CRS | Global Supply Chain Management



Supply Chain Management Handbook

Version 2.2

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SERVE CATHOLICS IN THE UNITED STATES as they live their faith in solidarity with their brothers and sisters around the world.

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VERSION HISTORY

VERSION 2.2: MARCH 2025

Minor changes throughout the entire handbook to **resolve broken links, correct typos, add alt text for improved accessibility, and align language with the new item request process in Insight**.

VERSION 2.1: JUNE 2023

Significant changes in the content and organization of Chapter 6: Procurement to correct inaccuracies and clarify information.

Minor technical changes throughout the entire handbook based on user feedback **to resolve broken links, correct typos, and add language about greening the supply chain.**

VERSION 2.0: OCTOBER 17, 2022

Improved language in the entire handbook to better represent CRS supply chain processes, specifically integrating Insight, health, CVA, food and NFIs, emergency, and sustainability.

- Greater integration of Insight-specific supply chain information. Earlier versions of this handbook were written to be relevant and useful for country programs regardless of which supply chain systems they were using because CRS did not yet have a standardized global ERP system. With the deployment of Insight (Oracle ERP system used by CRS) as the global system of record, the handbook now provides Insight-specific guidance on tracking and managing CRS goods and services throughout the supply chain. Important Insight-specific information is highlighted throughout the handbook in Insight call out boxes.
- **Greater integration of commodity- and context-specific supply chain information.**
    - To represent and guide CRS evolution better in the health supply chain space, important **health-specific supply chain information** is highlighted in health call out boxes and a Health Annex.
    - Important **CVA-specific supply chain information** is highlighted in CVA call out boxes to reflect CRS' "cash first" approach aligning with goal 2 of the agency's 2030 strategy.
    - Important **food-specific supply chain information** is highlighted now in food call out boxes and two appendices related to call forwards and international transportation of USG food assistance programs.
- **Full integration of the Procure-to-Pay (P2P) Manual.** The P2P Manual formerly used by Global Procurement has been fully integrated into this version of the handbook to provide a complete picture of all end-to-end supply chain business processes in one place.

New chapters developed and incorporated to align with the Compass project cycle, including Chapter 3: Design, Chapter 4: Start-Up, and Chapter 16: Close-Out.

Visual enhancements throughout the handbook to enhance readability, including new checklists to streamline staff responsibilities and infographics.

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ACRONYMS

CEO	Chief Executive Officer
COVID-19	Coronavirus Disease 2019
CRS	Catholic Relief Services
CVA	Cash and Voucher Assistance
D-goods	Distribution Goods
D-loan	Distribution Loan
ERP	Enterprise Resource Planning
FEFO	First Expired, First Out
FIFO	First In, First Out
GIK	Gifts-In-Kind
GKIM	Global Knowledge and Information Management (IT)
GSCM	Global Supply Chain Management
GPR	Global People Resources (HR)
HR	Human Resources
ICT4D	Information and Communication Technology for Development
INN	International Nonproprietary Name
IT	Information Technology
Incoterms	International Commercial Terms
ISO	International Organization for Standardization
kg	kilograms
KPI	Key Performance Indicator
LIFO	Last In, First Out
LMIS	Logistics Management Information Systems
LRP	Local and Regional Procurement
LRIP	Local, Regional, and International Procurement
MEAL	Monitoring, Evaluation, Accountability, and Learning
ND-goods	Non-distribution Goods
ND-loan	Non-distribution Loan

NFI	Non-food item
NGO	Non-Governmental Organization
PIC	Physical Inventory Count
PO	Purchase Order
POET	Project Number, Expenditure Organization, Expenditure Type, Task
QR Code	Quick Response Code
RACI	Responsible, Accountable, Consulted, Informed
RFP	Request for Proposal
RFQ	Request for Quote
SCM	Supply Chain Management
SKU	Stock Keeping Unit
SOW	Scope of Work
SMS	Short Message Service
SUV	Sport Utility Vehicle
TDY	Temporary Duty
U.N.	United Nations
UNHRD	United Nations Humanitarian Response Depot
UOM	Unit of Measure
U.S.	United States
USAID	U.S. Agency for International Development
USD	United States Dollar
USDA	U.S. Department of Agriculture
USG	United States Government
VMS	Vehicle Management System
WHO	World Health Organization

INSIGHT-SPECIFIC ACRONYMS

IO	Inventory Organization
SDP	Service Delivery Point

GLOSSARY

A

Advance Shipping Notice: An Electronic Data Interchange (EDI) document or notification of pending deliveries that is transmitted electronically.

Agent: A person who acts on behalf of another actor (the principal) in dealing with a third party.

Agile Supply Chain: This concept refers to the ability to respond quickly to unpredictable changes in the program participant's needs or the operating environment, by reconfiguring and adapting operations to effectively respond to these changes.

Air Waybill: A bill of lading for transporting domestic or international freight by air. It specifies the destination and terms of trade agreed upon by the shipper and transportation organization.

Annual Estimate of Requirements: An estimate of quantities of goods needed during an implementation year of an approved USG food program. An Annual Estimate of Requirements is required by USAID for all USG food programs, and once signed, it forms part of the award document.

Awardee: The entity that enters into an agreement with the U.S. Government.

B

Best-Used-by Date (BUBD): A date marked on the packaging of goods that indicates how long it will retain best flavor or quality. Please note that this is different from a food safety expiry date.

Bid/Proposal/Quotation: Documents submitted by potential bidders and consultants in response to an RFP or RFQ solicitation.

Bill of Lading: An official form often used by ocean or river carriers to document the transport of cargo. It serves several functions: an approval to transport cargo, a receipt for freight services, a contract between a freight carrier and shipper, and a document of title. The bill of lading is a legally binding document that provides the carrier with all the details needed to process the freight shipment, identify the location of discharge and the consignee, confirm the status of the cargo when loaded and offloaded, document losses and damage incurred during transport, and to justify payment of invoices.

Bin: a) A storage device designed to hold small discrete parts; b) A shelving unit with physical dividers separating the storage locations.

Bin Card (aka Stock Card or Stack Card): A document that records the status of a good held in inventory (e.g., keeps a running balance of stock on hand, stock received, and stock dispatched, and records physical counts [cycle counts and full PICs]). It also provides at-a-glance information about the good such as the product description and specifications, Batch/Lot Number, packaging, funding source, unit weight and volume, expiry/best-used-by date (BUBD), problems with the item, etc. A bin card can be attached to each bin holding stock or held in a filing system.

Break-bulk: Unitized cargo in bales, boxes, or crates that is placed directly in a ship's holds rather than in containers.

Bulk: Cargo that is shipped loose (unpackaged) and not containerized (e.g., grain). This type of cargo is shipped within a vessel's hold.

C

Call Forward: A request for food aid under an approved USG award, whether intended for direct distribution or for monetization purposes.

Cargo Availability Report (CAR): A listing of purchased food commodities by USDA for food aid awardees following a Call Forward request.

Cargo Consolidation: Bringing together many small shipments into a large shipment to take advantage of economies of scale in transportation costs. The different cargo is dropped off at several locations along the delivery route.

Cargo Preference: U.S. legislation that requires that at least 50% of all USG agricultural cargo (based on gross tonnages) must be shipped on U.S.-flag vessels.

Carrier: An individual or company that provides transportation services over air, sea, or land.

Clearing Agent: The entity hired to manage customs clearance formalities on behalf of a client.

Cold Chain: Temperature-controlled storage facility or equipment that extends and ensures the shelf life of sensitive and perishable goods, such as fresh agricultural produce, seafood, frozen foods, and pharmaceutical materials. Used correctly, an unbroken cold supply chain maintains the right temperatures to keep these goods viable during their transportation, storage and distribution, from factory to the point of administration to the target population.

Commodity: Term used interchangeably with goods, stock(s), inventory, products, supplies, and other terms to refer to all items that flow through a supply chain and logistics system.

Common Service Storage: A storage facility in which different companies/organizations can rent a portion of the space, rather than the entire warehouse as a whole.

Confirmation of Arrival (COA): A document that is included with shipping documents and serves to confirm vessel arrival at port of discharge. This form is used to manage freight funds and to ensure that freight monies are disbursed within the required timeframe.

Consignee: The entity referenced on a transportation document, such as a bill of lading, that is considered to be the legal owner of the goods or cargos transported. The consignee is often, but not always, the receiver of cargo.

Consumable: Supplies or materials that are consumed or exhausted during program implementation or operational activities.

Consumption: The quantity of each good that is used by the intended program participants or CRS/partners over the course of a defined period of time (e.g., project life, quarter, month, etc.).

Container Demurrage: Fees charged to a consignee for the late return of containers supplied by one party to another for the purpose of carrying cargo. Customers are given a set period in their carrier contract to "tip" or "destuff" (i.e., unload) containers at the point of delivery and return them to the shipper. Container demurrage can also be charged by shipping lines for "redecorating" (cleaning and repairing) containers after use.

Containerization: A shipment method in which goods are placed in containers, and after initial loading, the goods are not rehandled until they are unloaded at the destination.

Contract: A legally binding agreement between a buyer and a seller.

Convoy: A group of ships or vehicles travelling together for safety or convenience.

Cooperating Sponsor (CS): The Code of Federal Regulation 22 CFR 211.2 – Transfer of Food Commodities for Food Use in Disaster Relief, Economic Development, and other Assistance defines a Cooperating Sponsor (CS) as an "entity, within or without the U.S., governmental or not, such as the foreign government, the American Red Cross, the intergovernmental organization, or the private voluntary organization (PVO) or cooperative, which enters into an agreement with the U.S. Government for the use of agricultural commodities or funds."

Count Cards: Index cards that identify individual bins and SKUs to be counted. Prior to starting the

inventory count, cards are placed on every stack, shelf, rack, or other bin. Count teams count each assigned bin and SKU in sequence and document the tally after completing the count.

Cycle Count: The process of physically counting a few select items on a rotating basis as per a defined schedule to verify the theoretical inventory. Staff conducting cycle counts will count stocking units of measure as well as loose items (such as open, partially empty units of measure).

D

Delivery Note (DN): An internal Waybill used by CRS to authorize and confirm the removal of goods from inventory; identify the approved carrier and the specific transport asset; list the destination and consignee; validate the delivery of goods; and record any damage or loss upon receipt. The Delivery Note (DN) serves as the carrier's proof of delivery. Delivery Notes (DNs) are prepared by a supply chain staff and approved by a senior CRS official.

Demand Management: Estimating the total goods and services required to support the country program and its various projects over the planning horizon, based on forecasting of the program participant's needs.

Demurrage: The carrier charges and fees applied when rail freight cars and ships are retained beyond a specified loading or unloading time (usually per contracted terms). Demurrage can also be charged to customers for delays in returning containers to the shipper, see Container Demurrage.

Dispatch Request: A request made in writing by the Supply Chain Manager, Program Manager, Warehouse Manager, and/or Partner for the release of goods from a CRS warehouse(s).

Distribution: The process of, and the activities involved in, the transfer of goods to the intended recipient groups for a given purpose, in line with project or program design and selection criteria.

Distribution Goods (D-goods): Goods that are purchased for distribution to partners or program participants and are expensed when a partner or program participant receives them. D-goods appear in inventory valuation accounts as assets until they are distributed to a partner or program participant.

Distribution Unit: The unit each program participant receives. The specific unit is pre-determined at the program planning stage based on desired impact levels, demographic analysis, and other factors.

Distribution Verification Monitoring (DVM): The act of verifying and validating supply chain and distribution data by the Monitoring Officer, through site visits and questionnaires. It is used to understand the extent to which supply chain – especially distribution – activities have been implemented as per project planning.

Diversion: The process of redirecting transiting cargos to a different destination (consignee) point.

Dunnage: Loose wood, matting, tarps, pallets, or other materials used to keep cargo in position in a ship's hold, or placed under goods to protect them from water, dirt, and other elements.

E

Electronic Data Interchange: The electronic interchange of business information using a standardized format. This process allows one entity to send information to another entity electronically, rather than in paper form.

End User: The final consumer of a good or service, sometimes used interchangeably with program participant.

Enterprise Resources Planning (ERP): A framework for organizing, defining, and standardizing business processes. An ERP system provides extensive information databanks, including file records, financial information, historic and current transactional data, repositories of costs of goods, etc.

Evaluation: A periodic, systematic assessment of a project's relevance, efficiency, effectiveness, impact, and sustainability on a defined population. Evaluation draws from data collected via the monitoring system as well as any other more detailed data (e.g., from additional surveys or studies) gathered to understand the specific aspects of the project in greater depth.

Ex-Tackle: The seller is responsible for loss and damage until the goods are delivered on the quay at the port of destination.

F

Farm Service Agency (FSA): An entity within USDA that acts as a buying agent for U.S. food aid programs.

Fine Picks: Picking individual distribution units for shipment, rather than an entire container.

Fire Blanket: A highly flame-resistant blanket that can be used to either extinguish a small fire or to wrap around a person to provide fire protection.

Flagging: The process to describe whether a freight award is made on a U.S. or foreign-flag basis.

Flow Rate: The length of time to procure goods; transport them from the point of purchase/acquisition to the point of delivery to CRS; store them in various facilities; conduct inland transport; and distribute them to end users or program participants. Flow rates have a dramatic impact on the volume of inventory to put into the pipeline, storage and management requirements, and buffer (or "prepositioned") stock needed to avoid stockouts.

Food Aid: Donated food be intended for either direct distribution or for monetization.

Food for Education (FFE): Administered by the Foreign Agricultural Service of the USDA, the Food for Education (FFE) program provides agricultural goods to help promote child education and development. Food for Education (FFE) is considered non-emergency programming.

Food for Peace (Title II): Established under Public Law 480, the Title II program is administered by the Office of Food for Peace. Under Title II, agricultural goods are provided by the USG to address development and emergency needs. Title II programming is intended to combat malnutrition, promote food security and to stimulate economic and community development. Title II programs are either emergency (single year) or non-emergency (multi-year).

Food for Progress (FFP): A program that is administered by the Foreign Agricultural Service of the USDA on behalf of the Commodity Credit Corporation (CCC). Under Food for Progress (FFP), the Commodity Credit Corporation (CCC) provides donation of agricultural goods to awarded participants, so that the sale of such goods can generate proceeds to fund the implementation of program activities. Food for Progress (FFP) programs are focused on supporting agricultural growth and trade within emerging democracies and developing countries. Food for Progress (FFP) is considered non-emergency programming.

Footprint: Surface dimensions are referred to as "footprints." For example, a building measuring 10 m x 10 m has a 100 m2 footprint.

Forecasting: Estimating future need through using formulas, typically based on projected program participant numbers (i.e., how many), units per program participant (i.e., how much), and assistance coverage timelines (i.e., how long).

Free Alongside Ship (FAS): The seller (or donor) has delivered when the goods are placed on the quay alongside the vessel at the named port of shipment. From that point on, the buyer (or recipient) bears all costs and assumes all risk of loss of or damage to the goods. Under Incoterms 2010, free alongside ship (FAS) requires the seller to clear the goods for export.

Free on Board: The point at which the respective obligations, costs, and risks associated with the delivery of goods shift from the seller (or donor) to the buyer (or recipient). Under Incoterms 2010, free on board (FOB) requires the seller to clear the goods for export, but only for sea or inland waterway transport. The seller has officially delivered when the goods pass the ship's rail at the named port of shipment. From then on, CRS is responsible for all costs and bears the risks of loss of or damage to the goods.

Free Time: Amount of time, usually expressed in number of days, that cargo can reside within a terminal or warehouse without incurring additional charges.

Freight Forwarder: A company contracted on behalf of a shipper (CRS) to arrange for transportation, through one or more carriers, to a consignee. Often, these companies manage various logistical aspects associated with cargo movement, such as cargo consolidation, packaging, temporary freight storage, and/or customs clearing. Also, referred to as a Clearing and Forwarding Agent.

Fuel Stock (or Fuel Farms): Special warehouse locations where fuel is stored prior to being discharged into vehicles.

Full Container Load (FCL): A container that has been filled close to its volume or weight limit, or that holds the order of a single shipper and the shipper has requested that it be the only order in the container.

Fumigation Certificate: A document that provides evidence of completed fumigation of goods (especially agricultural goods, used clothing, etc.). It provides a quarantine clearance of any goods of plant or animal origin imported into a country or documents the fumigation of goods in storage facilities in the country of final use.

G

Gifts-In-Kind (GIK): A type of charitable giving that instead of giving money to buy needed goods and services provides the goods and services themselves (also referred to as in-kind donations).

Good: Term used interchangeably with commodity, stock(s), inventory, products, supplies, and other terms to refer to all items that flow through a supply chain and logistics system.

Goods Received Note (GRN): A record of goods received at the receiving location. This record often contains a list and description of the received goods, including their quantity, specifications, quality, and condition.

H

Heavy Vehicle: A vehicle with more than four wheels and more than 1 metric tons payload capacity, intended primarily for carrying goods (e.g. box trucks) or the transport of large numbers of passengers (e.g. school bus).

Host Country Agreement (HCA): A written agreement that is established with a foreign government that stipulates the terms and conditions required for a private voluntary organization (PVO) to conduct a program in this country.

I

Incoterms: A set of rules established by the International Chamber of Commerce that provides internationally recognized rules for the interpretation of the most commonly used trade terms in foreign trade. It is routinely incorporated in the contracts for sale of goods worldwide to provide guidance to all parties involved in the transaction.

Intermodal Bridgepoint: An inland location where cargo is received by the ocean carrier and then moved to a coast port location for loading.

Inventory: The stock of goods (e.g., equipment, medical supplies, furniture, property, and

foodstuffs of significant value) held by an office and required to support operations and serve CRS program participants.

Inventory Management: The oversight and control of the receiving, storage, and dispatch of inventoried items. It serves to help minimize waste and ensure compliance with CRS, international, and donor standards.

International Nonproprietary Name (INN): A common, generic name selected by designated experts for the unambiguous identification of a new pharmaceutical substance. The selection process is based on a procedure and guiding principles adopted by the World Health Assembly. INNs are recommended for worldwide use. This handbook uses INNs. The system was introduced by WHO in 1950 as a means of identifying each pharmaceutical substance or Active Pharmaceutical Ingredient (API) by a unique name that is universally accessible as public property (non-proprietary). It is often identical to the generic name: e.g., diazepam. A brand name (trade name) should not be derived from the INN name.

Inventory Valuation: A process or system that allows an agency to calculate the monetary value of items that make up its inventory, following a particular valuation methodology (e.g., FIFO management).

K

Key Performance Indicators (KPIs): An internal metric used to evaluate factors that are crucial for the success of an organization's activities and used to achieve continuous improvement of operations. KPIs are not published or included in reporting; rather, they are meant for self-evaluation.

Kitting: A process in which individually separate but related items are grouped, packaged, and supplied together as one unit (e.g., kitchen sets, hygiene kits).

L

Last Mile: A metaphor used to describe the movement of goods from a fulfillment center to their final destination, where they are distributed to the recipient group. It is used in any context that involves a physical flow of goods to the point where end users/program participants can access them.

Layday: One of a certain number of days allowed by a charter party or booking note for loading or unloading a vessel without demurrage.

Lead Time: The time between recognition of the need for goods and the receipt of goods. Lead time varies depending on the system, speed of deliveries, availability, and reliability of transport, and receiving and inspection time.

Less than Container Load (LCL): A shipment that occupies less than the maximum cubic or weight capacity of a container and is, therefore, shipped together with other less than container load (LCL) cargo in the same container.

Light Vehicle: Includes both passenger vehicles, primarily used to transport people, and light (four-wheeled) commercial vehicles, which can transport both goods (up to a 1 metric ton payload) and passengers.

Liner Terms: The terms and conditions that define what is and what is not included in an ocean freight rate. These terms will identify responsibility for costs related to loading at load port and unloading costs at discharge port.

Litigation Hold: Under U.S. Federal and local law, when the possibility of litigation is reasonably foreseeable, CRS has an affirmative duty to take reasonable steps to preserve all records and evidence — regardless how they are stored — which might relate to a potential claim. Failure to preserve all records relevant to a claim in existence at the time the hold is issued can result in serious civil or criminal penalties.

Logistics: The part of SCM that oversees the planning of execution of forward and reverse flow

of goods and related information, from the points of origin to distribution/consumption.

Logistics Cluster: A collaboration of organizations and stakeholders for coordination, information management, access to logistics support services, and communication of best practice to achieve an efficient and effective response to humanitarian emergencies.

Long Lasting Insecticide Net: A type of net treated with insecticide during the fabric manufacture; the insecticide is tightly bound within or around the fabric. These nets remain effective for around 20 washes, in practical terms, for the physical life of the net.

Losses: The quantity of stock removed from the supply chain pipeline for any reason other than consumption by program participants (e.g., expiration or damage of goods).

M

Mass Distribution: A distribution scenario providing universal coverage to program participant populations in each area or specific target groups within a population due to widespread needs affecting large populations. This type of distribution scenario occurs once or intermittently.

Metric Ton: The standard UOM applied when requesting food aid.

Mobile Storage Unit (MSU): A prefabricated storage facility that is relatively inexpensive to acquire, portable, and simple to erect. Mobile storage units (MSUs) are modular/sizable and generally made of an aluminum frame and vinyl panels (essentially large tents). Mobile storage units (MSUs) are frequently deployed in isolated, remote locations with poor infrastructure.

Monetization: An activity in which donated goods are sold in a commercial fashion on local markets, in part, to generate cash resources for program implementation.

Monitoring: The systematic collection, analysis, and documentation of information related to the progress made towards achieving project objectives and changes in operational contexts, to inform timely decision making and contribute to project accountability and learning.

N

National Transport: Transport done within a country program, either from the central warehouse to another warehouse or to a delivery point.

Non-Discrimination: CRS distributes goods to program participants on the basis of clearly defined programming criteria and does not discriminate (or tolerate discrimination) on any basis, including religion, race, color, age, national origin, sex, disability, political adherence, or handicap.

Non-Distribution Goods (ND-goods): ND-goods are purchased for internal consumption and are expensed immediately upon receipt. Although ND-goods do not appear in inventory valuation accounts as assets, they should be tracked while in inventory and until distributed to the end user.

Non-stock: Goods that are not kept in physical stock (inventory) at a warehouse/storage location.

O

Offeror: The entity that responds to a solicitation.

Outcome Indicator: Measures of the immediate or intended results or effects that are caused by, or attributable to, the project or program. Outcomes are often equivalent to the intermediate results and strategic objectives in the Proframe (adapted from USAID Glossary of Evaluation Terms).

Output Indicator: Measures of the goods, services, knowledge, skills, attitudes and enabling environment that are delivered by the project as a result of the activities undertaken by the project.

Outturn Report: A report by the port stevedoring company that records any discrepancy in the form of over, short, or damaged cargo in comparison to the quantity listed on the vessel's Manifest.

P

Packing List: A document that provides details (e.g., description, specifications, unit of measure, quantity, weight and volume) about the contents of a specific package. It lets carriers and consignees know the full contents of a package (to help them handle it accordingly), facilitates consignee verification of the contents upon receipt, and certifies the contents.

Passenger Vehicle: Four-wheeled vehicles designed primarily for the transport of passengers, maximum 1 metric ton payload capacity and generally less than 15 passenger seats. Passenger vehicles include sedans, 2WD and 4WD vehicles, such as RAV4s, Land Cruisers, minibuses, etc.

Physical Inventory Count (PIC): These counts are conducted to precisely evaluate and confirm both the quality and quantity of the SKU's at the distribution Unit of Measure. Requires that all Units of Measure are visually inspected and that random selection of Unit of Measures are selected to identify any variances.

Pick List: A document that indicates and authorizes items that can be picked from the inventory to fulfill orders. It is particularly useful for managing a large number of SKUs (e.g., more than 20). Please refer to the material pick list (MPL) form as an example.

Picking: The collection and consolidation of goods from various locations in a storage facility, in specified quantities, before onward shipping to extended or final storage and distribution facilities. The goods are then packed into a larger container (e.g., a cardboard box) for easier transport and handling. This is particularly relevant for medical supplies, pharmaceuticals, office supplies, vehicle and other spare parts, etc. During the packing of the goods, staff will itemize the contents on a Packing List for each package.

Pipeline: The entire chain of storage facilities and transportation links through which supplies move from manufacturer to consumer, including port facilities, the central warehouse, regional warehouses, district warehouses, all service delivery points, and transport vehicles.

Planning: A pre-determined course of action over a specified period of time, which represents a projected response to an anticipated context to accomplish a specific set of adaptive objectives.

Post-Distribution Monitoring (PDM): The act of collecting information after a distribution has taken place. It provides information on targeting; program participant satisfaction with registration, distribution process, and the goods themselves; or use of feedback or complaint mechanisms during the distribution. Information can be collected by various means including through interviews, focus group sessions or surveys with program participant households. Post-distribution monitoring (PDM) helps clarify program participant perceptions of the efficiency of the distribution event and the relevancy and usefulness of the goods received.

Pre-Alert: A notification sent to an importer or recipient of cargos to announce the arrival of cargo.

Prepositioned Stock: The positioning of stock in strategically located areas, in advance of an actual request or demand. It enables timely and efficient retrieving of stock from storage location.

Primary Warehouse: The main/principal warehouse where goods first arrive, are stored, and are then dispatched to other locations, such as secondary warehouses, also referred to as Extended Storage Locations (ESLs), or service delivery points, managed by CRS or partners.

Process Indicator: Indicators that directly measure the efficiency of key processes that affect project outputs and outcomes. Specific actions can be

taken throughout the project life cycle to improve the results of these indicators, which in turn should improve the results of the output and outcome indicators.

Procurement: The sourcing and acquisition of goods and services.

Program Participant: An individual, group or organization, whether specifically targeted or not, that benefits directly or indirectly from a development intervention or emergency response.

Pull: A distribution system in which the entities or individuals who receive the goods determine the quantities to order, i.e. the process where program participants or final users at the end of the supply chain request goods.

Purchase Agreement: A type of contract between a buyer and seller that outlines the terms and conditions related to the purchase of goods.

Purchase Order (PO): The purchaser's authorization used to formalize a purchase transaction with a supplier. The PO contains all information and agreements pertinent to the purchase and its execution by the supplier. When a supplier accepts a PO, the PO becomes a legally-binding contract.

Purchase Requisition: An internal document that notifies the Procurement Department of the need to: 1) request a resupply/replenishment of goods out of existing stock; 2) acquire goods or services through existing pre-supplier agreements; or 3) initiate a new procurement.

Push: Refers to the use of a forecast approach in which producers are confident that the goods they produce will find consumers; a distribution system in which the entities or individuals who issue the supplies determine the qualities to be issued based on estimates in advance of program participant needs.

Put-away: The process of moving received inventory from the dock or kitting area to a pre-determined and prepared storage bin; the relocation of inventory within its bin or the warehouse; and the replenishment of bins with inventory from reserve storage bins. Any time inventory is placed in a storage bin, it is being put-away. Put-away requires associated controls that rely on valid and viable confirmation and documentation processes.

Q

Quarterly Web-Interfaced Commodity Reporting (QWICR) System: USAID's online system for quarterly reporting on distributions, recipients, losses, and claims related to Title II food commodities.

R

Rail Transport: A mode of transportation over land by wheeled vehicles running on rails or tracks.

Receiving: This process involves the physical receipt of goods; verification of the quantities of goods received against the packing slip or shipping invoice; inspection of delivered packages to ensure that goods were not damaged; and the preparation of receiving reports and the documentation of discrepancies.

Recipient: A term closely linked to program participant, defined as an individual who receives goods and/or services as a participant of a program or project. This individual can be a head of household who receives goods on behalf of the entire household.

Reconditioning: The process of identifying, segregating and/or quarantining goods and damaged packages in order to visually examine and test the goods or contents, to recover or repair viable goods, to repackage them for storage and distribution, or to further segregate them for disposal.

Records Destruction: The action used to dispose of inactive or non-current records. Methods of

destroying records include: recycling the record medium, burning, pulping, shredding, macerating, or discarding by other secure methods.

Records Management: The planning, controlling, directing, organizing, training, promoting, and other managerial activities related to the creation, maintenance, use, and disposition of records to achieve adequate and proper documentation of compliance with CRS policies and procedures and donor regulation, and to document the effective, economical management of CRS operations and resources.

Records Retention Schedule: A document that describes CRS records to be retained; establishes a period for their retention by CRS; and provides mandatory instructions how to handle records that are no longer needed for CRS administrative needs.

Records: Information created, received, and maintained as evidence in pursuance of legal obligations or in the transaction of CRS business including but not limited to: financial records, support documents (e.g., vehicle Log Sheets, Delivery Notes (DNs), procurement files), statistical records, real property and equipment records, and other documents required for meeting CRS obligations to donors and for adhering to the laws of the countries in which CRS operates.

Reefer: A refrigerated ocean container that is used for transporting goods that are sensitive to temperature, such as perishable items.

Registration Card: A document issued under a program or grant to identify a person as a designated recipient of essential goods.

Replenishment: The sourcing and dispatch of new goods to replace those consumed. It is based on the actual and planned rates of consumption, the expected duration of use, and the ability of the affected population to absorb additional goods.

Request for Proposal (RFP): A type of solicitation document used in competitive procurements to communicate CRS requirements to prospective bidders and to solicit proposals or bids. RFPs must contain all the necessary information for prospective contractors to prepare complete proposals. An RFP tends to be accompanied with an SOW for services that are complex in nature (e.g., consultancy).

Request for Quote (RFQ): A document used to solicit vendor responses when a good has been selected and price quotations are needed from several vendors. RFQs are used when pricing is known and is fairly stable, some competition is expected, and there is no need to hold discussions with potential bidders in advance of issuing a PO.

Reverse Logistics: The return of inventory to storage facilities due to various reasons: residual inventory post-distribution, required maintenance and/or repair, refilling, reconditioning, disposal, or return to vendor.

Routine Distribution: Ongoing distributions to program participant groups to maintain coverage of needed good (e.g., provision of medicines through community health centers).

S

Safety Stock (or Buffer Stock): A quantity of stock planned to be in inventory to protect against fluctuations in demand or supply or as protection against forecast errors and short-term changes.

Sales Order: An electronic order or request for USG Gifts-In-Kind. A Sales Order is generated once the Call Forward details are transmitted via USDA's Web-Based Supply Chain Management (WBSCM) system.

Service Delivery Point: Any facility that serves program participants directly and where program participants receive supplies, such as especially set up service delivery points, households, clinics, hospitals, etc. Service delivery points are also known as distribution locations/sites.

Shelf Life: The 1) best-used-by-date (BUBD) or 2) expiration date.

Shipper/Consignor: The entity that sends or originates a cargo shipment.

Ship-to location: A location to which a good is delivered.

Solicitation: *See Tender.*

Spares: Spare parts, consumables, tools, and equipment used for the maintenance and repair of vehicles.

Stocked goods: Goods that are kept in physical stock (inventory) at a warehouse/storage location. Stocked Goods are tracked throughout the receiving, inventory, dispatch, and distribution processes.

Stock Rotation: A way of mitigating stock loss by prioritizing the dispatch and distribution of goods with approaching shelf-life deadlines. Rotation strategies generally include: 1) FEFO, 2) best-used-by-date (BUBD), and 3) FIFO.

Stock Keeping Unit (SKU): A unique identifier for each distinct good. SKUs are rooted in data management, enabling the systematic tracking of inventory or good availability, and all attributes associated with the good that distinguish it from other goods. These attributes include (but are not limited to) manufacturer, description, material, size, color, packaging, and warranty terms. During an inventory count, the quantity of each SKU is counted. SKUs are often assigned and serialized at the merchant level. CRS has the choice of maintaining the vendor's SKU or creating a CRS-specific SKU.

Storage Facility: A location to which goods are delivered, received, stored, and from which they are eventually dispatched. Storage facilities can be warehouses, rooms in offices, mobile storage units (MSUs), or other facilities with spaces designated for storage.

T

Target: There are two commonly used terms at CRS: 1) the intended program participant (e.g., the project "targets" pregnant and lactating women), and 2) an objective that is time-bound (e.g., the program will reach 100,000 more program participants by 2019).

Tender: The process in which requirements for procurement of goods or services are communicated to interested parties. Synonymous with Solicitation.

Theoretical Unit: The unit that is supposed to exist (i.e., in stock) according to the Packing List, Stock Card, etc.

Through Bill of Lading: A bill of lading that holds an ocean carrier responsible for delivering cargos to a consignee, using more than one mode of transport, located at a delivery point that is outside of the port/terminal.

Title: A term that is used to identify legal possession, control, or responsibility for cargo.

Transfer of Records: The act or process of moving records from one location to another, especially from an office space to CRS-managed secure storage facility or local records center; from one CRS office to another; or from a country office or storage space to the CRS Global Archive for permanent preservation.

Transloader: A facility that is responsible for transferring cargo from one conveyance to another.

V

Value for Money (VfM): The difference between the lifetime benefit and the lifetime cost of a good or a service over its period of use. Benefits and costs include money and non-monetary factors, including elements that strengthen market systems, streamline supply chain systems, and

facilitate environmental stewardship and sustainability.

Vehicle (or fleet, motorized asset): Light and heavy vehicles, and motorcycles.

Vendor/Supplier: Any independent third party, including individuals and firms, with whom CRS enters into contract for the provision of goods or services. The terms Vendor and Supplier will be used interchangeably throughout this handbook.

Vessel Loading Observation (VLO): A review and classification of the quality of packaged goods during the loading process. Please note that the Vessel Loading Observation (VLO) is not a tally of packaged units.

Visual Inspection: The process of examining goods and their packaging to determine their current state and potentially uncover obvious problems with quality of the goods.

Voucher: Transfers of paper, token, or e-card that can be exchanged for specific types of goods. There are two main types of vouchers: 1) vouchers that can be exchanged for fixed quantities of predetermined goods, and 2) vouchers that can be exchanged for a choice of goods with the equivalent cash value.

W

Warehouse: A planned space for receiving, storing, and shipping goods. Generally, a warehouse is a structure, used in whole or in part for the storage of goods and equipment. The term is also used as a verb, meaning to place, deposit, or store in a storage facility.

Waybill: An external, official form provided by a supplier or partner, used to document cargo transport. Similar to a Delivery Note (DN), each Waybill has a unique identifying number. It is the carrier's receipt by air or rail, evidence of the contract of carriage, and is usually non-negotiable. It is made out to a named consignee, who is the only party to whom the carrier may deliver the goods.

Web-Based Supply Chain Management (WBSCM) System: A USDA system used for the entry and transmission of Call Forward (order) details.

FOREWORD

A MESSAGE FROM OUR PRESIDENT & CEO

At Catholic Relief Services (CRS), we are dedicated to putting our faith into action to build a world where all people can reach their full human potential in just and peaceful societies. Supply Chain Management (SCM) has been central to CRS' ability to deliver goods and services to people in need, since our founding by the U.S. Conference of Catholic Bishops in 1943 to respond to the humanitarian needs of migrants and refugees in World War II. SCM staff around the world at CRS access real-time supply chain data to make evidence-based decisions, so life-saving goods and services reach our program participants as seamlessly and efficiently as possible, as exemplified below.

- We delivered 80 million bed nets and anti-malaria prevention medicines for over 23 million children from 2018 to 2020, sometimes door-to-door during the COVID-19 pandemic, as we adapted our distribution methods to continue serving our program participants in Congo, Guinea, Niger, and Nigeria.
- We delivered over 1,300,000 metric tons of food (comparable to the weight of 30,000 average-sized commercial airplanes) for CRS emergency and development programs from 2016 to 2021.
- We supplied daily school meals to 650,000 children across nine countries during the 2021-22 school year, increasingly from local producer groups, achieving dual objectives of improving education outcomes and strengthening local economies and food systems.

I am proud to present our updated Supply Chain Management Handbook, which is rooted in industry best practice and designed as the key supply chain reference for CRS colleagues as we strive to reach our Vision 2030 Strategic Outcomes. We thank the numerous colleagues who invested their time and expertise to finalize this quality product.

We know that in collaboration with the people we serve—along with the local Church, secular institutions, generous donors, inspiring partners, and our mission-driven team, all dedicated to the holistic development and well-being of program participants—we can advance our vision for a world where individuals, families, and communities flourish in just and peaceful societies that respect the dignity of every person and integrity of all God's creation.

Peace and Light,



Sean L. Callahan, President & CEO

PREFACE

A MESSAGE FROM OUR GSCM DEPARTMENT DIRECTOR

GSCM professionals at CRS put their expertise into action to ensure vast quantities of essential goods and services reach and transform lives in need around the globe. We obtain, store, transport, and/or deliver life-saving goods and services through diverse supply chain modalities for various sectors, prioritizing markets-based solutions to provide assistance such as CVA to vulnerable populations.

By understanding, strengthening, and using existing supply chains, we drive innovation both in the supply chain itself and in the larger programming we support. As SCM increasingly works to serve a nuanced array of contexts, sectors, and modalities using ever-advancing technologies, this handbook has been updated to capture new and revised GSCM practices that enable CRS to effectively meet the needs of those we serve.

Specifically, the updated Supply Chain Management Handbook:

- Standardizes language and processes that are used in our ERP system, Insight, for better data management and supply chain decision-making.
- Outlines effective SCM processes that are essential for CRS to continue to meet the needs of those we serve, maximize the use of donor resources, incorporate more environmentally sustainable practices, and contribute to economic growth as we deliver our mission.
- Streamlines staff responsibilities to optimize performance with standard tools and resources.
- Moves CRS beyond an exclusive focus on internal supply chains.
- Increases CRS capabilities with CVA, enabling our program participants to increase interaction with the supply chains that already exist in their daily lives.
- Propels CRS toward achieving our overarching Vision 2030 goal areas, including: saving 500,000 lives through malaria services; providing life-saving treatment to HIV positive children; distributing 1 billion USD in CVA, and other goals that contribute to agency objectives with a supply chain component.
- Aims to be the foundation for a more dynamic and “living” digital handbook that can be continuously updated to meet the learning and knowledge management needs of the agency.

This handbook is the product of numerous peer reviewers, subject matter experts, and other colleagues who invested their time and expertise to improve the quality, responsiveness, and sustainability of our supply chain practices. I am grateful for their valuable work, and trust that you will find the Supply Chain Management Handbook valuable for your work too.



Sarah Penniman-Morin, GSCM Senior Director

CRS | Global Supply Chain Management



Photo by Ollivier Girard

Chapter 1: Introduction

1. INTRODUCTION

The purpose of the SCM handbook is to guide CRS staff in the understanding and application of industry and CRS best practices in supply chain management for any good or service in the CRS supply chain, anywhere in the world.

This handbook is a tool for CRS staff for aligning current supply chain practices with industry best practices and with system requirements of Insight (Oracle ERP system used by CRS) while keeping information management as simple and straightforward as possible.

Unless otherwise specified, the information in this handbook is applicable across different contexts, commodities, assistance modalities, and delivery mechanisms. Requirements that are specific to certain goods or services, donors, functions, contexts, or operational modalities are noted or emphasized clearly in the text, or are addressed in special sections in the handbook, callout boxes, and/or through links to external resources.

Only print out the specific page(s) or chapter(s) that are needed for reference. **Do not print the entire Handbook.**

To understand which chapters are most relevant to which roles, see the Country Program SCM Handbook Roles Infographic.

1.1 HANDBOOK OVERVIEW

The SCM Handbook captures best practices and relevant examples from CRS, the non-profit sector, the private sector, and donors to:

- Harmonize supply chain activities across CRS and standardize processes (where appropriate).
- Ensure that goods or services entering the CRS supply chain meet international, donor, local, CRS, and quality management specifications.
- Guide the use of KPIs for documenting and monitoring supply chain and service provider performance.

In the early stages of rapid-onset emergencies, when robust SCM systems have not been set up and/or connectivity is limited, the Emergency Field Operations Manual (EFOM) is a useful starting point. All efforts should be made to move as quickly as possible to a comprehensive compliance environment as outlined in this handbook.

SCOPE

This handbook cannot—and does not—cover every operational or management scenario faced by supply chain management staff in the course of their work, and it does not provide requirements, processes, or guidelines for every decision that must be made at the country program level.

Global versus Country Program Functions/Roles/Responsibilities

The SCM handbook applies to country programs, regional offices, and global CRS departments (Internal Audit, Finance, International Transportation, Procurement, etc.).

Unless otherwise noted, **this handbook speaks to functions and roles at the country program level**. For example, a reference to "procurement staff" means procurement staff operating within the country program while a reference to "Global Procurement staff" means procurement staff operating within headquarters.

Roles at the Country Program Level Checklist

CHECKLIST *Roles at the Country Program Level*



CRS supply chain staff are responsible for:

- ☐ Identifying and carrying out logical, compliant, and cost-effective solutions in their daily work, especially when there is little (or no) precedence or guidance for the situation or decision they are facing.

Country Representatives are responsible for:

- ☐ Ensuring that their country program adheres to the requirements and directives in this handbook (including its appendices and Health Annex), CRS policies and procedures, and relevant donor regulations and guidelines.

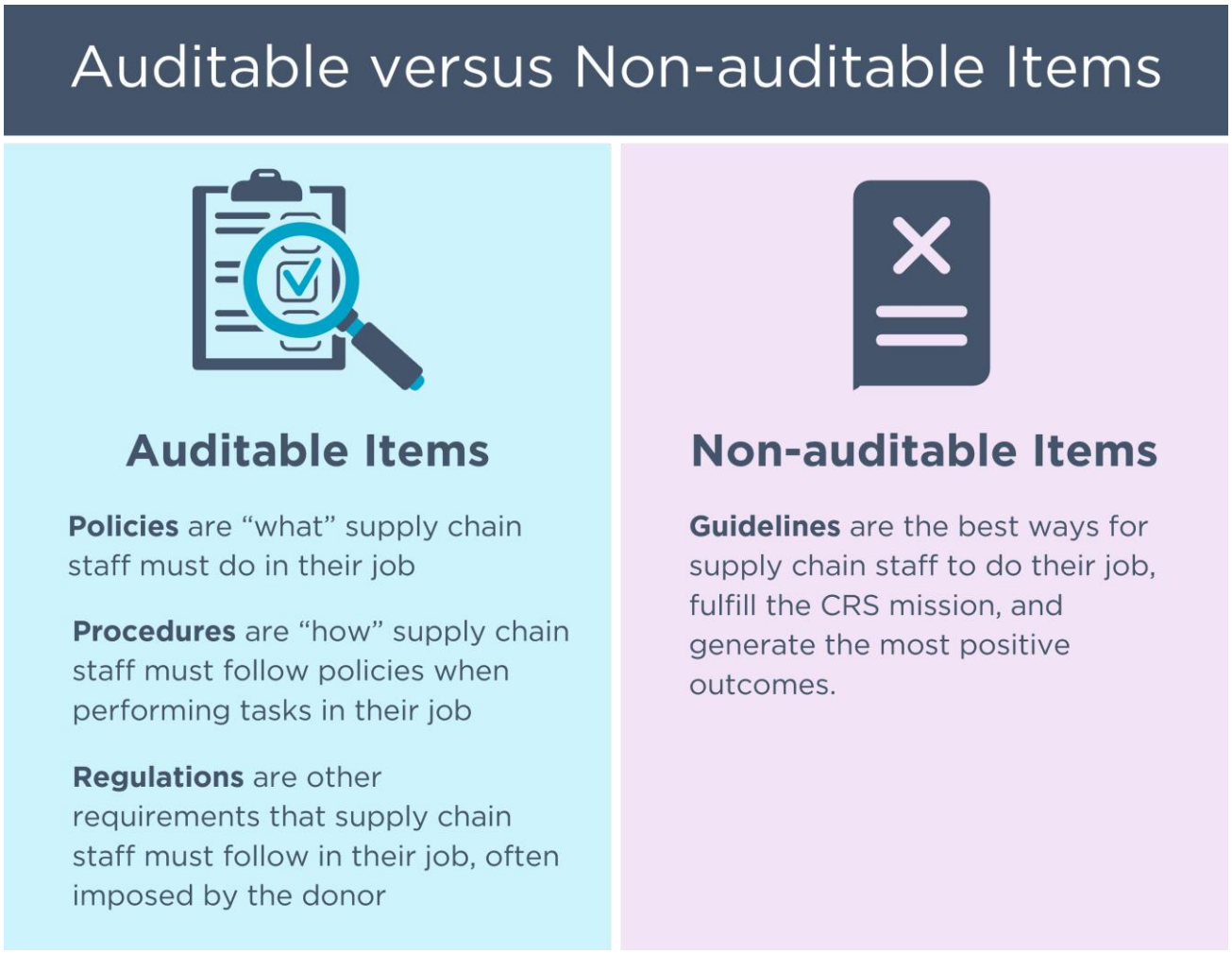
Country programs are responsible for:

- ☐ Implementing the requirements and directives in this handbook (including its appendices and Health Annex).
- ☐ Complying with CRS policies and procedures and with relevant donor regulations and guidelines.
- ☐ Developing additional guidance and processes specific to their operating environment.

Failure to comply with the guidance provided in the SCM handbook can negatively impact planned programs result in poor project implementation, and even lead to undesirable risks, liabilities, and consequences for CRS including significant financial losses to the agency and its partners.

Auditable versus Non-Auditable Items

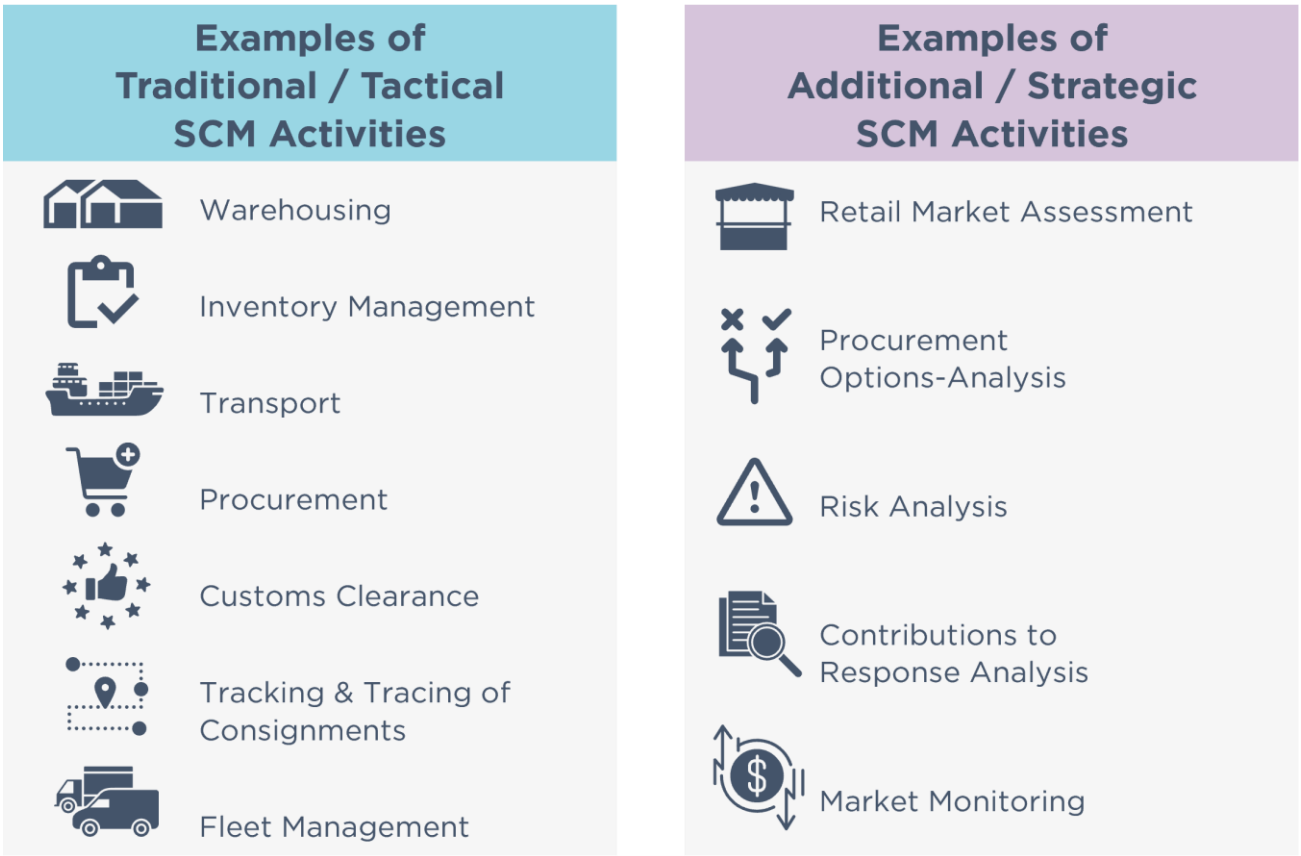
The **SCM Handbook is not an auditable document,** but it does contain references and links to policies, procedures, and donor/government regulations that are auditable. The figure below summarizes the difference between auditable and non-auditable items.



Strategic versus Tactical Activities

Historically, CRS supply chain staff have largely performed tactical activities (e.g., managing a warehouse, contracting transport, etc.). But going forward, CRS supply chain staff need to incorporate more strategic activities (research, data analysis, decision-making) into their work. More specifically, staff must think strategically (what is the objective) and act tactically (how, concretely, do we advance or accomplish the objective).

The figure below, adapted from the Fritz Institute/CILT *Certification in Humanitarian Supply Chain Management (CHSCM)* Unit 1: SCM in the Humanitarian World, provides examples of tactical versus strategic activities.



Source: Adapted from Fritz Institute/CILT. Certification in Humanitarian Supply Chain Management (CHSCM) Unit 1: SCM in the Humanitarian World, p. 9.

Strategies and tactics can be defined as shown in the figure below.

Strategies (the "What" and "Why")	Tactics (the "Who" "How" "When" and "Where" and "How Often")
Set the direction (generally at a high-level Identify specific objectives aligned with the agency's mission and vision. Often (but not always) cover an extended time horizon.	Must be aligned to the strategy. Are the concrete steps or actions (can be implemented as one or more tasks or processes) needed to execute the strategy (ultimately to accomplish the agency's strategic objective, mission, and vision).
Are reasoned decisions/choices about objectives or accomplishments that should occur within a given time horizon	Are specific, tangible steps that occur within defined but limited time horizons (many are routine, day-to-day) to accomplish the strategic objective.
Are generally established by leadership	Are generally established and executed by managers.
Is fairly static and unchanging	Can be modified as often as needed

OBJECTIVES

This handbook has four key objectives, as described below.

Objective 1

Enhance CRS' ability to better serve program participants around the world in line with the CRS mission through a more responsive and agile supply chain. This handbook positions CRS to deliver goods and services, cash and voucher assistance, and other resources to program participants in a timely and efficient manner by providing staff guidance that supports and enhances supply chain performance. In turn, a high-performing supply chain better meets the needs of program participant and, thus, increases the impact of programs.

Objective 2

Create an SCM community of practice with a common lexicon for better innovation and exchange of knowledge, ideas, and technology. This handbook provides a common operational lexicon with language that enables supply chain and non-supply chain staff to collaborate efficiently and effectively across supply chain functions, teams, and departments, with partners, sister agencies and within collaborative and coordinating bodies (e.g., Logistics Cluster). Many of the new practices, processes and terminology associated with the implementation of Insight are introduced and explained in this handbook.

Objective 3

Connect the continuum of People-Process-Technology. This handbook prioritizes standardized roles and responsibilities along the supply chain because people are the most critical factor for a well-functioning and responsive supply chain. The deployment of Insight standardizes many processes to support a wide spectrum of staff and their technological supply chain needs.

Objective 4

Ensure compliance with CRS, donor, and country-level policies and regulations. Continued compliance with these requirements and directives affirms CRS' accountability to donors, partners, host governments, and program participants. Each chapter of the handbook covers a different supply chain function or activity (e.g., procurement, dispatch, etc.) and provides links to existing policies, procedures and regulations related to that function or activity.

SOURCES

The information in this handbook was compiled from industry best practices found in the sources listed below and included in the References section.

- The Global Fund | Policies on Procurement and Supply Management of Health Products
- WHO | Model Quality Assurance System for Procurement Agencies
- World Food Programme | Emergency Field Operations Pocketbook
- USAID/DELIVER | Logistics Handbook
- USAID/OFDA | Field Operations Guide
- APICS | Supply Chain Operations Reference (SCOR)
- Logistics Cluster | Logistics Operational Guide (LOG)
- The Fritz Institute/CILT | Core CVA Skills for Operational Staff, Certification in Humanitarian Supply Chain Management, and Certification in Humanitarian Logistics
- Other sources of information and images are cited throughout the handbook and included under References.

ORIENTATION AND NAVIGATION

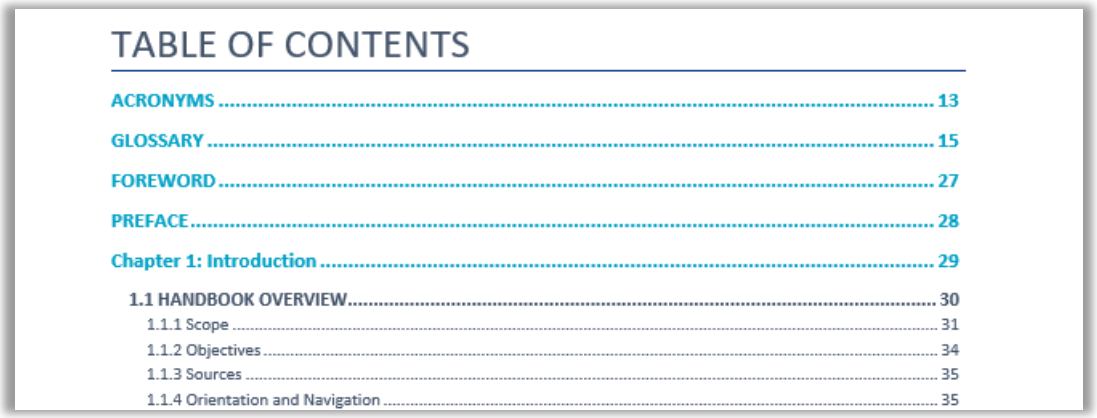
The SCM Handbook is published as a PDF document. The entire handbook is planned to be converted to an online format and translated.

There are several ways to navigate the PDF document.

1. To jump directly to a specific chapter or section within a chapter, go to the Table of Contents and press Control + Click on the chapter or section name.
2. To jump quickly between different chapters or sections of the document, use the Bookmarks view.
3. To jump quickly to the Table of Contents or the Glossary, use the quick link buttons at the top of the page (described below under Page Headers).

Table of Contents

The Table of Contents provides an overview of every topic covered in the handbook, by chapter and by section within each chapter.



Page Headers

Every page has two buttons in the top right corner with quick links to the Table of Contents and the Glossary, as shown below.

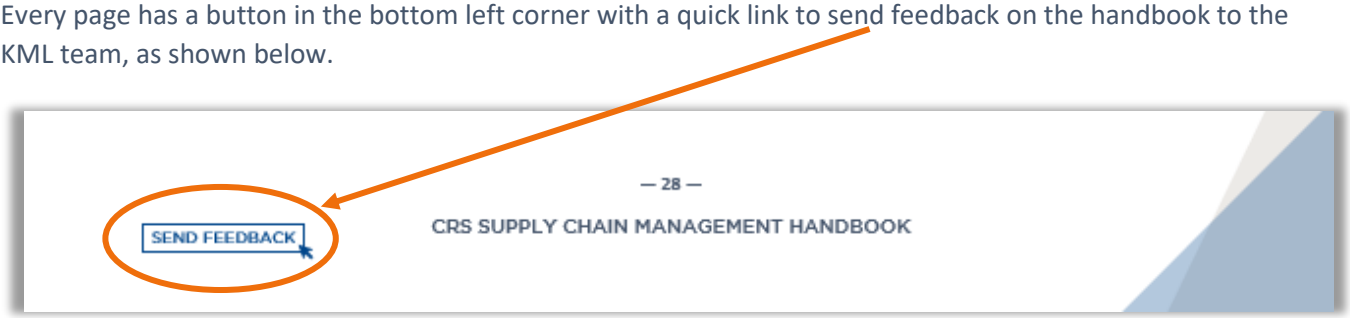


Page Footers

Page numbers are centered at the bottom of every page, as shown below.



Every page has a button in the bottom left corner with a quick link to send feedback on the handbook to the KML team, as shown below.



Hyperlinks

Throughout the handbook, information is presented once in detail in the chapter deemed most relevant.

When another chapter covers a related topic or related information, instead of repeating the information, a brief sentence redirects the reader with a hyperlink to the chapter or the specific section with the detailed information as shown in the **examples below**.

> For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

> For in-depth guidance on putting away goods, see the Putting Away Goods section of the Receiving chapter.

The handbook also contains many **links to internal resources located on SharePoint** (CRS' internal staff intranet that is not accessible to external entities). We aim to make more of these resources accessible to external readers in the future.

Examples of internally linked resources:

> For more information on collecting price data from primary sources, see the Market Monitoring, Analysis, and Response Kit (MARKit).

> Every project should have a procurement plan that aligns with procurement-specific Compass standards and key actions during the start-up and implementation phases of a project.

The handbook contains many **links to external resources**, including donor or government policies and regulations and supplemental materials, guidelines, or tools published by donors, governments, or other entities.

Examples of externally linked resources:

DONOR OR OTHER GUIDELINES

- CashHub.org - Cash in Emergencies Toolkit
- Logistics Cluster – Logistics Operational Guide (LOG)
- USAID/BHA Pipeline and Resource Estimate Proposal (PIPE) Guidance
- USAID|DELIVER - The Logistics Handbook: A Practical Guide for the Supply Chain Management of Health Commodities
- USAID|DELIVER – Quantification of Health Commodities: A Guide to Forecasting and Supply Planning for Procurement

CONTENT

Each chapter in the handbook covers a specific supply chain function or activity. For that function/activity, the chapter provides the following information, usually in the order listed below.

1. Policies, procedures, regulations, and guidelines (CRS, donor, other).
2. Overview (with important background information or key definitions).
3. Roles and responsibilities.
4. Tools (if applicable).
5. Processes.

Callout Boxes

Throughout the handbook, callout boxes signify a certain type of information as described below.

"General Information" Callouts

Used for highlighting useful or **important information**.

"Context-Specific" Callouts

Used for highlighting specific information related to **health supply chain**.



Used for presenting information about **Insight** processes and learning materials.



Used for highlighting specific information related to **food assistance**.



Used for highlighting specific information related to **cash and voucher assistance (CVA)**.



Used for highlighting specific information related to **emergencies**.



Used for highlighting different practices that can be used to make supply chain operations more environmentally **sustainable**.



Checklists

Throughout the handbook, checklists are used to list process steps (designated with ☐ check boxes) and staff roles (designated with **bold typeface**) for specific supply chain activities (see the example below). Staff can print out these checklists and hang them at their desks or carry them around for quick reference.

On the following page is an annotated example of a checklist with explanations of the various checklist components.

Defines the starting point for this part of the process in relation to earlier process steps that have already happened

Specifies the overall process

SAMPLE CHECKLIST *Offloading of Goods*



During the offloading process, the **Warehouse Manager**:

- ☐ Makes personal protective equipment (PPE) available for use by staff and day laborers (if hired) and ensures that it is used effectively.
- ☐ Etc.

Lists actions for process steps

States the **which CRS staff member(s) or staff group** are responsible for the process steps

After the container seal is broken and the receipt of goods is acknowledged, the **Warehouse Officer**:

- ☐ Organizes the day laborers to offload the goods from the trucks and into the designated receiving area.
- ☐ Etc.

Begins a new list of process steps when a new process starts and/or the responsibility changes to **new CRS staff member**.

If there are goods that are missing, have been quarantined, or were not ordered, the **Warehouse Officer**:

- ☐ Notes this on the waybill and the Goods Received Note (GRN) (if using).
- ☐ Etc.

Highlights useful or important information related to the process(es) in the checklist with "general information" callout box.

Handling Quantity Variances Found During Receiving

To determine whether there is a true shortage, the Warehouse Manager should track the quantities received from each truck against the waybill and wait for the complete delivery from all trucks. In many cases, the tally from one truckload might indicate a short landing but another truck in transit might be carrying excess goods. In other cases, there may be differences between the waybills and clearance documents.

If there are quantity discrepancies, the Warehouse Manager notes the actual quantity received and initiates the claim process.

Please see below for context-specific callout boxes that also apply.

Alerts the reader to "context-specific" callout boxes following the checklist with useful or important information related to the process(es) in the checklist (also see following page).

Sample Context-Specific Callout Box Following a Checklist

Context-specific call out boxes are placed **after** the corresponding checklist.

Sample Context-Specific Callout Box Following a Checklist

Context-specific callout boxes for Insight steps are placed **after** the corresponding checklist and **after** all other context-specific callout boxes.

CHAPTER ORGANIZATION

Policies, Procedures, Regulations, and Guidelines

This section lists all relevant requirements and guidelines (with hyperlinks) for the supply chain function or activity covered in that chapter. **The policies, procedures, laws, and regulations that are referenced in this section are auditable items.**

Supply chain staff must comply with U.S. regulations and laws, donor regulations, and regional, state, and local record retention and data privacy laws in the jurisdictions where CRS operates.

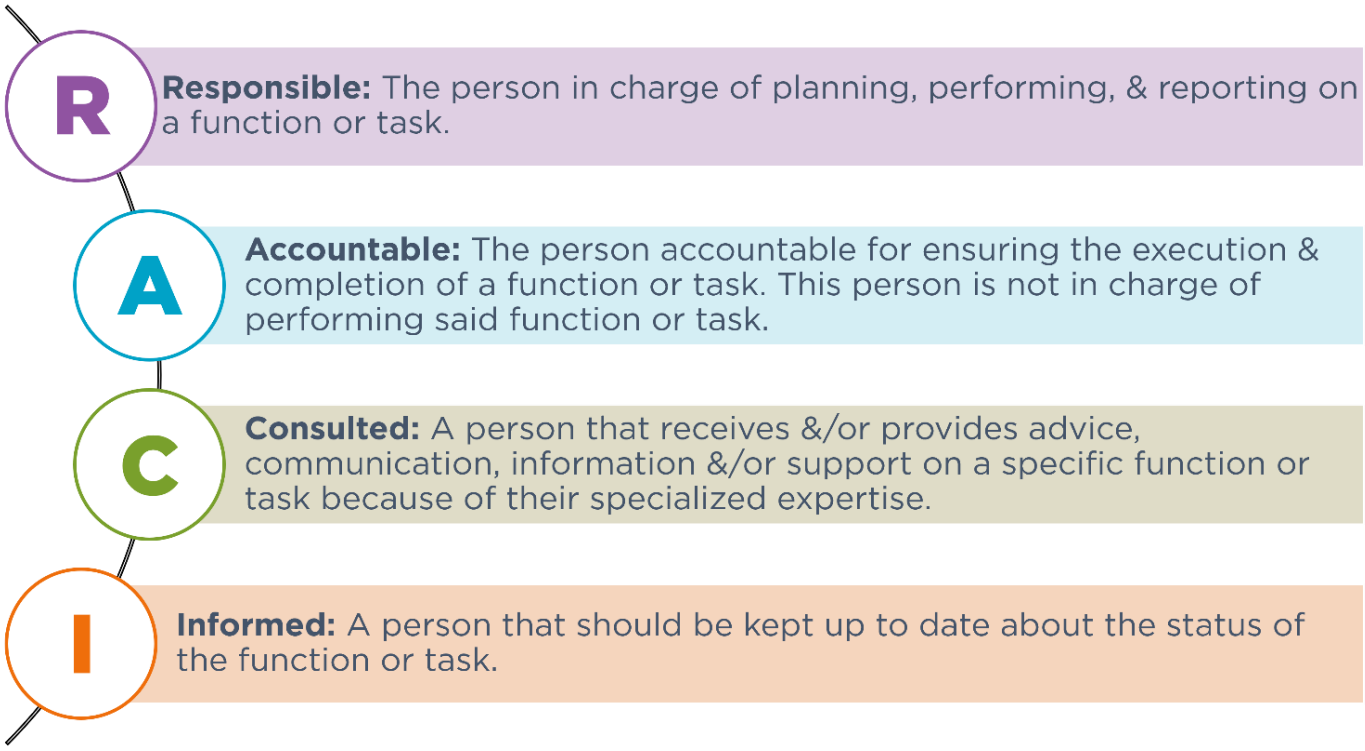
At the country program level, the Country Representatives, Heads of Operations, and Heads of Programming must review non-U.S. government donor awards and regulations governing records management and retention requirements to fully comply with those regulations and to review them on an annual basis.

Overview

This section orients the reader to the supply chain function or activity covered in that chapter. This section might include function/activity-specific terms and definitions, best practices or standards, strategies, methods, or other considerations.

Roles and Responsibilities

This section uses a RACI Matrix to summarize the distribution of the functions/activities and roles/responsibilities among individuals and teams from different units and departments. **RACI** stands for **Responsible**, **Accountable**, **Consulted**, and **Informed**. The assigned responsibilities for each function or task are distributed as follows:



In certain contexts, the roles and responsibilities may differ from the general RACI, for example when handling health commodities, delivering CVA assets (vouchers and smart cards), or operating in an emergency context. When applicable, an alternate RACI matrix will be presented in a call out box.

Most chapters have one RACI matrix for the entire process, but a few chapters have multiple process sections with a specific RACI for each process section (e.g., Warehouse and Inventory Management).

Tools

When applicable, this section provides information about specific tools that are relevant to the supply chain function or activity covered in that chapter.

Processes

This section provides both a summary and detailed explanations of all processes (and sub-processes) that are relevant to the supply chain function or activity covered in that chapter.

Processes are summarized first using simple process maps that show **key steps, decision-making points, and documentation/communication/reporting requirements**.

After the process flow chart, the detailed explanations of processes follow.

Most chapters have one process section with one associated process flow chart, but a few chapters have multiple process sections with a specific process flow for each process section (e.g., Warehousing and Inventory Management).

All chapters identify data indicators for supply chain performance monitoring that are relevant to the supply chain function or activity covered in that chapter. For in-depth guidance on monitoring and MEAL4SCM data indicators, see the Monitoring chapter.

FUTURE UPDATES

The handbook will be updated regularly. Although GSCM will notify staff when a new version has been released, staff should bookmark the online version of the handbook to ensure that they are referencing the newest version.

1.2 SUPPLY CHAIN OVERVIEW

The supply chain of humanitarian and development aid provides timely delivery with appropriate assistance to serve the needs of program participants worldwide. The CRS supply chain is part of a complex and global network of information, goods, services, stakeholders, decision makers, suppliers, and delivery points.

The chapters in this handbook are all **interrelated**. For example:

- Receiving: The process for putting away goods depends on the inventory management system and the warehouse layout and equipment
- Warehouse and Inventory Management: The inventory management system and warehouse layout depends on the type and capacity of the storage facility.
- Start-Up: The type and capacity of storage facilities depends on the type of goods to be stored and managed.
- Planning: The type of goods to be stored and managed depends on the quantification, forecasting and pipeline analysis process.

Many supply chain activities covered in this handbook are **mutually dependent**. For example (with receiving and warehouse management activities): before goods can be received and put away, storage space needs to be announced, allocated and prepared well in advance, and Insight system locators must be created or reactivated.

THE CRS SUPPLY CHAIN

The CRS supply chain aims to be responsive, reliable, innovative, flexible, and cost-effective. To that end, CRS is committed to delivering the **right goods or services** in the **right condition**, to the **right people**, in the **right place**, at the **right time**, in the **right quantities**, and at the **right cost** (see The 6 Rights of Logistics in USAID|DELIVER Logistics Handbook).

All resources entrusted to CRS must be safeguarded at all times to maintain quality, minimize loss and waste as much as possible, and ensure that resources can be used for their intended purposes. Because goods and services obtained through purchase or donation have significant financial and programmatic value, CRS applies strict financial accounting principles and risk assessment measures from acquisition through distribution to the final consumers to ensure good stewardship of all such resources.

At CRS, most supply chain management activities occur in a cycle and some activities occur continuously. The figure below illustrates the full CRS supply chain with cyclical and continuous activities that correspond to the project cycle.

- The on-ramp, outer track, and off-ramp represent **cyclical** high-level stages and processes (designated with a ⚙ symbol).
- The middle track represents **continuous** cross-functional activities that support implementation (designated with a ✳ symbol).
- The center track represents **continuous** and required operations improvement activities (designated with a ◠ symbol).



The figure below shows how the chapters of this handbook align with the Compass project cycle. Some activities are continuous throughout project implementation.



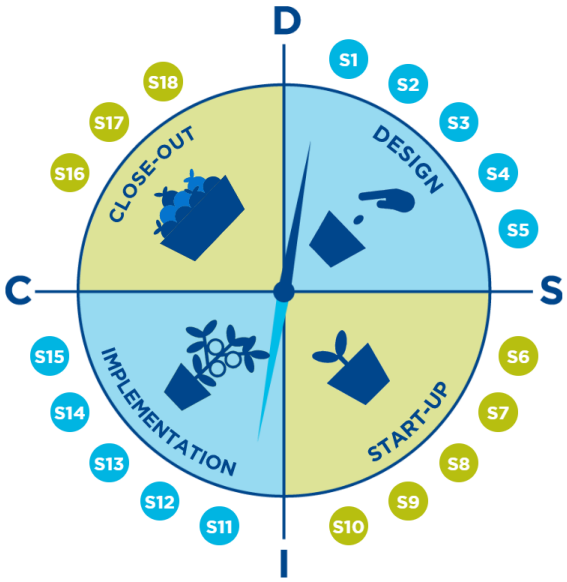
Supply chain staff play a critical role throughout all four project phases in the Compass project cycle (see figure below) and all 18 project management standards defined by Compass.

CLOSE-OUT

The close-out standards emphasize the importance of accountability and cross-disciplinary collaboration as projects come to an end.

IMPLEMENTATION

The implementation phase standards focus on timely, evidence-based, cross-disciplinary management of project activities and resources, in close collaboration with CRS partners.



DESIGN

The design phase standards focus on design issues that have a significant impact on a project's implementation.

START-UP

The start-up standards focus attention on this critical, and often challenging, phase of the project management cycle.

CRS SUPPLY CHAIN TERMINOLOGY

Supply chain management refers to the flow of goods, cash and voucher assistance, and services from project start-up (design, planning) through project implementation (procurement, transport, receiving, storage, dispatch, distribution) and project close-out (distribution verification monitoring, supply chain performance monitoring).

Goods are all inventory items (products, supplies, merchandise, and all other tangible objects) that flow through the CRS supply chain. Goods include food commodities, non-food items (NFIs), pharmaceuticals, medical supplies and equipment, capital and non-expendable property and equipment, administrative supplies, construction materials, vehicles, CVA assets such as vouchers or debit cards, and other articles.

All goods are categorized as either D-goods or ND-goods. Both types of goods are tracked throughout the procurement, transport, receiving, inspection, put away, storage, repackaging/kitting, dispatch, and distribution processes.

- **D-goods** are purchased for distribution to program participants (either directly or through partners) and are expensed when a partner or program participant receives them. D-goods appear in inventory valuation accounts as assets until they are distributed to a partner or program participant.
- **ND-goods** are purchased for internal consumption and are expensed immediately upon receipt. Although ND-goods do not appear in inventory valuation accounts as assets, they should be tracked while in inventory and until distributed to the end user.

Issuing out ND-goods to an end user, even internally, is considered a final distribution, **not** a dispatch.

CVA assets are physical items that represent or store the value of a CVA transfer amount including (but not limited to) paper vouchers, e-vouchers, e-cards, and smart cards. For more information, see the Cash and Voucher Assistance (CVA) section in this chapter.

Services include any external support procured by CRS to facilitate operations and the execution of various activities to meet programming and/or operational objectives or to support the execution of such activities for such objectives.

Examples of services procured to meet operational objectives (includes country, regional and agency objectives) are listed below.

- Enabling the flow of goods and cash through the supply chain (up to and including distribution to end users).
- Training on the use of goods.
- Training on the maintenance and repair of goods.

Examples of services procured to meet programmatic objectives include the following.

- Milling or fortification of grains.
- Job placement services.
- Financial services.
- Market information.

Examples of services procured to provide general or administrative support to programming or operations include the below.

- Travel agents.
- Vehicle maintenance and repair.

- Office equipment maintenance and repair.
- Residential security.

System of record refers to the official system that a country program uses to document supply chain transactions and to store supply chain records. Systems of record include Insight, SharePoint, and OneDrive. Insight is the official CRS system of record for country programs that are live in Insight. For country programs that have not yet implemented Insight supply chain modules, the system of record can be as basic as a physical ledger.

Program participants includes the different individuals, groups, and entities listed below.

- Individuals who are program participants.
- Delegates of program participant households who are receiving goods on behalf of their households.
- Delegates of targeted individual program participants in their households who cannot travel to the service delivery point because of illness or physical limitations.
- Locations that are program participants, such as schools, clinics, pharmacies, etc.

Requirements for Delegates of Program Participants

Recipients that are delegated to receive goods on behalf of a targeted individual should be over the age of 18 and should bring the documents listed below with them to the service delivery point.

- A form of identification.
- The card or voucher received prior to the distribution.
- (In some cases) A delegation authorization form.

If there is concern about whether the delegate is truly authorized to receive the goods, distribution staff should collaborate with community representatives to determine the validity of the documentation presented or the identified relationship.

After the distribution event, staff should follow up with the targeted program participant as required.

Suppliers are any entity (organization, group, or individual) that sell goods or services to CRS**.** Depending on the context in this handbook, “suppliers” might also be referred to as vendors, service providers, or sellers.

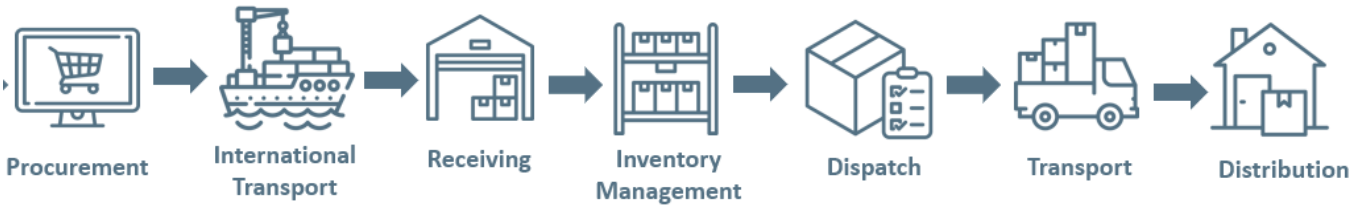
CRS SUPPLY MODALITIES

CRS transfers goods and services to targeted program participants in emergency and development contexts through the two modalities summarized in the figure below.



Both supply modalities apply to prepositioned goods. Prepositioned goods can be directly purchased, donated, or borrowed. In addition, CRS can preposition CVA assets and equipment and can set up framework agreements vendors, financial service providers (FSPs), etc.

The supply chain for both modalities involves the sequence of activities shown in the figure below.



Source: Fritz Institute/CILT Certification in Humanitarian Supply Chain Management (CHSCM) Unit 1: SCM in the Humanitarian World.

The supply chain for CVA also involves the activities listed below.

- Contracting financial service providers (FSP).
- Managing disbursements of cash, electronic funds, or vouchers.
- Managing program participant transactions with the vouchers and cash they have received.
- Managing payment to participating vendors.

CRS uses a process called "response analysis" to determine the most appropriate modality(s) for a given context. The analysis is informed by multiple factors, including the needs of the affected population(s); how well the local market functions; the operating environment; value for money; timeliness; and program participants' preferences, dynamics, and practices (see Design).

In-Kind Assistance

CRS provides three types of in-kind assistance: 1) procurement of goods or services, 2) in-kind donations, and 3) goods borrowed from other organizations or projects.

Procurement

Procurement refers to the purchase of goods or services through a competitive process (or, when applicable, a sole source). These goods and services are distributed for use by program participants, CRS partners, or CRS staff.

Goods and services may be procured from local, regional, or international suppliers relative to the specific geographic area(s) where goods will be distributed or where services will be rendered.

CRS and its donors increasingly favor local or "short" supply chains (especially for market-based programming and local procurement) to support and strengthen local markets and their participants and to reduce the environmental impact and costs of transportation across long distances.

Local and Regional Procurement (LRP)

Local procurement refers to procurement within the same country where the goods will be distributed/used.

- For the USG, local procurement requires the goods be produced (grown, manufactured) within the country.
- For CRS, local procurement aims to be as local to the programming area as possible (e.g., within the same region as the implementation area, sometimes called "hyper-local" or "ultra-local").

Local supply chains are not appropriate for all products (e.g., donor requirements for pharmaceuticals might require procurement from a subset of Europe-based suppliers, while permitting contracting of local service providers).

Regional procurement refers to procurement within the same region as the country where the goods will be distributed/used.

- For the USG, regional procurement is restricted to low-income economies, lower-middle-income economies, and upper-middle-income economies, as classified by the World Bank in World Bank Country and Lending Groups Classification.

When procuring goods and services, CRS must conduct market assessments to demonstrate that LRP will not seriously disrupt local or regional markets or influence prices up or down (see the Market Assessment and Procurement Assessment sections in the Design chapter).

International Procurement

International procurement refers to any procurement that does not meet the definitions of local or regional procurement.

- The USG rarely allows international procurement of food or D-goods and usually favors Gifts-In-Kind.
- At CRS, international procurement is mostly for ND-goods and is done or supported by Global Procurement.

Gifts-In-Kind

Gifts-In-Kind refers to donations of goods and/or services (instead of cash) to the implementing organization. CRS can either distribute Gifts-In-Kind directly to program participants or transfer Gifts-In-Kind to local partners for distribution. Goods or services can also be donated for internal use by CRS staff or partners, although this type of in-kind donation is less common.

Gifts-In-Kind is typically associated with large-scale food donations from major public donors, particularly the USG and The Global Fund. CRS advocates for flexible funding mechanisms from donors that allow for (but do not mandate) the use of GIK based on the needs of program participants and the local/market context.

Loans

Loans refer to goods borrowed from another project or organization.

- If the loan is a consumable item (e.g., food commodity), it is repaid with like items according to the terms of an agreement.
- If the loan is a non-consumable item (e.g., a laptop or car), the exact items that are borrowed should be returned to the organization or project that loaned out the goods (unless otherwise specified in the loan agreement).

Goods may be borrowed from projects within the same country office or from clusters, U.N. agencies or other NGOs nationally or internationally.

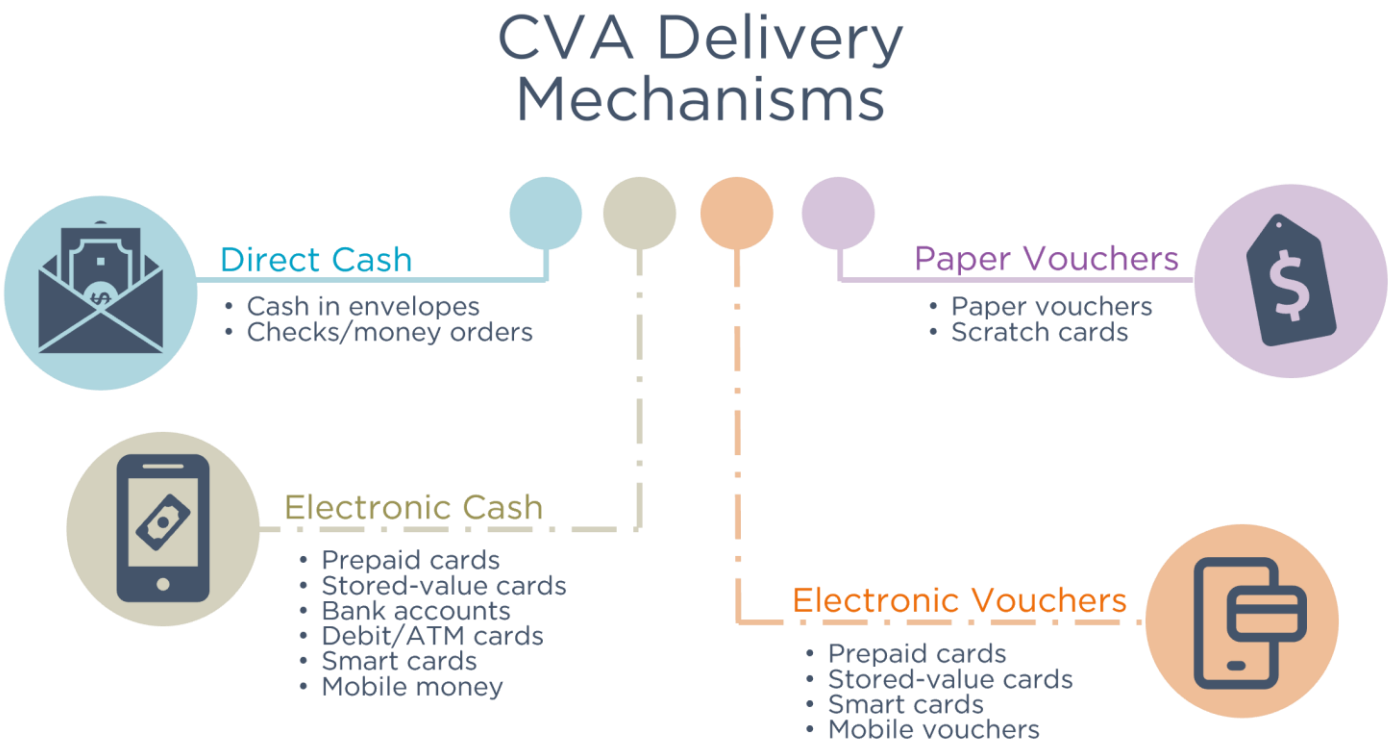
Cash and Voucher Assistance (CVA)

Because CVA relies heavily on local markets to deliver prioritized goods and services to program participants, CVA requires more strategic supply chain activities (e.g., retail market assessments, procurement assessments, response analysis, and market monitoring) to identify and use the right types of suppliers, transporters, and procurement and contracting mechanisms. With this expansion in CRS' supplier network and supplier relationships, the agency's in-kind and CVA supply chains both benefit.

Cash-based assistance programs use the transfer modalities shown in the figure below.



CVA programs deliver assistance through multiple mechanisms shown in the figure below.



Source: Fritz Institute/CILT, Core CTP Skills for Supply Chain, Finance, ICT, 2018.



Photo by Kent Truog

Chapter 2: Roles and Responsibilities

2. ROLES AND RESPONSIBILITIES

Purpose

> This chapter enables supply chain staff to understand the core responsibilities of positions typically found in or closely associated with a supply chain department and country program, including roles outside of the supply chain department or the country program.

2.1 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

Supply chain staff must comply with U.S. regulations and laws, donor regulations, and regional, state, and local laws in the jurisdictions where CRS operates.

At the country program level, the Country Representatives, Heads of Operations, and Heads of Programming must review non-U.S. government donor awards and regulations governing to fully comply with those regulations and to review them on an annual basis.

CRS POLICIES AND PROCEDURES

- CRS POL-FIN-ICS-024 – Internal Control Policy
- CRS PRO-FIN-ICS-024.02 – Segregation of Duties Procedure

2.2 SUPPLY CHAIN ORGANIZATIONAL STRUCTURE

GLOBAL SUPPLY CHAIN MANAGEMENT DEPARTMENT

The GSCM department is in CRS' Global Finance division. GSCM has three subunits, listed below.



The goal of GSCM is to enable CRS supply chains to be best-in-class and support the CRS vision, mission, and strategic priorities.

For more information about GSCM subunits, see the GSCM Portfolio of Expertise. To review GSCM's organizational structure and find individual GSCM staff, see the GSCM Department Organogram.

GSCM also maintains a site on MyCRS that contains current news, resources, tools, templates, and learning materials and opportunities.

GSCM staff may provide supply chain support when needed by country programs. The country program should inquire about supply chain support by contacting the SCM Regional Technical Advisor or the Deputy Regional Director/Operations.

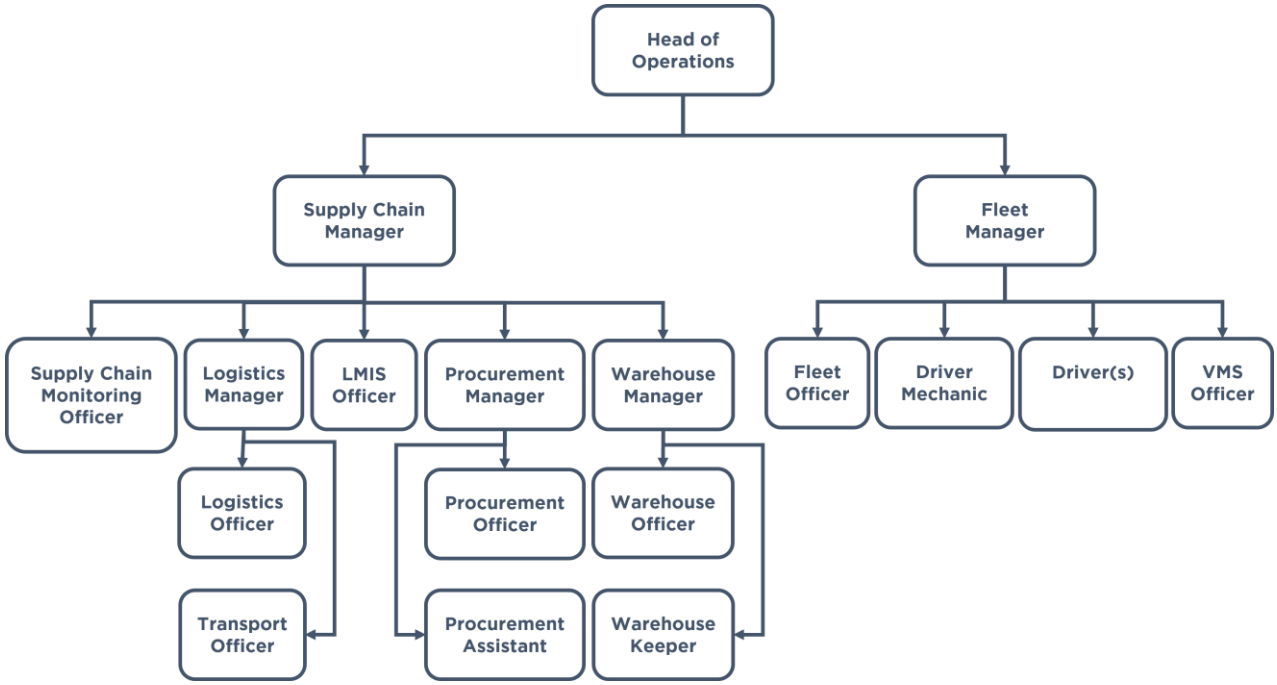
The Humanitarian Response Department (HRD) at CRS has staff under the operations team that can serve as surge capacity if country programs have staffing or operations gaps. HRD staff can temporarily fill Heads of Operations and Supply Chain Manager roles when needed. Click here to contact the correct HRD staff member for emergency support.

COUNTRY PROGRAMS

The actual structure (organogram) of a country program's supply chain department should be determined based on the size and scope of a country program´s supply chain. In all circumstances, segregation of duties must be maintained to ensure compliance with internal controls. For more information, see Segregation of Duties within the Supply Chain Department below.

A fully staffed supply chain organogram for a country program with an average complexity supply chain should look something like the one shown below.

Example of Supply Chain Department Organogram



For countries with less complex supply chains, not all these positions need to be filled. In these cases, responsibilities "roll up" to the next highest supply chain position. For example, if there is no Supply Chain Manager position, then the Head of Operations will have the responsibility of overseeing supply chain operations.

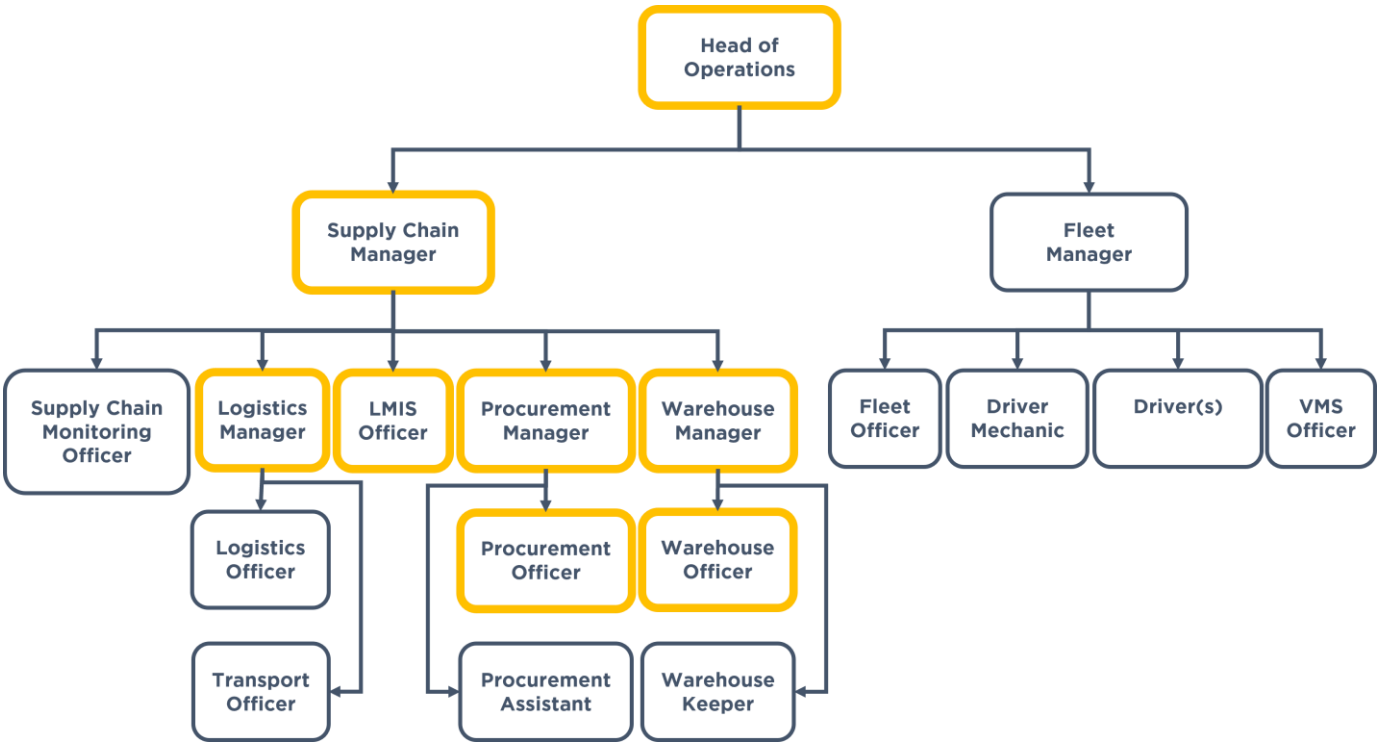
Some donors, such as The Global Fund, require a separate, project-funded supply chain structure that falls under the supervision of a Chief of Party or Program Manager. This individual or team focuses all their efforts on that one project. In such cases, the designated individual is considered a Deputy Supply Chain Manager and required to lead the project-specific supply chain management and supervise any other supply chain staff hired for the project. The Deputy Supply Chain Manager collaborates closely and communicates regularly with the Supply Chain Manager.

For more information about planning for and onboarding new supply chain staff, see the Start-Up chapter.

INSIGHT PERSONAS

For the positions highlighted below, staff are assigned an Insight persona to conduct transactions and/or have visibility into Insight supply chain modules. The Country Representative, administrative staff, and finance cost accountants also have access to Insight supply chain modules.

Insight Personas in a Supply Chain Department Organogram



Insight Persona Resources

- The Supply Chain Persona Policy explains how many country program staff can be assigned to each persona. For specific requirements, see the policy.
- The Supply Chain Persona Infographic is a helpful resource that describes what each persona can and cannot do in Insight.
- If you need to request a persona or assign a persona to a staff member, complete this **form.**

SEGREGATION OF DUTIES WITHIN THE SUPPLY CHAIN DEPARTMENT

There must be clear segregation of duties between each member of the supply chain department and among all employees along the supply chain. Requirements for segregation of duties are described in the CRS policies and procedures listed below.

- POL-FIN-ICS-024 – Internal Control Policy
- PRO-FIN-ICS-024.02 – Segregation of Duties Procedure

Responsibilities between team members must also be clearly defined. For more information about the segregation of duties in each country program context, see the relevant country program authorization matrix and process charts.

Determining Segregation of Duties

To determine how duties should be segregated, first map out the steps within a supply chain process category, and then list the person who is responsible for each step. If the map reveals that one person is both completing and then overseeing or approving a process, the Supply Chain Manager must find ways to shift responsibilities to maintain adequate segregation of duties. The table below is an example of a generic warehouse process map with a segregation of duties.

Process	Activity	Person Responsible
1	Sends shipping documents to Warehouse	Logistics Officer
2	Prepares reception and stock areas	Warehouse Assistant
3	Supervises day laborers	Warehouse Officer
4	Prepares tally and reception documents	Warehouse Assistant
5	Verifies quantity/quality against order and confirms receipt	Warehouse Manager
6	Puts away goods and updates Bin Cards	Warehouse Assistant
7	Inspects Bin Cards against product movement documents regularly	Warehouse Officer

During rapid onset emergencies, it may be more difficult to comply with segregation of duties at the beginning of a response. As the response begins to stabilize, start segregating duties as more staff become available.

In smaller country programs that have less supply chain activity, be extra careful to maintain segregation of duties as much as possible. No one should initiate, complete, and approve any process without proper supervision and verification.

2.3 SUPPLY CHAIN JOB SUMMARIES

The job summaries below provide a general understanding of supply chain positions and closely associated positions that support supply chain activities. A complete list of job descriptions can be found in the Standard JDs Document Library.

COUNTRY PROGRAM SUPPLY CHAIN POSITIONS

General Supply Chain Leadership

Country Representative or Country Manager



Insight Persona = Country Representative (1 per country program)

The CRS Country Representative or Country Manager oversees leadership and management of the country program from a supply chain perspective, including stewardship of CRS resources and operational excellence.

The Country Representative:

- Oversees risk management efforts.
- Develops networks and partnerships to facilitate high-quality programming design and implementation.
- Ensures efficient management of resources.

Head of Operations or Operations Manager



Insight Persona = Head of Operations (1 per country program)

The Head of Operations or Operations Manager oversees finance, HR, SCM (including fleet), administration, IT, and security.

The Head of Operations:

- Designs, implements, monitors, and reports on day-to-day operations to ensure all support services are delivered with high-quality standards and efficiency.
- Oversees the preparation of annual budget plans and grant/project budgets to ensure they reflect maximum operational efficiency, budgetary compliance, and risk mitigation.
- Ensures that the program is adequately staffed to meet the country program's needs and that all assets are available to facilitate programming activities (e.g., ensuring timely and sustainable vehicle acquisitions).
- Maintains an ongoing focus on quality management.
- Oversees compliance with CRS and donor requirements and local laws.

Supply Chain Manager



Insight Persona = Supply Chain Manager (1 per country program)

The Supply Chain Manager oversees all supply chain activities involved in the effective and efficient delivery of quality goods and services to CRS staff, partners, and program participants. These activities include supply planning, procurement, logistics, warehouse and inventory management, quality management, and risk management.

The Supply Chain Manager:

- Leads supply chain compliance with CRS and donor regulations and international and local requirements.
- Collaborates with the Head of Operations to assess supply chain risks and develop responses to risk.
- Coordinates with programming teams and participates in response analysis to determine the most appropriate modalities of assistance.

- Works closely with the Procurement Manager to oversee supplier management, supplier performance, and the development of strategic procurement strategies.
- Oversees transportation, warehousing, and distribution to ensure the proper handling and safeguarding of goods and the safety and security of staff.
- Oversees quality management, tracking, and documentation of goods and services from request to delivery.
- Ensures the timely recording of data in relevant systems and the preparation and submission of required reports.
- Establishes good coordination and communication between the supply chain team and other country programming departments and teams.
- Ensures that supply chain staff are oriented, trained, and mentored to effectively perform their job responsibilities.
- Leads CRS supply chain technical assistance and capacity strengthening efforts for implementing partners, often working closely with SCM Regional Technical Advisors and GSCM technical advisors.

A pharmacist must also be a member of the team to fulfill donor requirements for health supply chain management (e.g., Global Fund guidelines and WHO Model Quality Assurance System for Procurement Agencies), because pharmacists have the appropriate training to manage quality assurance, drug use, and pharmaceuticals procurements. In addition, there are licenses for importing health products in the National Drug Authority only obtained by pharmacists.

Deputy Supply Chain Manager

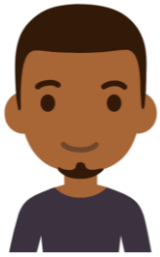


Insight Persona = N/A

The Deputy Supply Chain Manager oversees the supply chain forecasting and planning, monitoring, and quality management for one or more specific projects, product categories (e.g., health), and/or geographic locations. The Deputy Supply Chain Manager has similar responsibilities as the Supply Chain Manager but concentrates on a specific project, sector, or location to which they are assigned.

Logistics Management

Logistics Manager



Insight Persona = Logistics Manager (as many as needed per country program)

The Logistics Manager oversees all activities related to the quantification, shipment, receipt, storage/warehousing, dispatch, and distribution of goods.

The Logistics Manager:

- Plans and manages logistics from port or point of arrival to final distribution or disposal of goods.
- Collaborates with supply chain and programming staff to share pipeline analyses and logistics reports; participates in coordination meetings to ensure planning and coordination of logistics activities.
- Identifies potential or actual problems in the supply chain that can affect the short- or long-term availability of individual goods and services and acts proactively to address those problems.
- Oversees quality management of goods that are in the pipeline and ensures that logistics processes comply with CRS and donor regulations and guidelines.
- Identifies and assesses transportation resources, storage facilities, and any other logistics services.
- Provides regular coaching and support to CRS and partner staff to ensure effective operational processes.
- Maintains relationships with port operations, freight forwarders, customs clearing agents, and other key services providers to ensure good coordination and communication among Third-Party Logistics (3PL) providers, CRS, and the logistics, procurement, and programming staff of CRS partners.
- Ensures high-quality preparation of accurate and complete reports on the movement of goods.

Logistics Officer



Insight Persona = N/A

The Logistics Officer coordinates the implementation of all day-to-day logistics activities to ensure that goods and services are available for CRS needs. A Logistics Officer can be assigned responsibility for one or more specific projects, product categories (e.g., health), or geographic locations.

The Logistics Officer:

- Coordinates with country program staff on logistics needs to meet pipeline requirements; helps identify and provides recommendations to address challenges in the supply chain.
- Supports logistics market assessment and analysis and maintains logistics price data.
- Supports the implementation of operations from goods delivery to warehousing to final distribution and disposal per CRS and donor regulations and international and local requirements.
- Submits purchase requisitions for Third-Party Logistics (3PL) providers and coordinates with the procurement team to define delivery schedules and terms and conditions, including packaging, labeling, branding, and marking.
- Liaises with surveyors, clearing and forwarding agents, CRS and partner staff, and other parties to ensure timely receipt and distribution of goods.
- Maintains updated files with all required logistics documents and ensures all SCM activities and movements are fully and accurately documented.

Transport Officer



Insight Persona = N/A

The Transport Officer works with the Logistics, Fleet, and Warehouse Managers to determine transportation requirements based on distribution/dispatch plans and other department requests.

The Transport Officer:

- Assists with assessments of local transportation resources and infrastructure; monitors and reports on supplier performance and quality management related to transport operations.
- Develops transport plans based on dispatch plans and other ad hoc requests.
- Maintains contact with transport service providers for planning, performance issues, etc.
- Coordinates with the Fleet Management Department on the movement of vehicles used for the movement of goods.
- Enforces proper picking and loading of goods into vehicles with support from warehouse staff.
- Ensures complete and detailed documentation of transport services and assessments, including paper records when required by CRS guidelines, donor requirements, or local laws.

Warehouse and Inventory Management

Warehouse Manager



Insight Persona = Warehouse Manager (1 per internal IO)

The Warehouse Manager supervises all activities related to warehousing, receipt, inspection, put away, storage and handling, quality management, and dispatch of goods.

The Warehouse Manager:

- Works with logistics and warehousing staff and service providers to plan and implement the receipt, inspection, put away, storage and handling, and dispatch of goods following distribution and delivery schedules.
- Maintains storage facilities, goods, and the necessary equipment; ensures that goods are safe and secure.
- Maintains compliance with all CRS and donor policies, regulations, and guidelines, and with all local laws and requirements.
- Monitors stock levels and works with procurement, programming, and logistics staff to replenish goods and prevent stockouts or excess inventory.
- Provides regular coaching and support to CRS staff and day laborers to ensure proper handling of goods; ensures that safety, security, and health protocols are communicated and followed.
- Implements inventory quality control systems for the proper handling, storage, and accounting of goods and performs regular cycle counts and works with country program management to conduct annual PICs.
- Maintains up-to-date warehouse documentation; oversees data recording in relevant systems; prepares accurate and timely reports related to inventory, stock control, and warehouse activities.

For the management of goods that are stored in a CRS office storage location, the Administrative Manager has many of the same responsibilities as the Warehouse Manager. **In Insight, the Administrative Manager is assigned the Warehouse Manager persona.**

Warehouse Officer



Insight Persona = Warehouse Officer (as many as needed per internal IO)

The Warehouse Officer coordinates activities related to warehouse maintenance and the receipt, inspection, put away, storage and handling, monitoring, quality management, and dispatch of goods.

The Warehouse Officer:

- Coordinates the receipt, put away, dispatch, reconditioning, and loss handling of goods.
- Works with the Warehouse Manager to ensure that the storage facility and all equipment and supplies are secured and maintained in excellent physical condition.
- Conducts routine daily warehouse and inventory inspections and other quality control measures; takes immediate action to eliminate and/or mitigate damages and deficiencies.
- Monitors and reports to the Warehouse Manager on service provider performance (e.g., day laborers, tally clerks, transport operators).
- Plans and supervises the work of day laborers.
- Supports the inventory stock control and documentation system for goods and warehouse materials and equipment and records inventory data in relevant systems.

For the management of goods that are stored in a CRS office storage location, the Administrative Assistant has many of the same responsibilities as the Warehouse Officer. In Insight, the Administrative Assistant is assigned the Warehouse Officer persona.

Warehouse Keeper



Insight Persona = N/A

The Warehouse Keeper supports activities related to warehouse maintenance and the receipt, inspection, put away, storage and handling, quality management, and dispatch of goods.

The Warehouse Keeper:

- Conducts regular inspections and cleaning of storage facilities.

- Assists with the preparation of storage facilities for the receipt and dispatch of goods and assists with loading and offloading activities.
- Helps prepare the necessary documents for receipt, inspection, quality control, dispatch, damage, loss, and disposal and files documents per records management requirements.

Procurement

Procurement Manager



Insight Persona = Procurement Manager (1 per country program)

The Procurement Manager manages all systems and processes for local and international procurement of goods and services.

The Procurement Manager:

CVA Asset Custodian

The CVA Asset Custodian manages the receipt, storage, dispatch and returns of CVA assets for CVA project activities. CVA assets primarily include paper voucher booklets and e-cards. These responsibilities are assigned as a part-time position to an Administrative Assistant or similar role in each CRS office or sub-office in which CVA assets are stored.

The CVA Assets Custodian:

- Ensures CVA assets are kept safe and secure and maintained in excellent physical condition while in storage.
- Conducts routine inspections and other quality control measure; takes immediate action to correct damages and deficiencies.
- Coordinates with the logistics team to schedule the receipt and dispatch of CVA assets; tracks the status and movement of CVA assets; communicates with programming team about replenishment needs and stock levels.
- Ensures an efficient and reliable inventory stock control system for CVA assets.
- Coordinates with programming staff to load, activate, erase, and deactivate CVA assets.
- Maintains up-to-date documentation of all CVA asset transactions and records CVA asset data in relevant systems; assists with the preparation of reports related to CVA assets.

In Insight, the staff responsible for CVA Asset Custodian duties is assigned the Administrative Assistant persona, which allows them to manage CVA assets in the system.

- Manages the procurement processes for the entire country program and ensures compliance with all CRS and donor policies, regulations, and guidelines, and with all local laws and requirements.
- Coordinates with various departments to determine procurement requirements for goods and services; maintains an up-to-date procurement plan; and collaborates with budget holders to develop annual budget plans.
- Facilitates market assessments and ongoing price monitoring and analyzes response analysis and modality determination.
- Develops strategic sourcing solutions to ensure the best value for money, including establishing long-term and strategic service agreements.
- Ensures the highest level of transparency and integrity in the procurement department to prevent fraud; ensures and maintains clear segregation of duties; and conducts periodic risk assessments.
- Orients, trains, mentors, and monitors procurement staff.
- Oversees supplier relationships, supplier performance, and contractual obligations; acts to address contractual issues and mitigate risk; and advises on contract modifications, if needed.
- Monitors payment terms and schedules and oversees coordination with the finance team to ensure timely payments to vendors.
- Manages procurement documentation processes and data recording in relevant systems and oversees report preparation and data analysis for decision making.

Procurement Officer



Insight Persona = Procurement Officer (as many as are needed per country program)

The Procurement Officer coordinates local procurement activities and processes to acquire goods and services for the country program. At times, a Procurement Officer can be assigned to a specific project, product, service, or geographic location.

The Procurement Officer:

- Coordinates the sourcing process, including market research, cost estimation, solicitation document preparation, bidding process facilitation, supplier identification and research, negotiation, due diligence assessment, new supplier registration, and contract/PO preparation.
- Participates in market assessments and price monitoring and supports activities for response analysis and modality determination.
- Coordinates with various departments to maintain an up-to-date procurement plan for major purchases and provides pricing information to assist budget holders with budget preparation.

- Coordinates and tracks the delivery of goods and services and keeps CRS staff and partners informed of procurement status.
- Maintains constant contact with suppliers to follow up on the execution of contractual terms and conditions; monitors and reports on supplier performance.
- Maintains up-to-date procurement documentation and vendor files; inputs procurement data in relevant systems; prepares reports and facilitates document retrieval.

Procurement Assistant



Insight Persona = N/A

The Procurement Assistant performs various activities to assist with the acquisition of goods and services. At times, a Procurement Assistant can be assigned to support a specific project, product, service, or geographic location.

The Procurement Assistant:

- Assists requestors in completing purchase requisitions.
- Assists with maintaining the procurement plan.
- Assists with procurement tracking, to facilitate timely communication of procurement needs and provides status updates on the progress of all orders and deliveries.
- Assists the Procurement Officer in the continuous search for capable suppliers and visits suppliers to collect company profiles and explore potential partnerships; participates as requested in due diligence assessments.
- Purchases items following CRS procurement processes.
- Follows up with suppliers to ensure goods and/or services are delivered following the agreed terms and conditions; expedites procurements.
- Monitors prices for select commodities in select markets, as requested.

Non-Procurement Staff with Procurement Insight Personas



The **Requestor** submits an offline request for goods and services to the **Preparer** for entry into Insight. **Requestors** can be almost any staff member of CRS and are not members of the procurement team.

The Requestor:

- Submits a requisition using the standard requisition form.
- Provides sufficient specifications for the requested good or service.
- Provides the correct POET information.
- Informs the procurement team of any donor requirements or restrictions related to the requisition.



The **Preparer** receives offline requisitions from the Requestor and uses that information to enter the request in Insight. Preparers are not members of the procurement team. There are typically two Preparers per department or project.

The Preparer:

- Enters the requisition information and submits for approval in Insight.
- Receives services in Insight so payment can be made to the supplier.
- Tracks the status of a requisition or PO in the system and keeps the requestor informed.

Supply Chain Information and Accountability

LMIS Officer



Insight Persona = LMIS Officer (as many as needed per country program)

The LMIS Officer oversees inventory accounting, reporting processes, and supply chain data analytics. At times, an LMIS Officer can be assigned to a specific project, product, service, or geographic location.

The LMIS Officer:

- Ensures that required documents, data, and reports for supply chain are received and consolidated promptly and in compliance with standard policies and procedures.

- Enters supply chain data in relevant systems; enters partner and distribution data in Insight.
- Monitors supply chain KPIs and manages dashboards and analytical reports on KPIs.
- Reviews supply chain records and data entry in relevant systems for accuracy and completeness.
- Coordinates and works with programming, administrative, and supply chain staff to resolve issues and reconcile supply chain data when there are discrepancies or irregularities.
- Works with operations leadership to prepare for audits and assists with the audit process.
- Collaborates with programming, regional, and country program IT staff to implement technology initiatives related to supply chain (e.g., ICT4D).

Supply Chain Monitoring Officer



Insight Persona = N/A

The Supply Chain Monitoring Officer promotes consistency and compliance in warehousing facilities, movement of goods, and distribution practices.

The Supply Chain Monitoring Officer:

- Visits storage facilities and service delivery points to monitor quality management of goods and ensure that these locations meet all CRS and donor policies, regulations, guidelines, and all local laws and requirements.
- Reviews subrecipient internal control and quality management procedures at each stage of the supply chain to ensure they are minimizing the risk of misappropriation, fraud, unusual loss or waste, and any other irregularities.
- Prepares timely evaluation reports that document field observations.
- Provides recommendations for corrective measures to mitigate existing or potential risks.

Fleet Management

This handbook does not extensively cover fleet management. For detailed information about fleet management roles and responsibilities, see the Fleet Management Toolkit.

Fleet Manager



Insight Persona = N/A

The Fleet Manager manages the country program's owned and leased fleet, drivers, and VMS to meet transportation needs.

The Fleet Manager:

- Monitors compliance with operating policies and procedures for fleet operations and maintenance.
- Maintains vehicle inventory per the approved Vehicle Disposal and Acquisition Plan and maintains vehicles, vehicle spare parts, equipment, and fuel inventory and replenishment.
- Oversees the authorization and performance of CRS drivers.
- Follows up on road crashes and other incidents involving CRS vehicles, drivers, and passengers.
- Identifies the country programming needs and plans transportation to meet needs.
- Schedules and manages vehicle movements, performs situational analysis, plans routes, assigns drivers, and rents vehicles if needed; optimizes the use of resources to meet programming needs under the required schedules and standards.
- Manages fleet documentation and data entry in the VMS.
- Prepares reports, analyzes data, and plans annual budgets for fleet operations.

Fleet Officer



Insight Persona = N/A

The Fleet Officer coordinates the movement of the owned and leased fleet of the assigned country program and assigns drivers to meet the country program's travel and transportation needs.

The Fleet Officer:

- Monitors and reports on the physical security of all motorized assets, spare parts, and fuel; monitors the functioning of vehicles and equipment; recommends maintenance and repairs as needed.
- Supervises drivers to ensure safe and secure driving practices per CRS vehicle use policies and procedures.
- Maintains records related to fleet management in accordance with all CRS and donor policies, regulations, and guidelines, and with all local laws and requirements; prepares relevant reports.

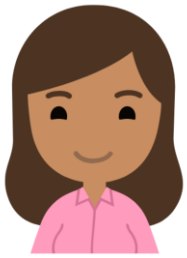
Driver Mechanic



Insight Persona = N/A

The Driver Mechanic manages the maintenance, repair, and refueling of CRS vehicles, and assists with orienting and training drivers.

Drivers



Insight Persona = N/A

Drivers operate CRS vehicles and ensure the safety and security of the vehicle, passengers, cargo, pedestrians, and others. Drivers document all travel in the vehicle log sheet and report on vehicle issues to the Fleet Manager.

VMS Officer



Insight Persona = N/A

The VMS Officer enters data in the VMS, performs data analysis, and prepares documentation and reporting related to fleet management.

The roles in this section are not assigned Insight personas because fleet management transactions and data are not recorded in Insight.

Day Labor

CRS typically hires day laborers during periods of high activity (i.e., when receiving or dispatching large volumes of goods at the warehouse). Workers are hired in accordance with local laws. The selection and payment of workers require strict segregation of duties to prevent corruption or favoritism. Payments to workers should not be documented as cash transfers. Cash transfers are specific to cash for work and cash and voucher programming.

REGIONAL SUPPLY CHAIN POSITIONS

Deputy Regional Director/Operations



Insight Persona = Logistics Manager

The Deputy Regional Director/Operations leads CRS operational strategy and implementation of best practices, risk management, and compliance. The Deputy Regional Director/Operations helps ensure that the region's operational strategy aligns with its programmatic strategy and CRS' mission.

Supply Chain Regional Technical Advisor



Insight Persona = Logistics Manager

The SCM Regional Technical Advisor provides technical advice, guidance, and support for all SCM activities, including logistics, procurement, CVA, warehousing, transportation, distribution, and partner management. The SCM Regional Technical Advisor also coordinates with the Deputy Regional Director/Operations to oversee the country program's compliance with all CRS and donor policies and procedures, regulations, and guidelines, and with all industry standards and local laws and requirements.

In coordination with the Head of Operations and the country program Supply Chain Manager, the supply chain Regional Technical Advisor:

- Reviews the supply chain section of country program proposals and provides feedback.
- Contributes to response analysis, modality selection, and operational design of strategic proposals.
- Supports country program quality management efforts and the development of solutions to identify and mitigate quality assurance and control issues.
- Assists country programs with audit preparation and disclosure of audit findings.
- Works with country program staff to strengthen supply chain performance by identifying challenges and proposing solutions.
- Contributes to supply chain knowledge management and learning by sharing best practice lessons learned, facilitating regional Community of Practice (CoP) calls, collecting information for KPIs, sharing reports, conducting training, and mentoring and coaching staff.

Supply Chain Regional Implementation Advisor



Insight Persona = Logistics Manager

The Supply Chain Regional Implementation Advisor supports the deployment of Insight and helps staff within their assigned region use the supply chain modules in day-to-day operations to stabilize and optimize regional supply chain performance.

In coordination with the Systems and Performance technical unit, the Supply Chain Regional Implementation Advisor:

- Supports the development and mapping of the local country program.
- Supply chain architecture for configuration in Insight.
- Provides hands-on support to country program staff with Insight's supply chain modules.

- Facilitates end-user training of new users during initial deployment. Follows up on training of existing users as needed.
- Optimizes and supports day-to-day use of the system of record so data reflect real-time information and can be used for accurate, evidence-based decision making.
- Guides end users on how to use supply chain reports to monitor supply chain activities and optimize supply chain performance.

Contact any of the above regional staff for questions about country program supply chain support, policies, processes, staffing, or anything else. The Deputy Regional Director/Operations, Regional Technical Advisor, or Regional Implementation Advisor will connect staff with the most appropriate resources or GSCM contacts, as needed.



2.4 SUPPLY CHAIN STAKEHOLDERS

Continuous communication and collaboration are crucial for optimal supply chain performance. The supply chain runs more efficiently and effectively when everyone works together. Supply chain stakeholders are those people who are not directly involved in supply chain activities, but who influence CRS supply chain operations. This section summarizes the relationship between these stakeholders and the supply chain.

COUNTRY PROGRAM STAKEHOLDERS

Finance Team

The supply chain team and the finance team mutually benefit from good communication and coordination throughout the processes listed below.



The finance and supply chain teams must work closely together for CVA programming. The finance team has information about cash resources available in CRS bank accounts or with Financial Service Providers (FSPs) and mobile network providers. The finance team also has information about the regulatory environment and local context for different cash delivery options (e.g., Know Your Customer requirements or audit requirements). It is helpful for the supply chain team to have this information in advance of cash transfers to program participants or payments to participating voucher vendors.

Programming Team

The supply chain team and the programming team mutually benefit from frequent communication and consultation throughout the project lifecycle. Below are opportunities during the project cycle for collaboration with the programming team.



Compass provides step-by-step guidance and practical resources that support achievement of CRS project management standards. All CRS staff who play a significant role in project design, start-up, planning, implementation, and close-out—including supply chain staff—should use Compass as a tool to better understand and fulfill their roles in carrying out key actions during a project's lifecycle.

All Departments

The supply chain team and other CRS departments mutually benefit from good communication and collaboration when departments are planning for and requesting goods or services. Department leads should work with the Supply Chain Manager, Procurement Manager, and Warehouse Manager when determining their department's needs and submitting requisitions to understand lead times, stock levels, etc.



Photo by Jerry Andrianaivoarivony

Chapter 3: Design

3. DESIGN

Purpose

This chapter enables supply chain staff to participate meaningfully in market assessments and response analysis during the design of a project; determine the best response modality by providing initial forecasting estimates and reviewing proposals from a supply chain perspective; and support the design and proposal processes.

3.1 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

CRS POLICIES AND PROCEDURES

- Supplier Master Policy

CRS GUIDELINES

- Compass Project Management Standards – Design Phase Key Actions
- CRS Minimum Market Assessment Guide
- CRS Private Sector Engagement (PSE) Playbook
- Guidance for Project Operating Context Review and Design Validation
- ProPack I: Guidance on Project Design for CRS Projects and Program Managers
- RFSA Proposal Development Guidelines
- CVA Resource Center Includes CVA Response Toolkit and resources for Response Analysis, Market Assessments, and Cash Readiness

DONOR POLICIES AND REGULATIONS

- 7 CFR 1590 USDA Local and Regional Food Aid Procurement Program
- 7 CFR 1599 McGovern-Dole International Food for Education and Child Nutrition Program
- 22 CFR 211 USAID Transfer of Food Commodities for Food Use in Disaster Relief, Economic Development and Other Assistance
- 2 CFR 700 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards
- 22 CFR 228 Rules on Source and Nationality for Commodities and Services Financed by USAID
- Bureau for Humanitarian Assistance (BHA) Functional Policy 20-01: Eligible Uses of Title II Associated Costs, Monetization Proceeds, and Community Development Funds for BHA Awards

- Bureau for Humanitarian Assistance (BHA) Functional Policy 20-03: Award Requirements for Source and Origin of Local, Regional, and International Procurement (LRIP) of Food Commodities
- Directorate General for European Civil Protection and Humanitarian Aid Operations (DG ECHO) Thematic Document Policy No. 3: Cash Transfers

DONOR AND OTHER GUIDELINES

- Bureau for Humanitarian Assistance Emergency Applications Guidelines
- Bureau for Humanitarian Assistance Resilience Food Security Information
- CaLP Minimum Standard for Market Analysis (MISMA)
- Certification in Humanitarian Supply Chain Management (CHSCM) Learning Materials - Unit 1: Supply Chain Management in the Humanitarian World
- Emergency Market Mapping and Analysis Toolkit (EMMA)
- Logistics Cluster Digital Logistics Capacity Assessment (DLCA)
- Malaria-Quantification-Manual_online.pdf
- Mercy Corps Delivery Guide for Scoping the Payments Landscape
- Practical Guide for the Quantification of Anti-TB Medicines: Guidelines for Quantification and Supply Planning for Procurement
- Quantifications for Health commodities- JSI
- Red Cross and Red Crescent Movements Cash in Emergencies Toolkit
- UNHCR Multi-sector Market Assessment: Companion Guide and Toolkit
- USDA McGovern-Dole Notice of Funding Opportunity
- USAID Modality Decision Tool for Humanitarian Assistance
- World Food Programme Market Analysis Tool: Import Parity Price
- World Food Programme Market Analysis Guidelines
- WHO and Global Health Cluster: Technical Note on the Inclusion of Health Expenditures in the Minimum Expenditure Basket and Subsequent Multi-Purpose Cash Transfer

3.2 OVERVIEW

The design of supply chain activities is informed by **response analysis** (defined in the callout to the right) and is guided CRS' **Compass project management standards** (described in the subsection below).

Supply chain staff have critical roles in both during the design phase.

What is response analysis?

The process of gathering and assessing information about the local context to select the most appropriate and feasible transfer or assistance modality(s) and distribution mechanism(s).

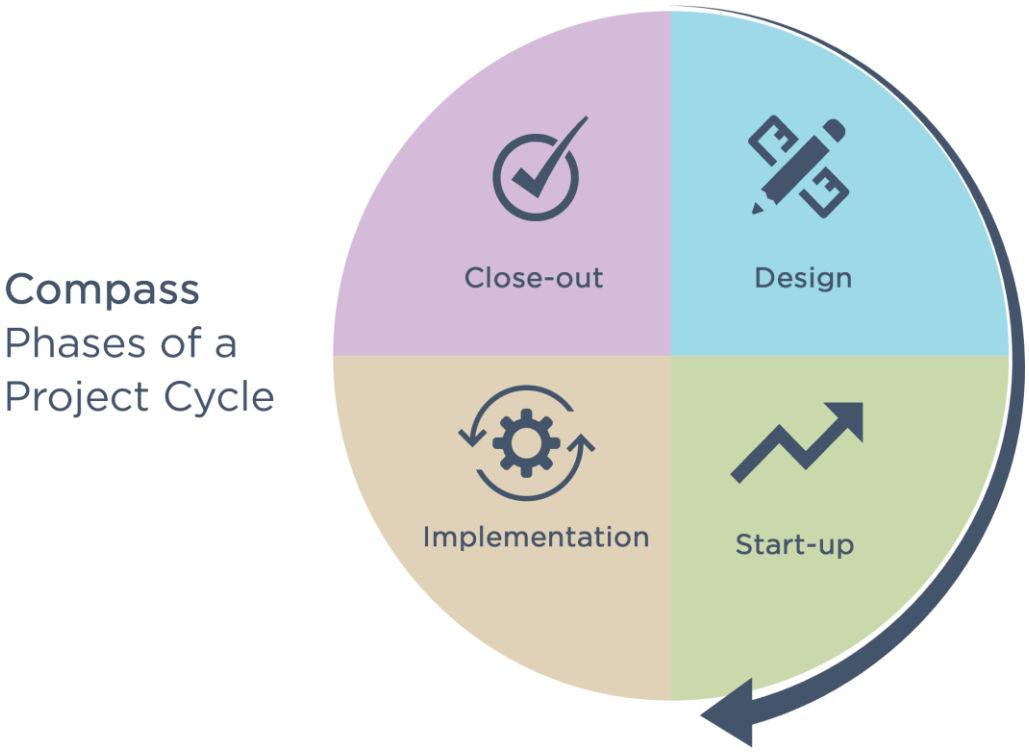
CVA projects use the term "delivery mechanism" instead of "distribution mechanism" to describe the modality for delivering and distributing assistance (e.g., hard currency, ATM cards, mobile money, etc.) to program participants. For CVA projects, there are additional decisions to be made after selection of the response modality.

COMPASS (CRS PROJECT MANAGEMENT STANDARDS)

Compass is CRS' guidance for all staff on project management standards for all four phases of the project cycle: design, start-up, implementation, and close-out. This handbook provides detailed guidance on supply chain activities that occur during the design phase as these activities relate to the key actions and standards found in Compass.

- For information about the entire design phase of a project, see the Compass Design phase site.
- For information about the Compass design process, see Compass Standards 1-5 and associated key actions and ProPack I: Guidance on Project Design for CRS Projects and Program Managers.

The figure below shows the four Compass phases of every **project cycle**.

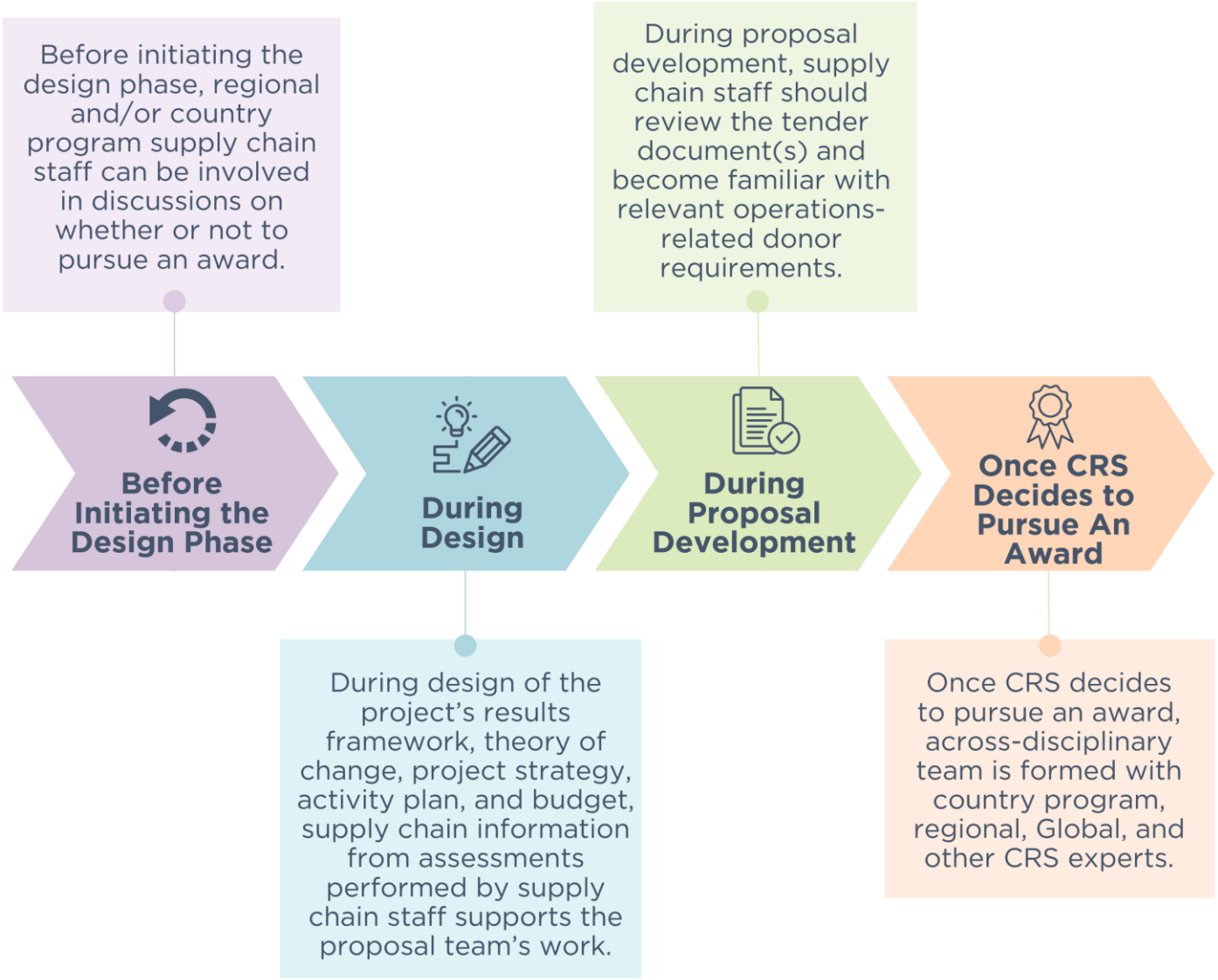


The figures below show important **supply chain activities performed by supply chain staff** during the design phase.

Supply Chain Activities Performed by Supply Chain Staff in the Design Phase

1 Assess operational capabilities	2 Evaluate risks	3 Contribute to market analysis to determine functionality of market/local context and availability, quality, and cost of goods and services
4 Forecast, quantify, and estimate supply needs	5 Assess logistics infrastructure	6 Analyze procurement options

Together, these activities contribute to the selection of response modalities and strategies in project design.


Before initiating the design phase, regional and/or country program supply chain staff can be involved in discussions on whether or not to pursue an award.
During proposal development, supply chain staff should review the tender document(s) and become familiar with relevant operations-related donor requirements.
Before Initiating the Design Phase
During Design
During Proposal Development
Once CRS Decides to Pursue An Award
During design of the project's results framework, theory of change, project strategy, activity plan, and budget, supply chain information from assessments performed by supply chain staff supports the proposal team's work.
Once CRS decides to pursue an award, across-disciplinary team is formed with country program, regional, Global, and other CRS experts.

3.3 ROLES AND RESPONSIBILITIES

This chapter presents new CRS roles and responsibilities for supply chain staff in the design process. These roles and responsibilities are aligned with emerging best practices and GSCM's Roadmap Toward the 2030 Vision and will require the development of supply chain competencies in market assessment and procurement analysis over time. For now, country program leadership—with support from Regional Technical Advisors—should assess the capabilities of individual staff and teams and assign the roles and responsibilities listed below accordingly.

The design phase is an ideal time to engage with pre-identified CRS partners (subrecipients or prime recipients, depending on the award). Depending on the partner and the relationship, supply chain staff can use this phase to establish a capacity-building partnership or to strengthen a partnership by the working together.

Supply chain staff should still make data and analyses available to CRS partners and peers, even if they are not involved in the design stage.

RESPONSE ANALYSIS PROCESS

The figure below lists the functions and activities of eight roles involved in the response analysis process during the design phase. For more information about each of these roles, see the Roles and Responsibilities chapter.

Response Analysis Function/Activity	Proposal Team Coordinator	Programming Members of the Design Team	Supply Chain Manager	Logistics Manager	Procurement Manager	Procurement Team	Head of Programming	Head of Operations
Forms a design team to design the project and develop the proposal	I	I	I				R	C
Conducts the program participant needs and preferences assessment and estimates demand (number of program participants, distribution unit sizes, types of goods and services)	A	R	I				I	
Estimates quantities and volumes of goods needed using forecasting and quantification methods		C	R					A
Forms a market assessment team	R	I	I		I	I	A	
Gathers data for analyzing the market context	A	R	R	C	R	C		
Writes market assessment report with findings, identified risks, and recommendations	A	R	C	C	C	C		
Maps the logistics network and determines the status of the infrastructure	I		A	R				C
Estimates storage and transport capacity needs based on estimated forecast		C	R	C				A
Identifies equipment needed to move and maintain the quality of goods being considered		C	R	C				A
Writes logistics assessment report with findings, identified risks, and recommendations	I	I	A	R				C
Researches import parity price (IPP) and compares with wholesale and retail prices	I	I	I		A	R		
Analyzes contracting options for response modalities being considered		C	I		A	R		
Writes procurement assessment report with findings, identified risks, and recommendations	I	I	I		R	C		
Decides on response modalities to be included in the project design	A	R	C	C	C		I	I

R=Responsible; A=Accountable; C=Consulted; I=Informed

During the design phase, programming staff and supply chain staff are responsible for coordinating closely with one another and with other teams to ensure that complete and accurate information is available to all involved parties throughout the process. At the same time, they are responsible for leading different components of the response analysis process, as shown in the figure below.

Programming Staff

Programming staff lead:

- Overall coordination of the response analysis process.
- Program participant needs assessment.
- Gender assessment, including intra-household roles and responsibilities, preferences, access, decision-making, and protection concerns.
- "Demand" side of market assessment (overall market systems, program participant access to markets, estimation of demand, and determination of preferences).
- Sector-specific assessments for financial services, rental markets, Private Sector Engagement (PSE) opportunities, etc.
- Coordination of risk analysis.
- Selection of response modality(s) and distribution/delivery mechanism(s).

Supply Chain Staff

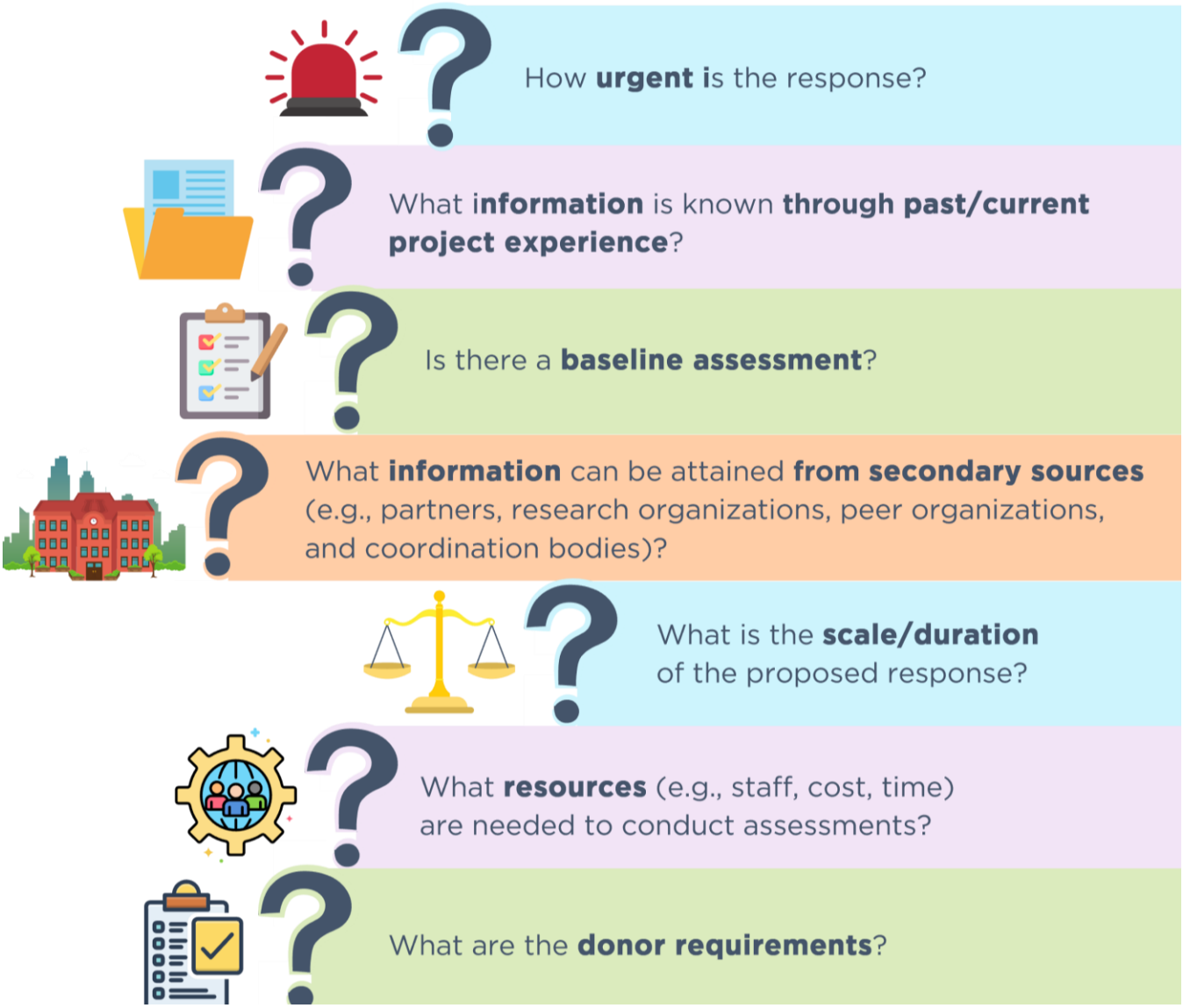
Supply chain staff lead:

- Initial forecasting and quantification of goods and services based on the program participant needs assessment. **For guidance, see Forecasting and Quantification.**
- "Supply" side of market assessment (retail markets and supply chains). **For guidance, see Market Assessment**
- Logistics Assessment
- Procurement Assessment

Supply chain staff also **contribute** information to the following components:

- Sector-specific assessments, including financial services, rental markets, scoping exercises for Private Sector Engagement (PSE) opportunities, as necessary
- Security assessments. For guidance, see Logistics Assessment.
- Threat assessment and risk analysis. For guidance, see Threat and Risk Assessment.
- Selection of response option(s) and distribution/delivery mechanisms. For guidance, see Response Selection.

Teams should collect and analyze the minimum information required for managers to make informed and evidence-based decisions, which depends on factors like those listed in the figure below.



Staff who are developing the proposal during the design phase should collect sufficient information to develop and justify the suggested approach in the proposal, recognizing that more comprehensive assessments (market, logistics, etc.) is often required within the first three months or first year of the award to confirm or adjust the proposed strategy.

MARKET ASSESSMENT PROCESS

Both supply chain and programming staff participate in the market assessment, visualized in the figure below.

Both Supply Chain Staff & Programming Staff Participate in Market Assessment

Supply Chain Staff

Focus on "supply" side: Assessing retail and wholesale markets

Programming Staff

Focus on "demand" side: Assessing target community's needs & participation in the market & inclusivity & resilience of market systems

What questions do supply chain & programming staff use to gather information?

1. Can the commercial market reliably meet the needs of the target population (variety, quantities and qualities of targeted goods and services)?
2. What are the potential negative impacts of the project interventions on the economy, market actors, and consumers?
3. Can bottlenecks in commercial supply chains be addressed through the project, and if so, how?
4. Are retail agents and other supply chain actors qualified and willing to participate in the project?
5. Is there any evidence of price fixing or collusion among market actors?
6. Do market actors freely enter and exit the market?

1. Which goods and services do project participants procure in which markets?
2. Are the preferred goods and services typically available in the market?
3. Do targeted project participants have safe and reliable access to markets?
4. Who within the household decides what to buy? Who makes the purchases? How would these members of the household spend additional cash that enters the household?
5. Will improved access to markets (physical, social, or financial) achieve project objectives?
6. What is the anticipated change in marginal market demand due to potential interventions?
7. Are individual markets and the larger market system inclusive and resilient?

It is important that programming and supply chain staff coordinate, collaborate, and share information during the market assessment process. Information gathered should be analyzed jointly to gain a clear understanding of market dynamics and the implications of those dynamics on project design and intended outcomes.

PROPOSAL DEVELOPMENT AND REVIEW PROCESS

The figure below lists the functions and activities of eight roles involved in the proposal development and review process during the design phase. For more information about each of these roles, see the Roles and Responsibilities chapter.

Proposal Development and Review Function/Activity	Proposal Team Coordinator	Programming Members of the Design Team	MEAL Manager	Supply Chain Manager	Logistics Manager	Procurement Manager	Head of Programming	Head of Operations
Develops the results framework, project strategy, and theory of change	A	R		C			C	C
Determines key indicators to be included in the MEAL system	A	R	C	C	C	C	I	
Determines project staffing	A	R		C			I	I
Collects all identified risks and risk responses in a project-level risk register	A	R		C	C	C	I	C
Conducts Procurement Needs Analysis	A	R		I	I	R	I	I
Creates and validates supply chain-specific budget	C	C		R	C	C	I	A
Develops the project budget	A	R		C			I	I
Writes the project proposal	A	R					I	
Reviews the project proposal	I	I	R	R	R	R	I	I
Conducts Proposal After Action Review (AAR)	A	R	C	C	C	C	C	C

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

3.4 PROCESSES

RESPONSE ANALYSIS

Response analysis is a process that involves the analyses listed below, each of which are discussed in-depth later in this section.

- Baseline Assessment
- Forecasting and Quantification
- Market Assessment
- Logistics Assessment
- Procurement Assessment
- Threat and Risk Assessment

Both supply chain and programming staff participate in this process (see breakdown of their respective roles and responsibilities in the Response Analysis Process section in this chapter).

This section provides guidance on how supply chain staff contribute to response analysis in coordination with programming, security personnel, and other teams.

> Early engagement and active participation by supply chain teams in the design process is crucial to ensure accurate budgeting and minimize delays in project start-up.

Supply chain staff and programming staff use the process of response analysis to select the right design for the project with the right supply chain elements (e.g., transfer or assistance modality, distribution mechanism). Response analysis is typically led by programming staff, with supply chain staff providing key information about the retail and wholesale markets, logistics, procurement options, and distribution or delivery mechanisms.

> Design teams should establish the minimum conditions that must be met for different response options. For example, health programs that provide medicines to patients have strict quality requirements. If donor-approved regulatory structures for pharmaceutical products do not exist in the country, then market-based approaches cannot be considered.

Response analysis involves a series of interrelated assessment analyses to understand the needs of program participant needs and the operational context. The analysis includes baseline assessment, forecasting and quantification, market assessment, logistics assessment, procurement assessment, and threat and risk assessment. Programming staff determine the scope of assessments, with input from supply chain and other relevant teams.

Emergency response projects typically rely on rapid assessments, which should be repeated as the context changes and as more resources become available. Assessments for emergency response are usually less in-depth than assessments for development projects.

Health supply chain projects typically rely on a detailed assessment to identify the strengths and weaknesses of health supply chain systems.

If this assessment cannot be performed thoroughly during the design phase (due to insufficient time or resources), staff should use secondary data to inform the proposal design and should build funding into the project budget to perform a more detailed assessment during the implementation phase.

When performing this assessment, the Health Supply Chain Manager should coordinate with implementers and stakeholders to leverage in-country information and/or supply chain assessment tools that are already available.

For more information, see the Health Assessment chapter in the Health Annex.



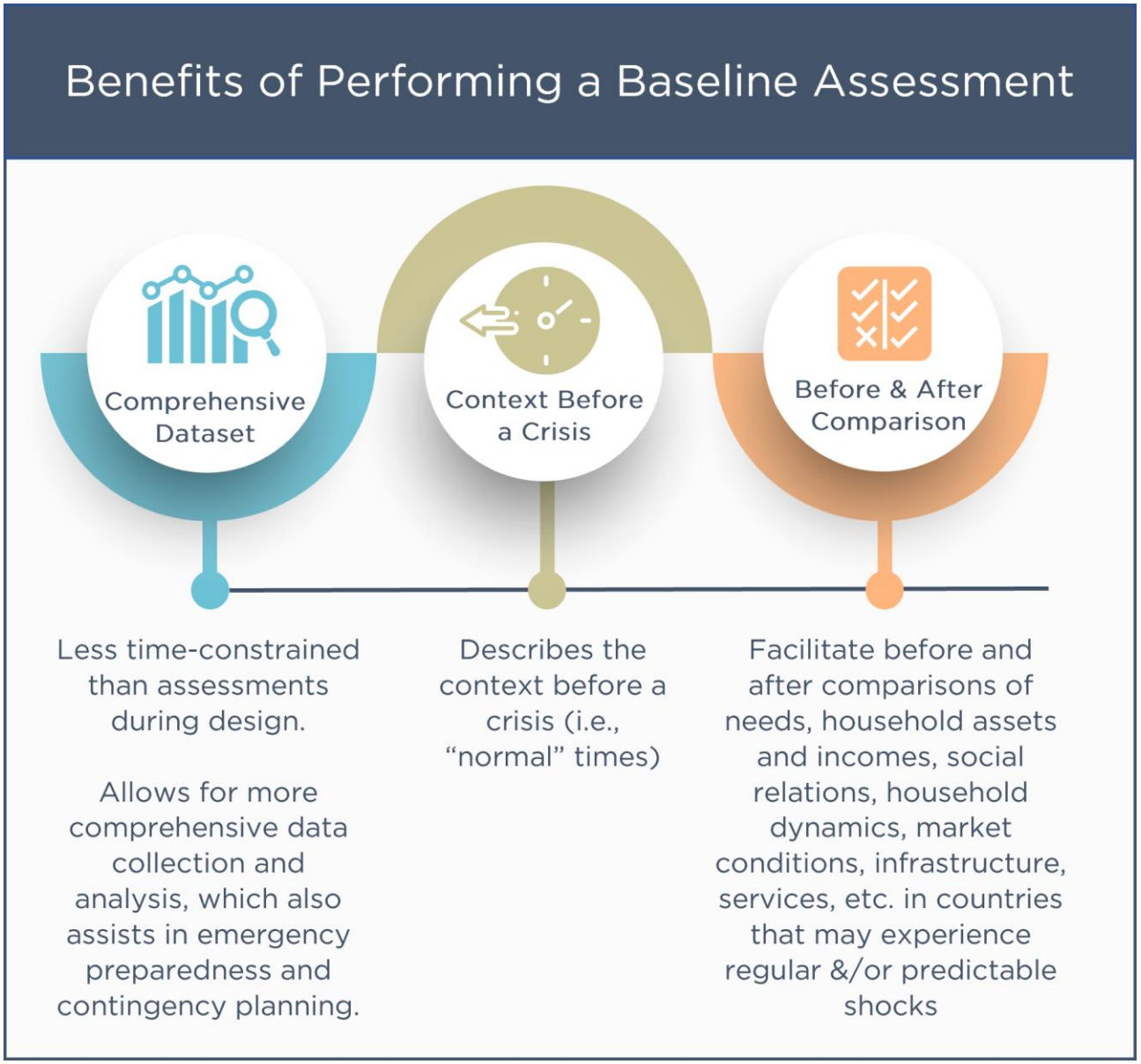
When analyzing appropriate response options, teams should first ask "will cash work?" If cash is not appropriate, teams should consider procurement strategies and other interventions that strengthen local market systems (e.g., social sourcing, market support interventions, etc.). This approach is aligned with **Goal Area 2** of the **CRS 2030 Strategy**, which seeks to ensure that "the immediate and recovery needs of crisis-affected people are met in timely and dignified ways, **prioritizing market-based solutions that also help local economies to recover**."



Baseline Assessment

Country program staff should conduct baseline assessments, which can be updated quickly following a disaster or during proposal development. When seeking data to inform response analysis, CRS staff should leverage existing reports and assessments.

The figure below lists several benefits of baseline assessments.



When possible, baseline assessments can be coordinated with other peer organizations or through clusters like the Logistics Cluster (LC) and other working groups.

Country programs should plan and budget for baseline assessments when developing their Annual Program Plan (APP).

Forecasting and Quantification

Forecasting estimates the quantities of goods and services and the costs of goods, services, and supply chain functions to facilitate the adequate storage and efficient movement and delivery of such goods (or delivery of services) over a defined period. Quantification uses these estimates to develop the proposed budget.

The terms forecasting and quantification are often used interchangeably. For purposes of this handbook, the term "forecasting" refers to process of estimating future needs and product flows and the term "quantification" refers to the data generated by the forecasting process (e.g., precise numbers based on program goals and activities).

In a health supply chain, quantification includes the processes of forecasting (estimating the quantities and costs of the products required for a specific health program or service) **and** supply planning (determining when the products must be available to ensure an uninterrupted supply for the program).

For more information on the quantification process when designing health programs or services, see the Health Annex.

Forecasting and quantification are interdependent and iterative processes that occur regularly throughout the project lifecycle to test assumptions and make updates over time. During the design phase, quantities should be recalculated as more information becomes available about strategies and costs. During the start-up phase, forecasts of the project caseload, updated demographic data, market prices, shipping and insurance rates, etc. should be recalculated as more precise data becomes available.

For more information on pipeline analysis, quantification, and forecasting during project implementation, see the Planning chapter.

Forecasting and quantification depend on demand estimation (defined in the callout box below) of the goods or services needed for a project or program.

Two demand estimation methods that can be used are the **ration or regimen method** and the **consumption method**, both of which are discussed below.

What is demand estimation?

A **forecast** of the required goods or services **based on the estimated needs** of the target population (or CRS or partner staff) **over a defined time horizon**. It includes the **estimated associated costs** (prices) and **budget** of the required goods or services.

The term "ration" refers to the basket of assistance across sectors or commodities, not just food items.

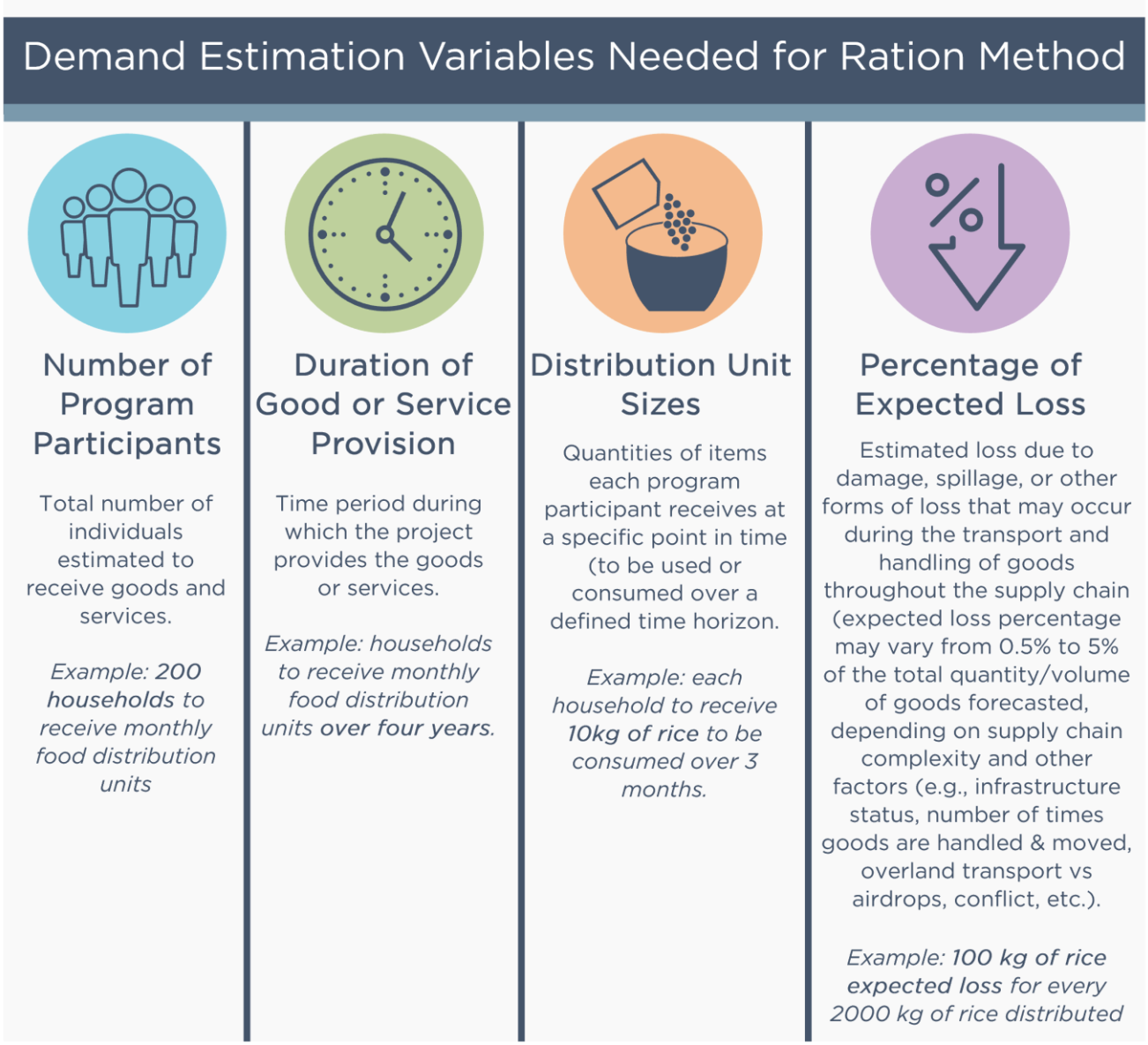
Ration Method

This method is used for goods that are distributed on a regular schedule such as food commodities, WASH items, or the equivalent cash and voucher transfer values. To forecast and quantify future demand, this method uses the determined distribution unit size and the estimated number of households or individuals served over a defined time horizon.

An example of this demand estimation method in the WASH sector might be that each household (distribution unit) receive three bars of soap and four packets of detergent (ration) which is estimated to be consumed over three months (defined time horizon).

Variables

The figure below lists variables that are needed to forecast quantities using the ration or regimen method.



Programming staff should determine the ration size based on a gap and needs analysis. For example, for food commodities, the ration is set by determining the total nutritional requirements that each household needs minus what each household can provide to meet these needs.

In cash and voucher programs, the **ration method** is used to calculate transfer values.

Programming staff are responsible for determining the cash "ration."

- Typically the ration is based on an example basket of goods or services that program participants could purchase with cash or vouchers.
- For multipurpose cash transfers (MPCs), the ration is based on the Minimum Expenditure Basket (MEB).

Supply chain staff are responsible for providing the following data to calculate CVA transfer values (for data sources, see the Market Monitoring Secondary Sources Job Aid).

- ☐ **Local market prices:** the per-unit price of each item or service in the "ration" or MEB (average prices can be used, but significant variances across geographical locations or over time may require different transfer values by location or season)
- ☐ **Exchange rate:** the value of local currency obtained per USD (if there is a parallel exchange rate (i.e., difference between the official and market exchange rate), staff should use the UN Operational Rates of Exchange - Rates)
- ☐ **Estimated inflation rate:** the percent of annual adjustments for multi-year programs in transfer values based on the Consumer Price Index (CPI)

Regular price monitoring ensures that transfer values are sufficient to cover the items and services identified in the expenditure basket. For information on setting up and conducting market monitoring, see the Start-Up chapter.



Formulas

The table below provides formulas to calculate demand based on the ration method with examples of each calculation.

Ration Method – Demand Estimation Formulas and Examples	
Individual Ration	$\left(\frac{R}{r}\right) * D * I * 1.0x$ *R* = ration *r* = rate of use or consumption of ration in days, weeks, or months *D* = duration of service provision in days, weeks, or months *I* = number of individuals served *X* = percentage of expected loss Example (rice): 0.4 kg / 1 day * 120 days * 1,000 individuals * 1.015 (1.5% estimated losses) = 48,720 kg (or 48.7 metric tons)
Individual Ration (CVA)	$\{[\left(\frac{R1}{r}\right) * P1] + [\left(\frac{Rn}{r}\right) * Pn]\} * D * I * 1.0x$ R_1 = quantity of item 1 in expenditure basket *r* = rate of use or consumption of ration in days, weeks, or months P_1 = per average unit price of item 1, in local currency *Rn* = quantity of item n in expenditure basket *r* = rate of use or consumption of ration in days, weeks, or months *Pn* = per average unit price of item n, in local currency *D* = duration of service provision in days, weeks, or months *I* = number of individuals (or households) served *x* = exchange rate to USD Example: {[10 kg rice / month * 1500 NGN/kg] + [5 kg lentils / month * 1000 NGN/kg] + [4 liters fuel / month * 1200 NGN/liter]} * 6 months * 1,000 individuals * 0.0024 (USD/NGN) = 89,120 USD
Household Ration	$\left(\frac{R}{r}\right) * D * H * 1.0x$ *R* = ration *r* = rate of use or consumption of ration in days, weeks, or months *D* = duration of service provision in days, weeks, or months *H* = number of households served *X* = percentage of expected loss Example (bars of soap): (5 bars of 250 grams of soap / 1 month) * 12 months * 1,000 households* 1.0005 (.5% estimated losses) = 60,030 bars of soap

Consumption Method

This method is used for goods that are distributed on an irregular or variable schedule, such as medicines and medical supplies. To forecast and quantify future demand, this method uses records of past consumption.

To quantify and forecast the demand of health products, there are two additional demand estimation methods that can be used, as described below.

- The **morbidity method** estimates the need for specific medicines based on the expected number of attendances, incidence of common diseases, and standard treatment patterns for the diseases considered.
- The **proxy-consumption method** uses data on disease incidence, medicine consumption, demand, or use, and/or pharmaceutical expenditures from a "standard" supply system and infers the consumption or use rates to the target supply system, based on population coverage or service level to be provided.

For more information on quantification and forecasting of health products, see the Health Annex.



Variables

The table below lists variables and definitions that are needed to forecast quantities using the consumption method.

Variable	Definition
Historical Consumption Data	Historical consumption data on the actual quantities of health commodities that have been dispensed to patients or consumed at service delivery points within a specific period.
Services Data	Services data are historical program-level or facility-level data on the number of patient visits to facilities, the number of services provided, the number of disease episodes or health conditions treated, or the number of patients who receive a specific service or treatment within a given period
Morbidity and Demographic Data	Morbidity and demographic data include total population, population growth rates, incidence, and prevalence of specific disease/ health conditions available by population group or through surveillance or research study group and extrapolated to estimate national-level incidence or prevalence rates of specific disease diseases/health conditions.
Difference between Morbidity and Demographic Data	Demographic data include data on the number and characteristics of the population targeted for services. In contrast, morbidity data are estimates of the number of episodes of a specific disease or health condition in a common denominator of the population. These data are extrapolated to define the total estimated need and then refined to determine specific targets, or percentage of total need, to be reached.

Source of definitions: John Snow, Inc. 2020. *The Supply Chain Manager's Handbook, A Practical Guide to the Management of Health Commodities.* Arlington, Va.: John Snow, Inc.

Formulas

The figure below provides formulas to calculate demand based on the consumption method with examples of each calculation.

Consumption Method – Demand Estimation Formulas and Examples

$C_A = C_T \div [R_M - (D_{OS} \div 30.5)]$ (preferred)

or

$C_A = C_T \div (R_M - M_{OS})$

- C_A = Average monthly consumption (AMC), adjusted for stockouts
- C_T = Total consumption during the review period
- R_M = Total consumption review period in months
- D_{OS} = Number of days an item was out of stock during the review period
- M_{OS} = Estimated number of months an item was out of stock during the review period

Example:
Calculate the average monthly consumption (AMC).

- C_T = Total consumption = 6,600 units
- R_M = Review period = 6 months
- D_{OS} = Out of stock = 15 days

C_A = Adjusted AMC = 6,600 ÷ [6 – (15/30.5)]
= 6,600 ÷ 5.5
= 1,200 units

Calculate the projected average monthly consumption (AMC).

$C_P = C_A + (C_A \times A_U)$

- C_P = Projected average monthly consumption (AMC)
- C_A = Average monthly consumption (AMC), adjusted for stockouts
- A_U = Utilization adjustment (percentage increase/decrease)

Example: Calculate the projected average monthly consumption (AMC) assuming 5% increase.
C_P = Projected average monthly consumption (AMC) = 1,200 +(1,200 x 5%)
= 1,200 + 60
= 1,260
Thus, if forecast period is one-year, total forecast consumption = 1,260 x 12 = 15,120 units.

$C_A = C_T \div [R_M - (D_{OS} \div 30.5)]$ (preferred)

or

$C_A = C_T \div (R_M - M_{OS})$

- C_A = Average monthly consumption (AMC), adjusted for stockouts
- C_T = Total consumption during the review period
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Example:
Calculate the average monthly consumption (AMC).

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Consumption Method – Demand Estimation Formulas and Examples

- R_M = Review period = 6 months
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Calculate the projected average monthly consumption (AMC).

$C_P = C_A + (C_A \times A_U)$

- C_P = Projected average monthly consumption (AMC)
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- A_U = Utilization adjustment (percentage increase/decrease)

Example: Calculate the projected average monthly consumption (AMC) assuming 5% increase.

C_P = Projected average monthly consumption (AMC) = 1,200 +(1,200 x 5%)
= 1,200 + 60
= 1,260

Thus, if forecast period is one-year, total forecast consumption = 1,260 x 12 = 15,120 units.

Calculate the quantity of medicine needed for each health problem.

- $Q_T = E_T \times Q_E \times P_T$
- Q_T = Total quantity of each medicine needed in basic units
- E_T = Number of projected treatment episodes for each health condition
- Q_E = Quantity of each medicine needed for each treatment episode
- P_T = Percentage of cases expected to be treated with that regimen

The following examples show detailed steps to find the quantity of each medicine required for each episode (Q_E) and the number of treatment episodes for each health problem (E_T).

1. For acute treatment, calculate the quantity of each product required to treat or attend to an episode of the health issue.

$Q_E = D_{BU} \times N_D \times L_D$

- Q_E = Quantity needed for each treatment episode
- D_{BU} = Basic units (of the product) per dose/administration
  - Where $D_{BU} = D_{AD} \div S_{PR}$
- D_{AD} = Dosage per administration of medicine
- S_{PR} = Strength of product
- N_D = Number of doses per day
- L_D = Length of treatment in days

Treatment includes 400mg of Fluconazole twice a day for 14 days. The product dispensed is a 200mg tablet.

$Q_E = (D_{AD} \div S_{PR}) \times N_D \times L_D$
$Q_E = (400 \div 200) \times 2 \times 14$
$Q_E = 2 \times 2 \times 14 = 56$ tablets

2. Calculate the number of treatment episodes for each health problem.

$E_T = C_E \times F$

Consumption Method – Demand Estimation Formulas and Examples

E_T = Number of projected treatment episodes for each health condition
C_E = Projected total number of contacts (in thousands)
F = Frequency of health problems

Calculate the number of treatment episodes for each health problem.
$E_T = C_E \times F$
Where C_E = 1,000 (x '000)
F = 80 per 1,000 contacts
E_T = 1,000 x 80 = 80,000
Thus, forecast quantity = 80,000 x 56
= 4,480,000 tablets

For in-depth guidance on the forecasting and quantification process, see the Certification in Humanitarian Supply Chain Learning Materials – Unit 2 Planning for In-Kind Transfers.

Quantification Steps using Consumption Data for Health Products

Step 1: Prepare a list of pharmaceutical products to be quantified.

Step 2: Determine the time period to be reviewed for consumption.

Step 3: Collect historical consumption data from site level for the time period identified in Step 2.

Step 4: Evaluate consumption data for completeness (are all sites reported?) and reliability (are all sites reported accurately?).

Step 5: Adjust reported consumption to account for days when products were out of stock.

Step 6: Adjust reported consumption to account for missing reports.

Step 7: Calculate average monthly consumption (AMC) for each product based on available, adjusted consumption data.

Step 8: Identify trends in past use, if any.

Step 9: Use linear trend analysis or apply a percentage factor for growth/shrinkage to average monthly consumption (AMC) to estimate consumption for the forecast period.

Step 10: Estimate costs of forecast consumption.

For more guidance on the quantification of health products, see Malaria Quantification Manual, JSI Quantification of Health Commodities, and Practical Guide for the Quantification of Anti-TB Medicines.

Forecasting & Quantification Checklist

CHECKLIST *Forecasting & Quantification*



Programming members of the proposal team:

- ☐ Estimate the number of program participants of the targeted population that will receive goods and/or services.
- ☐ Determine the types of goods and/or services being considered for the project.
- ☐ Estimate the distribution unit size each individual or household participant will receive.
- ☐ Determine any other goods needed to make the program operational (e.g., ND-goods for staff that the project budget will cover such as laptops, CVA assets, transaction fees for cash delivered through financial service providers, etc.).
- ☐ Share the gathered information with the Supply Chain Manager.

Using information provided from programming staff, the **Supply Chain Manager, with other members of the supply chain team:**

- ☐ Estimate the number of goods or CVA assets needed using the Ration Method or the Consumption Method.
- ☐ Estimate the storage and transport capacity needs based by determining the weights and volume of goods needed (for information about how to assess logistics infrastructure, see Logistics Assessment).
- ☐ Identify any equipment needed in the supply chain for moving and maintaining the quality of the goods beings considered for the project (e.g., cold storage equipment).
- ☐ Identify any services (financial service providers, mobile money, SMS sending services to inform participants when assistance is available for redemption/collection) and/or equipment (phones, smart cards, smart card readers, mobile receipt printers, biometric readers) needed in the supply chain to disburse cash or vouchers to participants and/or to redeem their values from participating vendors.
- ☐ Share data with the Procurement Manager to support the market assessment and procurement assessment process.

Supply chain staff can use the resources and tools listed below (which are also referenced throughout this chapter) to determine market prices and supply chain costs.

- Market Monitoring Secondary Sources Job Aid (for global and regional commodity prices, indices, and exchange rates)
- Sample Warehouse Budget
- Weight and Volume Calculator
- Metric Ton Valuation Calculator (WFP - food)
- Commodity Calculator (USAID/Bureau for Humanitarian Assistance)
- Compendium of Supply Chain Costs (USAID)

☐ **See below for context-specific callout boxes that also apply.**

CVA programs that transfer cash or voucher values using CVA assets (i.e., smart cards, paper vouchers) also need to determine the number of CVA assets required by the project, using the questions below for e-cards and paper vouchers as a guide.

E-Cards (e.g., e-vouchers, ATM cards)

Typically, one smart card per program participant is sufficient, with a small buffer to replace lost or malfunctioning cards. Participants can use the same cards to access cash or goods across distributions, interventions, and even projects.

- Can participants use the same cards for multiple transfers? Can they be loaded with values remotely?
- Can cards hold multiple wallets for different interventions within and across projects (e.g., one wallet for multipurpose cash and another wallet for agricultural inputs)?
- Do the cards require specific technologies or project-specific branding? Is there an existing stock of cards that can be used?
- What is the loss/malfunction rate of cards used in previous projects?
  What is the date expiration/period of validity for the cards?
- Do Program Managers and Supply Chain Managers plan to reclaim cards from participants after the intervention/project?

Paper Vouchers

Typically, many paper vouchers are needed to transfer the same total value to participants as would be transferred by e-card. Providing multiple vouchers per distribution (e.g., a booklet of vouchers) allows participants to redeem their vouchers with multiple vendors and over time. Similarly, smaller denominations provide more flexibility than larger denominations. The benefits of increased numbers of vouchers for participants and markets should be weighed against the costs of procuring and managing them.

- What is the total transfer value per recipient for each distribution?
- How many distributions will there be?
- Will program participants exchange their vouchers with multiple vendors and/or over multiple market days? How much flexibility is required/desired?
- What are the appropriate denominations of vouchers, based on the prices, diversity, and quantities of goods and services to be purchased?
- What is the date expiration/period of validity for the vouchers?
- What are the costs in money and staff time to print, distribute, collect, and reconcile vouchers?



Market Assessment

Market assessments use market-related data to understand how well a market system functions, including:

1) Market reliability to transfer goods (or services) from surplus to deficit areas in response to demand patterns, and
2) Potential bottlenecks that may need to be mitigated or addressed by project interventions.

Detailed market assessments should **not** be conducted in the initial aftermath of an acute emergency (e.g., an earthquake) when markets are destabilized and competition surges. During this phase, rapid market assessments should be prioritized and updated frequently as the context evolves. More detailed market assessments can begin after a given market has begun to stabilize, once displaced people have settled (at least temporarily), and when market actors (producers, transporters, retailers) have developed coping strategies.

Markets tend to be extremely dynamic and adapt rapidly to the context. The speed of market stabilization depends on several factors, including: 1) the scale and intensity of the disaster, 2) the prior experience of market actors with a similar crisis, and 3) the pre-crisis strength of the market.

Both supply chain and programming staff participate in the market assessment, as shown in the figure below (see also the breakdown of their respective roles and responsibilities in the Market Assessment Process section in this chapter).

CHECKLIST *Market Assessment*



Before beginning the market assessment, **the proposal design team, with support from the Supply Chain Manager**:

- ☐ Identifies the market assessment team and clarifies roles and responsibilities. The team should be composed of at least one staff member from programming and one staff member from the supply chain team.
- ☐ Gathers the following data that will be provided to the market assessment team:
  - ☐ Types of market systems that are prioritized for assessment (e.g., what markets could be affected by anticipated crises or are important for achieving program priorities).
  - ☐ Types and quantities of goods and services to be delivered to project participants (see Forecasting and Quantification about how this information is defined).
  - ☐ Specifications and quality requirements for goods and services.
  - ☐ Anticipated areas of project implementation.
  - ☐ Anticipated project duration.
  - ☐ Approximate number of project participants, disaggregated by location (if known).
  - ☐ Available information about the market system(s) including known constraints and/or other concerns.

The **market assessment team**:

- ☐ Defines the objectives of the market assessment, identifying the questions that need to be answered will guide the assessment design and approach.
- ☐ Maps out the known market structure and supporting market environments for each prioritized market system, considering both macro and micro characteristics (see Review of Market Systems).
- ☐ Gathers and analyzes secondary data from existing data sources (see Sources of Market Information).
- ☐ Identifies information needs to fill gaps in knowledge about the market structure.
- ☐ Prepares data collection plan and tools.
- ☐ Conducts data collection of primary data (see Sources of Market Information).
- ☐ Reviews and synthesizes data from primary and secondary data sources.
- ☐ Conducts analysis, using market maps, production and trade flow maps, seasonal calendars, and price analysis, as appropriate (see Market Analysis Tools).
- ☐ Conducts a market risk assessment profile (see Market Risk Assessment Profile).
- ☐ Writes report with the findings, identified risks, and recommendations (see Market Assessment Reports).
- ☐ Shares results with the proposal (or project) team and engages in discussions on how to incorporate the findings.

For information on how to conduct the market assessment, see the guidance below. Note that this is only intended as an overview of market assessments. Refer to the Minimum Market Information Guide or other resources for in-depth guidance on rapid market assessments, plus tools and templates.

Reviews of Market Systems

Supply chain activities in a project have the potential to impact market systems. When CRS procures or transfers goods (directly or through cash and vouchers), it affects supply and demand of goods in the local market and can also affect existing power dynamics in the market. These impacts can be minimal or significant, positive or negative, and differ according to the assistance modality and other supply chain strategies. The table below compares the desired market impacts and their related risks and potential consequences by market modality.

	CVA	In-kind Transfers[1]	Local Procurement[2]
Desired Market Impact(s)	Increase effective demand by project participants for available goods and services from the local market.	Address quantity and/or quality gaps in local supplies. Decrease prices to affordable levels.	Increase demand for locally produced goods. Shorten supply chains for in-kind transfers (decrease monetary and environmental costs).
Risk(s)	Local supplies cannot keep pace with increased demand, resulting in price increases and/or supply shortages.	Decreased local demand for locally available goods, resulting in supply surpluses.	Available supplies fall below what is demanded locally (or by existing buyers), resulting in price increases and/or supply shortages. Decreased competition from a smaller supplier pool.
Consequences if Risks Are Realized	Short-term Reduced purchasing power for program **and** non-program participants (for program participants, due to diminished CVA transfer values)	Short-term Decreased sales and income for local producers and retailers. Long-term Potential disincentives to local production and trade.	Short-term Diminished availability and purchasing power for consumers. Potential lower quality or inability to match specifications.

[1] In-kind transfers can be sourced from Gifts-in-Kind, prepositioned stocks, or procured locally, regionally, or internationally. This column addresses the impacts and consequences in the **distribution markets** only (**not the source markets** for the goods).

[2] Local procurement refers to the impacts on the source market, regardless of whether the procurement is local, regional, or international to the country where the goods are distributed. For goods procured from the same markets where they will be distributed, the net impacts of the procurement and in-kind transfers will need to be considered.

Understanding market systems allows CRS staff to anticipate the impacts of planned interventions, mitigate the risks of doing harm, and protect the interests of CRS, our partners, and project/program participants. Market assessments are an important part of programming quality and should be performed before designing projects that involve resource transfers or procurement.

Market assessments can be conducted for goods and for key services in a market system such as those accessed directly by project/program participants (e.g., milling of grains, housing markets) and those used by CRS to deliver assistance (e.g., financial service providers, mobile money operators, and transportation services).

- For resources developed specifically to assess Financial Service Providers (FSPs) and other services, see the Policies, Regulations, and Guidelines at the beginning of this chapter.

Macro-level

At the macro level, the market assessment team seeks to understand how well the market being assessed functions, including market infrastructure, regulatory environment, level of competition, integration, and financial inclusion.

> In the context of this section, "macro" refers to the entire market system and not geographic locations relative to the intervention sites. The macro-level assessment might include local, national, regional, and international markets (depending on the scope of the assessment), the sources of goods that enter the intervention markets, and the influence of other markets on prices and availability in the intervention markets.

The figure below, adapted from the Fritz Institute/CILT *Certification in Humanitarian Supply Chain Management* Unit 6: Cash Transfer Programming, provides examples of what macro-level market characteristics can be investigated depending on the local context, assessment objectives, and scope.



Source (adapted from): *Fritz Institute/CILT. Macro Retail Market Assessment "Unit 3: Cash Transfer Programming" Certification in Humanitarian Logistics. v3, 2017, pp. 20*

Micro-level

At the micro-level, the market assessment team reviews the capacities of market actors and, if applicable, their willingness to participate in project interventions as voucher vendors, suppliers for local procurements, or service providers.

In the context of this section, "micro" refers to the level within the market chain (e.g., retailers) and not the geographic location of the project or assessment. The project may engage market actors outside of the project area, through national or regional tenders, or private sector partnerships. The geographical target of the micro-level market assessment will be informed by the results of the macro-level market assessment.

Questions to answer during the micro-level assessment include:

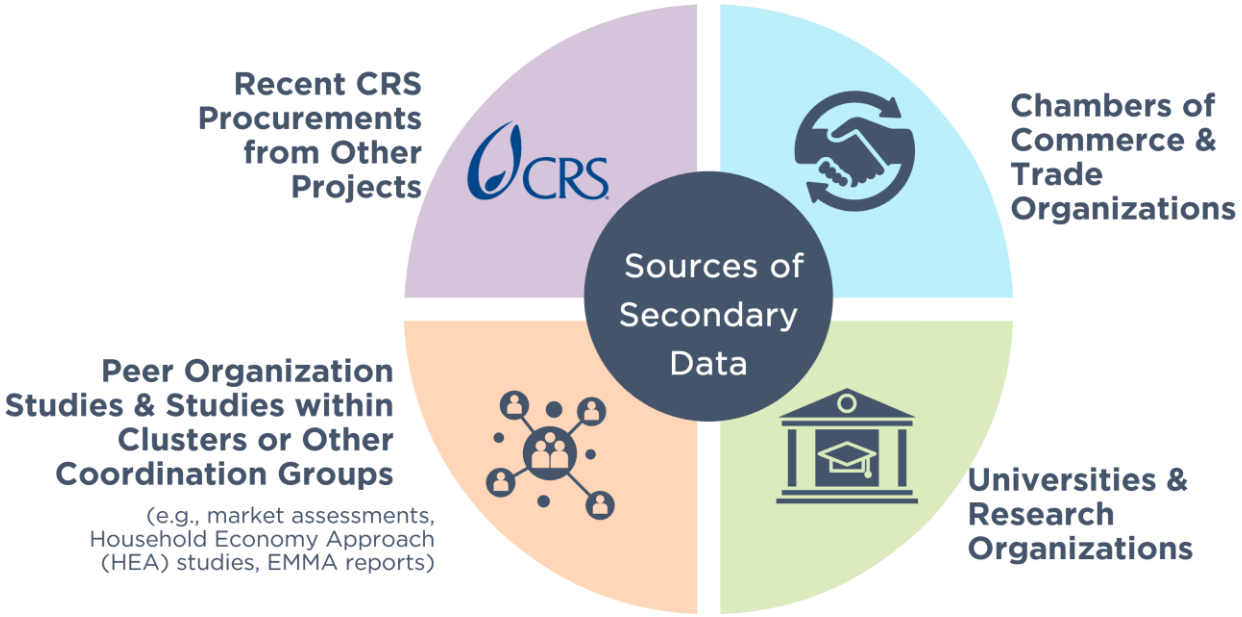


A market assessment is **not** a replacement for the regular procurement process for finding and selecting suppliers. The micro-level market assessment can produce a list of potential suppliers for appraisal and pre-qualification in the Supplier Master List. But the purpose of the micro-level market assessment is to inform procurement criteria, strategies, and decisions about the selection of the most appropriate response mechanism.

Sources of Market Information

Market assessments should be based on both secondary and primary data.

Secondary data is information that already exists (from recent CRS procurements from other projects, from previous CRS studies or generated by other entities). The market assessment team collates and synthesizes secondary data.



For a list and descriptions of secondary market information sources, refer to Market Monitoring Secondary Sources Job Aid. The figure below shows other sources of secondary data.

Primary data is information to be collected directly (if needed) by the market assessment team.

The following are sources of primary data that can be used for the market assessment:



Interviews with Key Informants

Key informants can provide high-level information on trends, market flows, and known bottlenecks.

Key informants can include:

- CRS and partner staff.
- Industry or trade organizations, market committee members, and trader/producer cooperative representatives.
- Local government departments.
- UN agencies and other NGOs with potential market knowledge.
- Banks and other financial institutions.
- Local leaders and community representatives.

Interviews with Market Actors

The data collection process should start with producers/vendors/retailers in local markets where the interventions might take place, then continue with wholesalers that operate upstream from the local retailers (or downstream from the producers) and other market actors, as needed.

Focus Groups with Households and Communities

The focus groups should collect information on market access, the goods and services available in those markets, the prices and quality of those goods or services, and any other useful information. Programming staff should lead the focus groups. Information gathered in the focus groups should be disaggregated by gender and other demographic considerations.

It is important to triangulate data received from the three primary source categories. Tools, templates, and questionnaires for gathering primary data can be found in the CRS Minimum Market Information Guide and the UNHCR Multi-sector Market Assessment Guide.

Market Risk Assessment Profile

Assessment teams should document threats and risks identified during the market assessment process. Potential market-based threats and resultant risks include those identified in the marketplace, the supply chain, with market actors, infrastructure, variability in the process, and market access for target populations. These risks will be consolidated with other risks identified during other parts of the response analysis. For more information, see the Threat and Risk Assessment section.

Market Analysis Tools

The market assessment team—which includes programming, supply chain, security, and other staff—should meet to review and analyze the market assessment data, determine the key findings, and make recommendations aligned with the key findings.

> Market analysis is an ongoing, iterative process, not a one-time activity. The market assessment team should meet regularly to discuss new information and identify areas where more information is needed.

The tools discussed in the following subsections can be useful to analyze market information, but these tools are not required to be used in every market study and may not be necessary in every market study. In some cases, after the initial review of secondary data, it is helpful to create preliminary market system maps and production and trader flow maps that capture which information is already known, what are the gaps, and to highlight important markets, commodities, and market actors for further investigation.

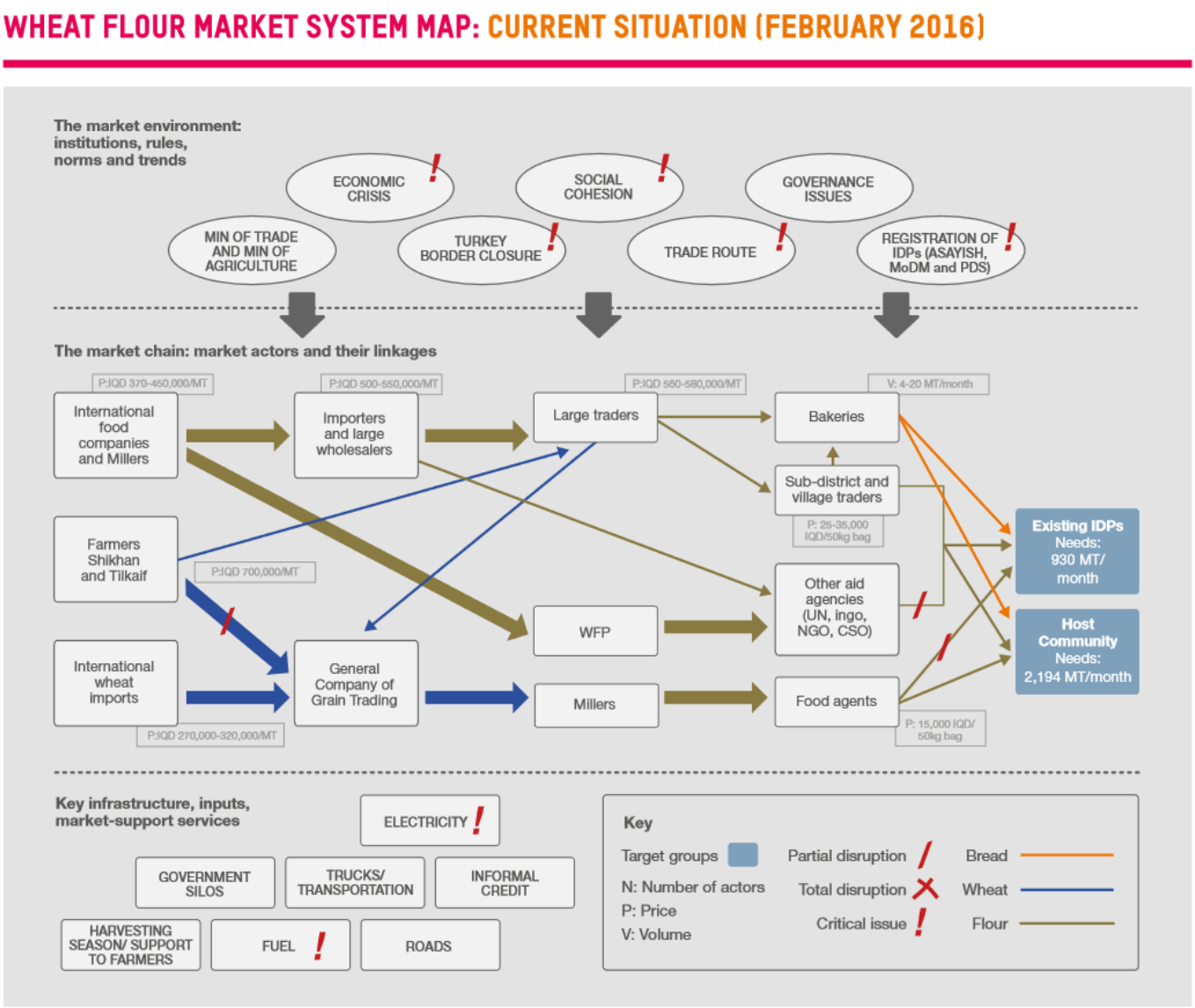
Market System Maps

A market map describes how a market system works, at a particular point in time, for a defined good or group of related goods. The market map charts the entire market system, as shown in the figure below.



Market maps are useful for showing weaknesses and bottlenecks (actual or potential) in the supply chain. Market maps should be updated as new information becomes available or as the market context changes. For more information on how to create a market system map, see the EMMA Toolkit, Pre-Crisis Market Analysis (PCMA), or the CaLP Market Analysis Guidance (MAG).

The figure below is an example of a baseline market map for wheat flour in Iraq.



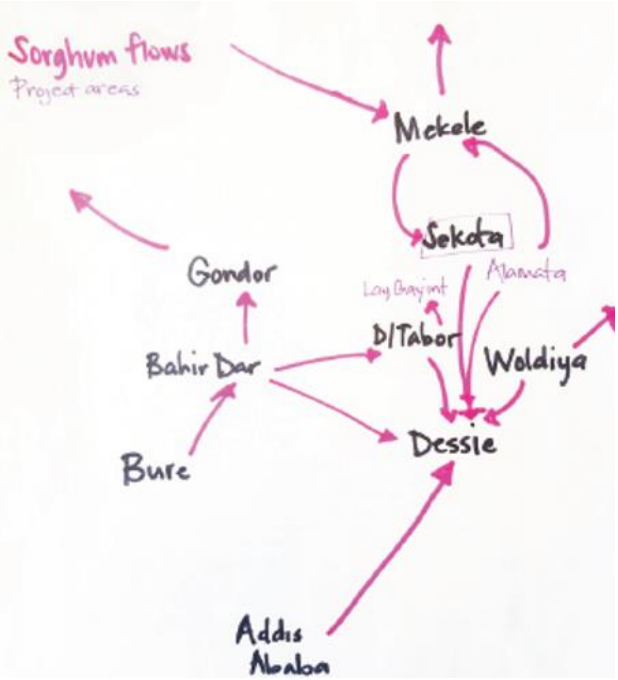
Source: Saint, Emmeline, et al. "Wheat Flour Market System Map: Current Situation (February 2016)." *Pre-Crisis Market Analysis: Credit, Drinking Water and Wheat Flour Market Systems*. OXFAM, International Rescue Committee, and UNDP, 2016, pp. 12.

Production and Trade Flow Maps

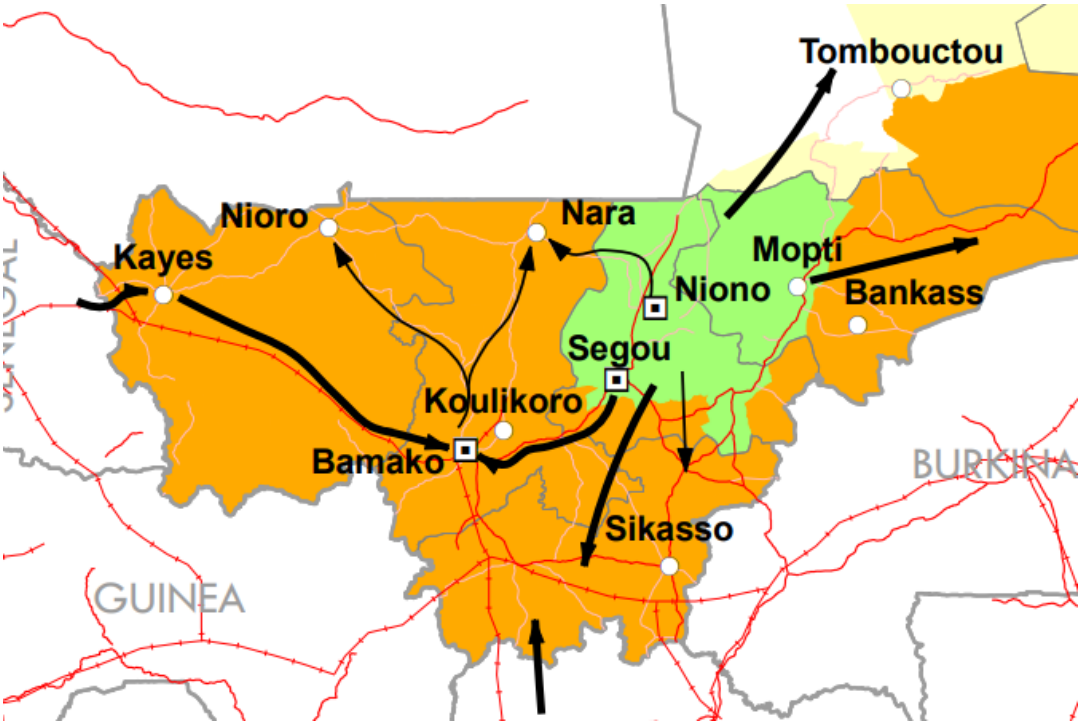
Maps of production zones and trade flows capture the geography of market networks for a product in each country or region. These maps include surplus and deficit areas, key market towns, cross-border trade points, and trade flows. These maps also identify important markets that should be included in the market assessment or for ongoing market monitoring activities, especially because production zones and trade flows can change seasonally.

Production and trade flow maps can be simple or sophisticated.

The figure below shows a hand-drawn map of sorghum flows in Ethiopia.



The figure below is an example of a trade flow map of rice in Mali.



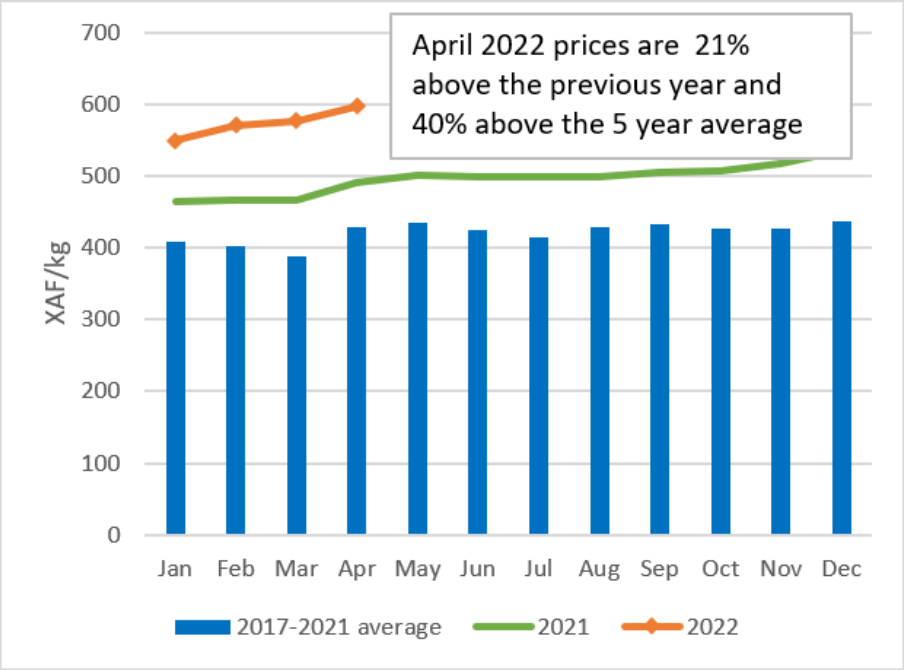
Source: USAID. "Production and Market Flow Map: Mali Rice." FEWS.NET.
https://fews.net/sites/default/files/documents/reports/ml_fullmap_rice_norm.pdf

Many production and trade flow maps can be found on the Famine Early Warning Systems Network site (FEWS.net).

Price Graphs

Price is the cost or value of a good or service. Wherever possible, prices should be analyzed across time, across market locations, across types of goods, and across levels in the retail supply chain (e.g., production, distribution, etc.).

The figure below is an example of a price graph showing prices in XAF/kg of imported rice in Yaounde, Cameroon.



Seasonal Calendars

Seasonal variations in prices and markets can be caused by annual production, weather, and labor patterns. Seasonality should be considered when assessing the market and designing interventions, while mitigating the risks of doing harm to the local market.

Predictable changes occur in prices throughout the year because of seasonality. For example, food prices typically increase before a harvest (as stocks run low) and decrease after the harvest (when food supplies increase in the markets). Seasonality affects other categories of goods too, such as medical supplies and agricultural inputs.

The figure below is an example of a seasonal price calendar.

Event	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Input purchases												
Main harvest												
Agricultural day labor available												
Flood season												
High prices												
HH consumes own production												
Trade volumes	High	High			Low	Low	Low	Low		High	High	High
Expected price pattern	⇔	⇧	⇔	⇩	⇩	⇩	⇔	⇔	⇔	⇧	⇧	⇧

Source: Catholic Relief Services. 2020. MARKit: Market Monitoring, Analysis and Response Kit. 2nd Edition. Baltimore: CRS

Market Assessment Reports

Market assessment reports should address all the information gathered during the market assessment process, including:

- the objectives of the assessment and key questions;
- a description of the methodology used for gathering data;
- key findings and results; and
- conclusions and recommendations.

The market assessment team should avoid recommending specific interventions based solely on the market assessment, as these will be informed by factors such as participants' preferences, availability of safe and accessible delivery mechanisms for CVA, government rules/restrictions on specific modalities, etc.

It is good practice to share findings in the report with other NGOs, UN agencies and relevant working groups/clusters.

A market assessment report should be concise, using charts, maps, and graphs to present information.

If multiple market systems are assessed, each market system should be described separately, followed by a consolidated summary of the results and recommendations.

The **key findings/results section of the report** should answer the questions identified at the start of the assessment, listed in the figure below.



The **conclusions and recommendations section of the report** should outline the opportunities and limitations of the market in the potential response. Below are examples of such opportunities and limitations in different contexts with different commodities.

- Local producers can supply up to "n" metric tons of maize per season.
- The increase in demand that would be generated by the cash transfers is expected to have negligible impacts on prices or availability.
- Aluminum roofing materials sold in the local markets do not meet the quality standards recommended by the national cluster (i.e., geographic concentrations of interconnected suppliers of such materials).

More information and tools for market assessment reports can be found in the CVA Resource Center (see Market Assessments publication in the CRS Keep It Simple Series).

Logistics Assessment

A logistics assessment provides important information about the following during the design phase and throughout the project lifecycle:

- the complexity of the supply chain needed to deliver goods and services to the target population;
- the most appropriate and effective response modality;
- the logistics budget.

Logistics assessments should be regularly reviewed and updated during the implementation phase, particularly if there are any changes to the local context/infrastructure, if new offices or storage facilities are leased, if supply chain activities are expanded, or to support new partners.

Supply Chain Components

Below are the main logistics components to be evaluated during a logistics assessment.

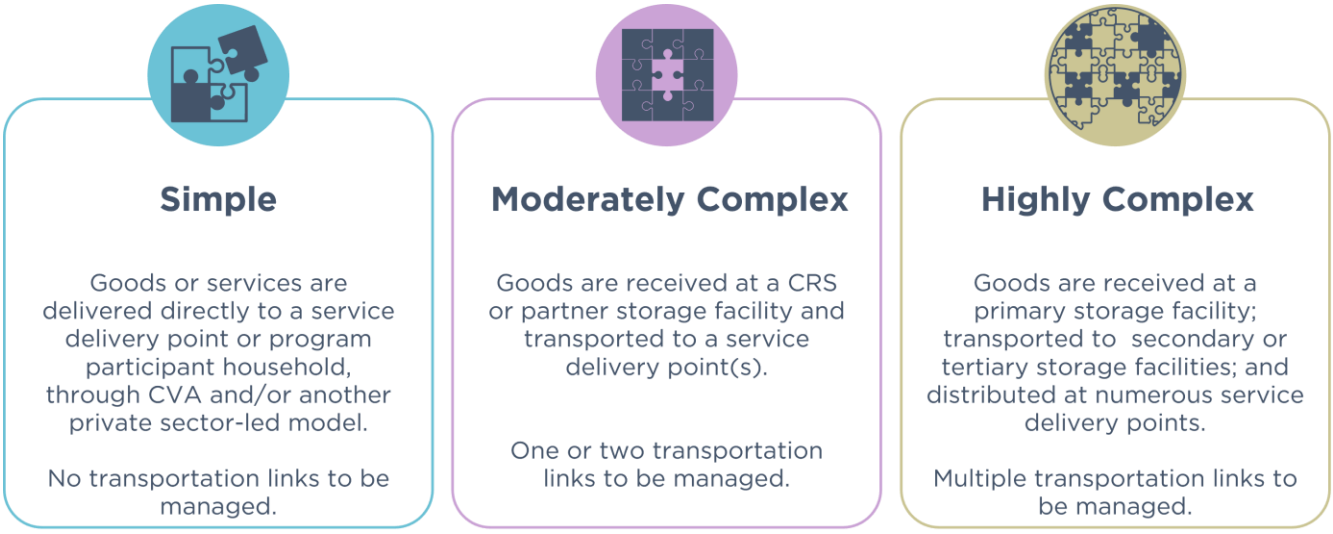
- Availability of logistics infrastructure throughout the country, particularly within the intervention area (e.g., seaports, airports and airfields, roads, bridges, railways, waterways/ports, storage facilities, etc.).

> The logistic assessment can and should include multiple countries as needed (e.g., when the project involves landlocked countries that receive imports through seaports and regional procurement).

- Availability and costs of transportation modes and transport service providers (e.g., heavy trucks, rail, watercraft, aircraft, etc.).
- Availability and capacity of CRS-owned light and heavy vehicles.
- Capacity of currently leased storage facility and identification, locations, and prices of additional storage facility locations.
- Local and national requirements for transporting goods (e.g., import and customs clearance regulations, other relevant local regulation, etc.).
- Geographic locations and capacity of proposed service delivery points.
- The current security situation and any logistics threats and associated risks.

Supply Chain Complexity

The complexity of supply chains ranges from simple to highly complex, as shown in the figure below:



In countries where there are existing projects with supply chain components, there should already be a logistics assessment available. If so, the **Logistics Manager** can review and update the logistics assessment for new projects being designed.

The Logistics Rapid Assessment (LRA) is a simple tool that can be used to guide and document the results of the assessment. The Logistics Cluster (LC) also provides detailed Logistics Capacity Assessments (LCAs) for many countries and provides generic templates and guidance that can be used.

Logistics Assessment Checklist

CHECKLIST *Logistics Assessment Process*



During the logistics assessment, supply chain staff and programming staff should work together to share information and assumptions.

The **Programming Members of the proposal team** and the **Supply Chain Manager:**

- ☐ Share the project parameters (e.g., the proposed goods or services being considered, the intervention area, the proposed number and locations of the service delivery points and new office locations, etc.) with the Logistics Manager.

The **Logistics Manager**, with the support of other members of the logistics team:

- ☐ Prepares the tools and templates that will be used for the logistics assessment.
- ☐ Maps out the known country infrastructure, including locations of ports, airports, roads, bridges, and waterways (helpful maps can be downloaded from the Logistics Cluster (LC) website).
- ☐ Gathers and analyzes secondary data from existing data sources to complete information in the logistics assessment tools/templates (for a starting point, see the Logistics Capacity Assessments (LCAs) on the Logistics Cluster (LC) website).
- ☐ Identifies information needs to fill gaps in knowledge about the logistics infrastructure.
- ☐ Interviews peer organizations, members of the Logistics Cluster, clearing and forwarding agent, port agents, or other identified parties that can provide missing information.
- ☐ Writes a summary report with the findings, identified risks, and recommendations.
- ☐ Shares results of the logistics assessment with the proposal team.

Procurement Assessment

The procurement assessment shows decision-makers the anticipated effects of different sourcing approaches and response modalities on cost, resource requirements, threats, and risks before determining the final strategy(s).

Procurement staff gather the information through the forecasting and quantification, market assessment, and logistics assessment processes to analyze different sourcing options and contracting options for each type of good or service to be delivered to program participants (i.e., D-goods and CVA delivery services).

SOURCING OPTIONS

When deciding whether to source goods locally, regionally, or internationally, it is important to compare the local price, wholesale price, and **import parity price (IPP)**. Large variances between the IPP and local prices may be the result of poor market functionality and integration, which could impact the feasibility of market-based response modalities.

For detailed guidance on how to calculate the IPP, see the Import Price Parity Job Aid.

The table below is an example of a simple IPP analysis for three different types of goods at a single point in time.

What is import parity price (IPP)?

"Equivalent to the international market price for a commodity, converted into the local currency, plus the costs of any transport, tariffs, and other outlays that the buyer would bear if importing."

Source: Albu, Mike. *Emergency Market Mapping and Analysis Toolkit*. Warwickshire, Practical Action Publishing Ltd, Oxfam GB, 2010, pp. 202.

	UNITS	LOCAL PRICE	WHOLESALE PRICE	IMPORT PARITY PRICE (IPP)
Rice	metric tons	651 USD	600 USD	400 USD
Sugar	metric tons	878 USD	800 USD	792 USD
Blankets	bale (100 blankets)	55 USD	54 USD	51 USD

Source (adapted from): Fritz Institute/CILT. Structuring Output. "Unit 6: Cash Transfer Programming" *Certification in Humanitarian Logistics*. v3, 2017, pp. 33.

In the example above, the large variance between the local price and IPP for rice indicates that the local rice market is not well-integrated and therefore less likely to be responsive to changes in demand. This is a red flag that the value local rice provides relative to imported rice is not justified by the increased cost of the local rice. The above IPP analysis also indicates that even though the IPPs of sugar and blankets are slightly less than the local prices, they provide more value than the imported commodities, due to the involvement of local market actors and the injection of cash into the local market.

The results of the import parity analysis may lead to different sourcing recommendations per type of good (e.g., importation of rice and cash transfers or local procurement for other food items).

CONTRACTING OPTIONS

Different types of contracts and contracting instruments have different implications on cost, timeliness, and the achievement of project objectives (see Contracts Types and Contracting Instruments in the Procurement chapter).

The most common factors that inform the type of contract and contract instrument include:

- the complexity of the good or service,
- the total contract value, and
- the likelihood that CRS will continually need that same good or service.

Analyzing the costs and benefits of different contracting options for presentation to decision-makers can show that some contracting options are not feasible or carry some risk.

In some cases, partnerships with private sector actors may be preferred over contractual/transactional relationships with suppliers, to strengthen market systems or achieve more sustainable outcomes. This may be justification for sole sourcing and/or increased costs and should be included in the proposal to receive permission from the donor. For more information, see the Procurement chapter and CRS Private Sector Engagement (PSE) Playbook.

CHECKLIST *Assessment of Contracting Options*



To analyze contracting options, **procurement staff**:

- ☐ Identify the different contracting options that could be used to procure and deliver D-goods and CVA services. Contracting options may be characterized by:
  - The product or service to be acquired.
  - Existing relationship with supplier (e.g., framework agreement, private sector partnership, etc.), as relevant.
  - Situation-specific restrictions (e.g., types of suppliers, geographic zones, etc.).

All potential contracting options must adhere to CRS and donor policies and standards listed in the Procurement chapter.

- ☐ For each contracting option:
  - Describe the implications for resource requirements; product availability, reliability, and quality; timeliness and timing considerations; and other relevant considerations.

Data for this analysis comes from the market assessments, logistics assessment, previous contracting experiences, expressions of interest (EOI), etc.

Implications should be presented objectively, without values or judgements placed on them (e.g., “lead times of two weeks” instead of “lead times are too slow”).

  - Highlight key risks that affect the feasibility of each option, with potential mitigation strategies.
- ☐ Summarize the comparison of contracting options and associated risks in the Procurement Assessment Report and share with the proposal team.

The following table shows the implications of three different contracting options listed below that were identified to procure rice for a school feeding project.

a. Restricted tenders of locally produced rice from producer groups near schools (**Producer Groups**)
b. Restricted tenders of locally produced rice from mid-size millers (**Millers**)
c. Rational competitive bidding (NCB) of imported rice (**Importers/Wholesalers**).

	a. Producer	b. Millers	c.
Est. suppliers needed to meet requirements	8-20 producer groups (depending on size and capacity of groups)	1 miller in Lofa county can meet about 50% of project needs	1-2 importers/wholesalers
Est. pool of suppliers	60-100	1 miller	10 importers, 20+ wholesalers
Contracting approach	Restricted tenders	Sole source Potential Private Sector Engagement (PSE)	National competitive bidding
Product received	Traditionally milled rice	Industrially milled rice sourced from local farmers in Lofa and surrounding counties	Parboiled rice sourced within the West Africa region Quality certifications (tests conducted before goods enter Liberia)
Average cost	360 USD/metric ton Plus delivery to schools	340 USD/metric ton Plus delivery to central location	325 USD/metric ton Plus delivery to central location
Considerations/ Implications	• Most groups have limited to no experience with quality testing; 3 groups currently have contracts that require testing • Rice becomes available in January and is usually sold before April • Producers can increase production of rice if contracts are signed before the planting season • Large variation in capacity of groups • Some groups have experience with tenders; others do not • Multiple contracts to manage • No requirements for centralized storage or transport to schools	• Mill requires investment to increase processing capacity • Limited experience with quality testing • Mill has reliable source of rice inputs through advanced contracts with local producers; mill provides financing and inputs to contracted farmers • Requires contract before planting season • Previous experience with school feeding contracts • Can deliver to centralized or regional warehouses • CRS/partners will need to manage central warehouse(s) and delivery of goods to schools	• Reliable source of supply • Requires central warehouse • CRS manages transport to schools • 1-2 contracts to manage • Average 2 weeks lead time • CRS/partners will need to manage central warehouse(s) and delivery of goods to schools

For more information about different contracting approaches and their pros and cons, see the Procurement chapter and Certification in Humanitarian Logistics (CHL) Unit 3 – Procurement.

Procurement Assessment Checklist

CHECKLIST *Procurement Assessment Process*



The Programming Members of the proposal team, with support from the **Supply Chain Manager**, provide the following information to the **Procurement Manager** and the **procurement team**:

- ☐ Types, quantities, specifications, and quality requirements of goods and services to be delivered to project participants (for definitions of this data, see Forecasting and Quantification).
- ☐ Probable areas of project implementation.
- ☐ Anticipated project duration.
- ☐ Estimated number of project participants (if known), disaggregated by location.
- ☐ Available information about the market, including known risks, constraints, or concerns.
- ☐ Results, recommendations, threats, and risks identified during the market and logistics assessments.
- ☐ Preliminary response modalities under consideration.

Before beginning the analysis, the **Procurement Manager**:

- ☐ Identifies existing framework agreements with suppliers at the country, regional, and global levels that may be relevant.
- ☐ Confirms with the programming team whether there are specific Market System Development (MSD) or Private Sector Engagement (PSE) objectives. For more information, see the CRS Private Sector Engagement (PSE) Playbook and the CRS Approach to Market System Development (MSD) for Scale, Inclusion, Resilience, Environmental Stewardship and Social Cohesion.
- ☐ Determines if existing relationships with private sector actors should be considered in the analysis.
- ☐ Consults the Head of Programming for a list of active PSE relationships across projects and locations.

With direction from the **Procurement Manager**, the **procurement team**:

- ☐ Identifies potential vendors from the Global Approved Supplier List.
- ☐ Researches the import parity price (IPP) of the proposed goods being considered in the project design and compares with wholesale or local prices. For more information about IPPs, see Sourcing Options.
- ☐ Analyzes the contracting options for the response modalities being considered (e.g., local, regional, or international procurement, prepositioned stock, or CVA). For information about this analysis, see Contracting Options.
- ☐ Writes a summary report with the findings, identified threats and risks, and recommendations of the procurement assessment.
- ☐ Shares results and recommendations with the proposal team.

The procurement assessment is an iterative process, with increasing levels of detail and firmer recommendations as the list of potential response modalities is narrowed down (as resources allow).

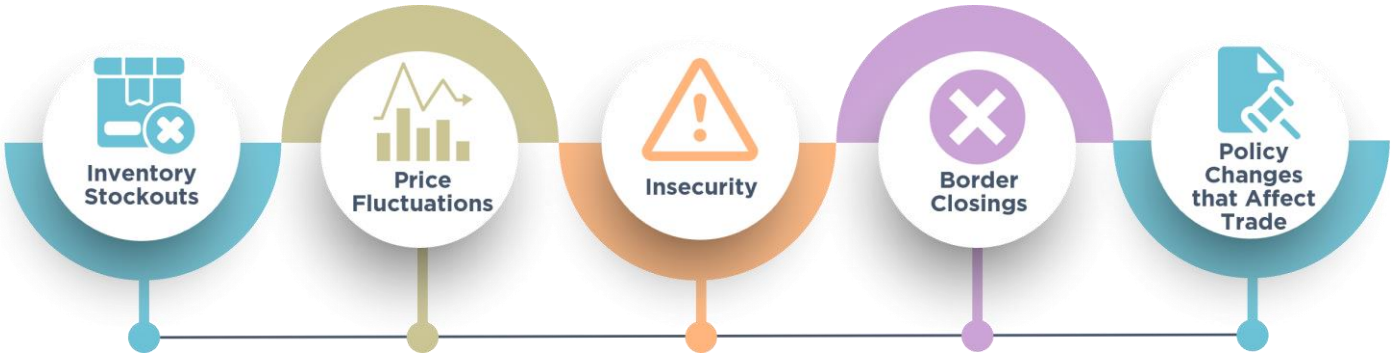
Threat and Risk Assessment

During the design phase of the project lifecycle, potential threats and risks to the supply chain should be identified and evaluated. Any threats that are detected during the market assessment, logistics assessment, forecasting and quantification, and procurement assessment should be added to the project risk register and supply chain **risk register**. These risk registers should be revisited during Start-Up and reviewed and updated frequently during the project cycle.

What is a risk register?

A repository where all potential threats and risks and correlated responses are compiled.

The figure below shows examples of supply chain threats.



Supply chain staff should coordinate with security staff as appropriate in determining threats and risks related to insecurity.

The steps for threat analysis and risk assessment are listed below.

1. Determine the risk score for each listed risk, which includes the probability of the risk occurring and the impact of the risk if it occurs.
2. Develop mitigation strategies for high-probability, high-impact risks. If the risk cannot be mitigated to an acceptable level, then other response modalities may need to be considered.
3. Incorporate risk factors into the market monitoring strategy, with clear indicators and threshold levels to trigger adaptations to the programming strategy, if needed.

Response Selection

The purpose of this step is to bring all the pieces together from the various assessments and analyses to make an informed recommendation to decision-makers on the key details of the project design. This step is led by programming staff, with critical input from supply chain staff on resource requirements, feasibility, threats, and risks of the selected response.

Below are best practices for response selection.

- The appropriateness of a selected response depends on the context and should be explicitly stated in the justification for the recommended response option(s). In volatile contexts, the selected response

may change as assessments in the response analysis process are updated or new information about the validity of the selected response becomes available.

- Market monitoring systems should be established to monitor key assumptions and threats that are identified through assessments in response analysis process.
- The design team should identify thresholds that may trigger changes in modalities and/or other design aspects. These may include prices, food security status, and other process/input and outcome indicators.

Factors to Consider

Multiple factors should be considered when selecting the most appropriate procurement option(s) (e.g., sourcing options, contract type, and contract instrument for the project) and—for projects with CVA components—the CVA transfer modalities, distribution, or delivery mechanisms. These can be grouped into the categories listed in the visual below.

1 Participant Needs & Preferences



- Does the response modality meet the identified needs of the program participants?
- Which response is preferred by women, men, girls, and boys?
- Does the response equitably support each of these participant groups?

2 Program Objectives



- Will the response modality meet the program's objectives?
- Does it address the underlying cause(s) of the identified problem?
- Does it meet urgent and chronic needs in the respective the project phase (emergency, recovery, development)?
- Is behavior change required to achieve the desired results?
- Are there beneficial multiplier effects?

3 Market Appropriateness & Strengthening



- Does the response support or (preferably) strengthen local economies and markets?
- Do market conditions support this modality?
- Do participants have reliable and equitable access to markets?
- Are quantities and qualities of goods or services that meet CRS quality requirements available at acceptable prices?
- Can vendors provide goods or services in time to meet program deliverables?
- Can market actors sufficiently restock goods to meet demand?

4 Feasibility & Organizational Capacity



- Is the response possible in a timely manner?
- Are cash/voucher/in-kind mechanisms available and strong?
- Can CRS and partners conduct the response quickly, effectively, and safely?
- Are there donor or government restrictions on the type of response?

5 Safety & Risk



- Can the response be conducted safely for staff, partners, and program participants?
- Can risks such as misappropriation, fraud, abuse, program disruptions, and others be eliminated or mitigated?

6 Value for Money



- Does the response achieve an impact that justifies the cost?
- Can higher costs be justified for procurement/response options that enhance environmental stewardship and sustainability, strengthen markets, or increase social cohesion?
- Will a particular response have multiplier effects in the local economy?
- Is value for money based not only on the minimum purchase price, but on the maximum efficiency and effectiveness of the purchase?

The weights given to each of these categories (and/or their component parts) will differ depending on the context, project phase, and objectives.

- For an emergency response, existing organizational capacity may be weighted more for a quicker start-up.
- For longer-term development programs, programming objectives and value for money may be weighted more for strengthening organizational capacity over the life of the project.

Mixed Modalities

The most effective, efficient way to meet program participant needs can be through a single modality or through a hybrid approach with mixed modalities. The decision to employ mixed modalities can be justified by any of the factors considered in the response analysis process. Examples of mixed modalities include:

- combining multiple modalities of assistance in a given project;
- employing different modalities by geographic region or target group; or
- changing transfer modalities seasonally or throughout the response.

Even if the response analysis process indicates that one modality can meet the project's needs, supply chain staff may recommend a mixed modality approach to reduce project risk and plan for project contingencies. Building mixed modalities into a proposal can secure donor approval for different modalities, in the event it becomes necessary to make changes during the project (e.g., due to ruptures in primary supply chains, evolving market conditions or needs, etc.). It is often easier to scale up or down an existing modality than to start over with a new modality.

The scenarios below are examples of mixed modality choices that are influenced by market context, quality of local goods, program participant preferences, seasonality, and value for money.

- **Scenario 1:** Market systems for different goods or services may function differently. Markets for cereals may be well-integrated and competitive, while markets for animal proteins, agricultural inputs or other NFI may be weak and unresponsive to changes in demand. In this type of scenario, it may be appropriate to use cash or vouchers for staple foods with local distribution of other priority items (sourced as close to project areas as recommended by the market assessment).
- **Scenario 2:** Markets systems in different project zones may function differently. Intervention A has markets that function well for all targeted goods. Intervention B is remote with few market actors and high transaction costs. In this type of scenario, it may be appropriate to use different modalities for these two project zones.
- **Scenario 3:** Markets function relatively well, and most prioritized shelter items are available. However, the quality of metal sheeting recommended by the shelter team cannot be accessed locally. In this type of scenario, it may be appropriate to combine cash with the in-kind distribution of high-quality metal sheeting.
- **Scenario 4:** Targeted households regularly spend the majority of their incomes on food, so cash is appropriate to increase access to food. However, the project is also promoting a new nutrient-dense food that is produced locally through a partnership with a private sector actor; but households are

not accustomed to this food item and are unlikely to use their cash to purchase it. In this type of scenario, it may be appropriate to combine unconditional cash transfers for food with vouchers redeemable with the Private Sector Engagement (PSE) partner for nutrient-dense food.

- **Scenario 5:** In-kind food (procured or Gifts-In-Kind) may be appropriate in the lean season, to relieve pressure on limited stock, while cash or vouchers are appropriate in the harvest season, when stock is plentiful and in-kind distributions would displace sales by local producers and traders.
- **Scenario 6:** In line with national government priorities, school feeding programs favor procurement of goods as local as possible to the schools where the foods will be consumed. While this approach results in higher costs relative to international prices, the local price of vegetable oil (or the local substitute) is too costly. In this type of scenario, it may be appropriate to source cereals and fresh produce through restricted tenders with local producer groups and to source vegetable oil through the USG (Gifts-In-Kind).

The response analysis process outlined in this chapter focuses on the choice(s) between transfer modalities, distribution/delivery mechanisms, and procurement strategies. In many cases, direct transfers to program participants are secondary to other types of interventions, such as income generation, agricultural production practices, capacity building, behavior change, disaster risk reduction, etc. The identification and design of these interventions are outside the scope of this chapter and largely fall under the domain of programming staff.

However, in some cases, behavior change strategies ("cash plus" strategies) are important complements to transfer modalities. For example, cash may be a viable option for shelter reconstruction following an emergency, but only in combination with trainings or demonstrations to ensure that new construction meets the objectives of the USDA's Build Back Better Initiative.



Phased Approaches

Mixed modalities can also be used in succession, based on the phase of the response or changes in the factors that determine the optimal modality(s). For example:

- Responses to acute emergencies often prioritize timeliness and may favor the use of pre-positioned stocks or loans (where available) and/or strategic sourcing from pre-qualified suppliers, if framework agreements for cash delivery with financial service providers are not already established. In these cases, programs should aim to transition to market-based responses as soon as markets stabilize and contracts with local suppliers or mechanisms for CVA distribution are established.
- Longer-term programs often prioritize building capacities, structures, and systems (both internal and external), which may preclude the feasibility of certain modalities/design aspects in the immediate phase. Efforts to build these capacities and systems should be explicitly included and budgeted for in the project design, as needed (see Market Support Interventions section below).

Market Support Interventions

Market support interventions seek to improve the situation of populations affected by a crisis by targeting critical market systems on which the target population relies for goods, services, labor, or income. These interventions provide support to specific market actors, services, policies, and infrastructure based on bottlenecks identified in market assessments to enable the target population's self-sufficient and reliable access to key goods and services at affordable prices.

Market support interventions can be implemented as a sole activity or can be combined with other response options to address market constraints by:

- strengthening the capacity of market actors;
- improving market linkages;
- catalyzing adapted goods and services;
- generating demand;
- increasing access to finance; and
- enhancing the business-enabling environment.

For more information, refer to the joint CaLP-CRS publication Market support interventions in humanitarian contexts – a tip sheet and the PSE Playbook.

Supply Chain Agility

An agile supply chain can adjust rapidly and cost-effectively to unexpected changes in supply and demand. Potential obstacles to supply chain agility include long lead times, supplier contracts, staffing structures, and other internal and external factors that limit CRS to certain types of supply chains, operational modalities, and/or delivery volumes. The more supportive that a country program's supply chain systems and structures are, the more useful the activities described in this section will be.

To maximize the agility of CRS' supply chain, the design team should build flexibility into logistics systems through multiple modality responses and diverse procurement and distribution/delivery strategies. It is especially helpful if the supply chain team has diverse capacities and responsibilities across all operational modalities. This facilitates unbiased decision-making and efficient transitions between modalities. Project-specific design choices in broader supply chain structures and systems can increase supply chain agility when combined with the activities shown below.





Ongoing Communication

Ongoing communication between program and supply chain staff to discuss potential changes in project/program needs, context, and objectives

- The earlier these types of changes are communicated, the more time supply chain staff have to investigate and prepare for operational adjustments.



Regular Market Monitoring

Regular monitoring of market information to develop a strong understanding of how markets function

The existence of valid, detailed market baselines (from primary or secondary sources) allows supply chain staff to:

- be proactive rather than reactive to market conditions;
- anticipate changes in the market context that impact decisions about modality and supply chain strategy; and
- plan for market considerations in a timely and cost-efficient manner.



Strategic Preparedness

Strategic preparedness with prepositioned stock to enable rapid scale-up of assistance

The use of contracts for prepositioned goods and services provides access to prepositioned safety stocks and electronic "top-up" capabilities for CVA so supply chain staff can mobilize response efforts rapidly when facing a crisis or major market change.



Active Collaboration

Active collaboration among peers, partners, government actors, and donors to improve access to information and strengthen coordination among one another

Participation in working groups and bilateral discussions may present opportunities to access prepositioned stocks and loaned goods.

While the activities described above can save significant time, resources, and even lives, they are not free of costs. Decisions about investments in prepositioning stocks and service agreements and building staff capacities should be weighed against the likelihood that conditions and objectives will change.

Cash readiness refers to the ability to use cash as a modality wherever it is feasible and appropriate. This includes the ability to implement cash in line with minimum quality standards, in a timely manner, at scale and efficiently. Cash readiness activities apply to both humanitarian and development programming.

Typical cash readiness activities include:

- CVA training for key programming, operations, and management team members.
- Pre-positioning agreements with Financial Service Providers (FSP) for cash delivery.
- Developing CVA Standard Operating Procedures (SOPs).
- Identifying the most appropriate cash delivery mechanisms.
- Piloting a CVA response.
- Adapting CVA tools and guidance to country program context.

At the global level, CRS has established the Global Payments Solution (GPS), which offers country programs access to multiple financial service providers with whom CRS has global framework agreements. The GPS makes cash a timely and feasible option even in acute emergencies. For more information on the GPS, contact the Cash & Markets Team at fspsupport@crs.org.

To evaluate your country program's cash readiness and develop an improvement plan, contact the HRD Markets Based Rapid Response and Recovery (MBRRR) Team at harc@crs.org.



Response Selection Checklist

As members of the design team, supply chain staff should be involved in each of the steps leading to the selection of the response modality(s), distribution/delivery mechanism(s), and procurement option(s). Supply chain staff should ensure that operational considerations are considered in the criteria; that they are assigned sufficient weights; and the evaluation of the response options against the criteria is realistic.

CHECKLIST *Selecting a Response*



In making its recommendation, the **design team**:

- ☐ Determines the criteria for selecting the response modality(s), distribution/delivery mechanism(s), and procurement option(s).
- ☐ Assigns criteria weights that reflect the relative importance of the criteria (e.g., more weight is given to modalities and distribution/delivery mechanisms that can be accessed by women).
- ☐ Compares each of the response options under consideration against the weighted criteria, using the results of the market assessment(s), logistics assessment, procurement assessment, Private Sector Engagement (PSE) scoping studies, needs and situation assessments, risk assessments, etc.
- ☐ Selects response option(s) and provides a justification, including identified strengths, potential weaknesses, and mitigation strategies, as needed.

For templates to use when making response selection decisions, see "M3_1_6_1 Decision making matrix template" in the Red Cross and Red Crescent Movements Cash in Emergencies Toolkit and the USAID Modality Decision Tool.

Supply chain teams should develop and implement action plans as soon as possible to address any potential weaknesses that are identified in CRS supply chain systems, structures, and capacities that could limit the effectiveness of the selected response option(s). Even if the current proposal is not funded, these actions will improve CRS preparedness for future responses.

PROPOSAL DESIGN AND REVIEW

Assessments and analyses in the response analysis process should be completed before the design workshop and the development of the proposal package. But because these assessments and analyses are iterative, they can occur simultaneously and may include the activities listed below.

- Development of the results framework, project strategy, and theory of change.
- ProFrame development and planning for MEAL.

> Donors may require MEAL indicators to be used during the project. CRS can choose additional MEAL indicators as necessary to provide additional information about the project performance and accountability, including those related to supply chain activities and performance.

- Organizational capacity and management plans (including decisions governance structures, staffing, and risk management planning).

- Development of an activities schedule and project budget.
- Proposal writing and formatting.
- Proposal review by key stakeholders and subject matter experts.
- After Action Review (AAR) after the proposal is submitted (for large and complex projects and new donors).

During the iterative processes of proposal design and review:

- Supply chain staff **and** programming staff on the proposal team should communicate regularly so the final project design is informed by programming and operational needs and considerations.
- Supply chain staff should engage actively so the final project design is realistic and effective.

Budget Development

It is important to carefully estimate and calculate the staff, facilities, equipment, etc. required to implement the desired intervention as designed by the project design team (which includes the Supply Chain Manager).

Procurement Needs Analysis

The procurement needs analysis is completed by the budget holder, programming staff, and/or proposal staff—in partnership with procurement staff—to identify the procurement requirements and costs for the D-goods/services **and** ND-goods/services needed to implement the selected response(s).

The procurement needs analysis is usually conducted during the start-up phase of a project, but is important to begin this analysis during the design phase to ensure the following:

- Budgets included in proposals (including the annual budget) reflect realistic costs.
- Timelines included in proposals (including the annual budget) reflect realistic lead times.
- Needed good(s)/service(s) are available **and** the country program knows how and from where to procure such good(s)/service(s).
- Import requirements are known, so customs clearance will be as efficient and low-cost as possible.

Conducting a procurement needs analysis during the proposal design stage avoids the potential "pain points" in the procurement process during implementation, as described in the figure below.

Examples of Potential Procurement Process "Pain Points"



A requisition is submitted using the budgeted cost. Quotes are requested, received, and evaluated, only to find out that **the actual cost is significantly over the budgeted cost** for that good or service.

The programing team must reduce the quantity, change several line items on the budget, or change specifications. **Changing specifications means that procurement must launch a new procurement process.**



A requisition is submitted for vests for an upcoming Long-Lasting Insecticide Net (LLIN) distribution campaign. **The requisition has a delivery date of one week, but the goods take one month to be procured.**

CRS will either be unable to provide vests in the campaign or pay much higher prices for vests that can be delivered within the time frame.



A requisition is submitted to a country program procurement department for one vehicle with special accessories. When the requisition is submitted, **local vendors are unable to provide** the vehicle.

The Global **Procurement department now needs to procure the vehicle, adding about three months to the delivery date**, when factoring in production time, transit time, and customs clearance time.

Before the procurement team begins the procurement needs analysis, the **design team** provides the following information to the Procurement Manager and the procurement team.

For the project:

- A list of all potential goods and services needed and to be procured for the project, such as construction services, cash distribution services for CVA programs (e.g., mobile money services or banks), etc.
    - For each good, minimum specifications that ensure quality.
    - For each service, a basic description of the SOW and minimum qualification requirements.
- Expected project duration.

- Any sourcing requirements.
    - Example 1 – “Food commodities in a CVA program will be sourced from very local vendors in vendor fairs in X, Y, and Z geographic areas.”
    - Example 2 – “DHIS2 software consultants must be trained by the software’s coordinator of development activities, the University of Oslo.”

For each good and service:

- Expected quantities.
- Expected geographic location.

Conducting a Procurement Needs Analysis Checklist

CHECKLIST *Conducting a Procurement Needs Analysis*



After receiving information from the proposal team, the **procurement team**:

- ☐ Identifies the source where each good or service could be procured.
- ☐ Identifies the expected unit price and delivery time for each good and the cost of each service.
  For goods and services that can be procured locally or internationally:
  Prices and delivery times **for both options** must be obtained

  For goods and services procured locally:
  The unit price offered by the vendor is typically the total cost of the procurement

To research information about sourcing, prices, and delivery times, the **procurement team**:

- ☐ Requests prices from local vendors.
- ☐ Uses a public catalogue of pricing from a government ministry.
- ☐ Uses the previous pricing received for the same/similar goods or services.

  For goods and services procured internationally, pricing estimates:
  - ✓ **Must include** transportation/travel costs
  - ✓ **Should include** the unit cost of the goods and the costs of international transport and customs clearance
  - ✓ **Should also include, as applicable,** tariffs, warehousing costs, and local transport costs

  For services sourced internationally, pricing estimates:
  - ✓ **Should also include, as applicable,** the hourly/daily rate and/or total cost, travel, accommodation, per diem, visa cost, and expenses.

Using the findings to make recommendations, the **procurement team**:

- ☐ Considers slightly increasing the unit prices and/or delivery times from the initial findings to account for potential increases, as prices and delivery times can fluctuate.
- ☐ Recommends how to source goods and services that are available in both the local and international markets.

> Generally, local procurement is preferable to support local businesses. Even if the international unit price, with all costs considered, is slightly less expensive than the local unit price, there is justification to purchase locally, as time is saved on transportation and customs clearance, and CRS is supporting the local economy.

- ☐ For goods that will arrive in multiple shipments and/or services that will be needed throughout the project, recommends where possible that one procurement process is done at the start of the project and a long-term agreement (i.e., either a Blanket Purchase Agreement or Contract Purchase Agreement) is signed with the selected vendor.

CONTINUED *Conducting a Procurement Needs Analysis*



- ☐ Writes a procurement plan (the plan can be as simple as a summary table/report of the findings and recommendations) and shares the procurement plan with the proposal team.

The **procurement team** typically researches the information by:

- ☐ Using the previous pricing received for the same/similar goods or services
- ☐ Reaching out to Global Procurement to obtain pricing
- ☐ For food commodities, use one of these resources:
  - USAID Bureau for Humanitarian Assistance Commodity and Ocean Freight Price Estimates
  - WFP food prices per country
  - FEWS Net Staple Food Price Data
  - Logistics Cluster (LC)

Weight and Volume Calculations

For accurate budget development, it is critical to calculate the weight and volume of **all** goods during the proposal design stage to logically estimate storage and transportation requirements. To estimate these requirements, supply chain staff should use the Weight and Volume Calculator.

For items that are boxed or bagged, the simple formula for calculating volume is:

Volume in m^3 = [Length (cm) * Width (cm) * Height (cm) * 0.000001]

(Note: multiplying by 0.000001 converts cm^3 into m^3)

For items that can be "nested" (i.e., packaged into each other, such as plastic buckets, hoes, and cook pots), the preferred method for calculating volume is to measure the dimensions of a nested group (e.g., 50 buckets, 20 hoes, and 25 cook pots) and divide the total nested volume by the number of units in the nest. This method produces a much more realistic estimate of storage space requirements, as illustrated in the figure below.

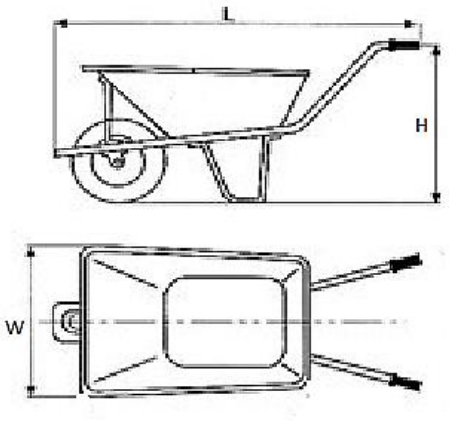


Stack of 10 nested buckets = [30 cm (l) * 30 cm (w) * 100 cm (h)] * 0.000001 (conversion of cm^3 to m^3) = **0.09m^3**

so…

1 nested bucket = [0.153m^3 stack volume] / 10 units = **0.009m^3**

For irregularly shaped items that cannot be easily nested (e.g., an assembled wheelbarrow, sledgehammer, and generator), the preferred method of calculating volume is to estimate the smallest box that could hold the item by using the longest dimension of each axis, as illustrated in the figure below.



Approximate dimensions:

130 cm (**L**ength)

65 cm (**H**eight)

70 cm (**W**idth)

Unit Volume = [130 * 65 * 70] * 0.000001 = **0.592m^3**

(**Note:** it is best practice to slightly overestimate unit volume as a space margin)

The weight and volume of many commonly used goods are available online or through resources like the UNHRD relief items catalog. The table below lists the estimated volume of commonly used goods.

Type of Good	Primary Packaging	Unit Volume (m^3)
Food		
Grains, cereals, and pulses Blended foods and flours Veg Oil Salt	Poly Bag, 50 kg Paper Sack, 25 kg Carton, 23.2kg (6 tins) Poly Bag, 25 kg	0.090 0.050 0.036 0.018
NFI		
Kitchen Kits, family of 5 OFDA Hygiene Kits, family of 5 Plastic Sheeting (4 m x 6 m sheet) Soap (bars) Family Tents Blankets (50% wool content) Collapsible Jerry Cans (10 gallons) Latrine caps, plastic (80cm x 60cm x 5cm)	Carton, 5 kg Carton, 15.5 kg Bale of 5, 27.0 kg Carton of 20, 5.3 kg Each, 76.6 kg Bale of 30, 42.0 kg Carton of 100, 17.0 kg Carton of 10, 36.5 kg	0.040 0.079 0.054 0.007 0.310 0.210 0.096 0.244
Medical		
IEHK 2017 (full kit for 10,000 persons for 3 months) long-lasting insecticide net (LLIN) (size = L 180cm x W 160cm x H 150cm)	Kit, 65 cartons, 1.25 metric tons Bale of 25, 16.45 kg	7.15 .052

Budget for Supply Chain Activities

Using the information from the procurement needs analysis and the weight and volume calculations, supply chain staff can begin creating the budget for supply chain activities, which typically make up 60-80% of a project budget.

Creating a Project's Supply Chain Budget Checklist

CHECKLIST

Creating a Project's Supply Chain Budget



The **Supply Chain Manager**, working with the **Warehouse Manager** and **Logistics Manager**:

- ☐ Estimates the number and type of vehicles needed to move goods and staff/workers during the project period.
- ☐ Estimates the warehousing capacity needed during the project period.
- ☐ Lists the additional staff, supplies, equipment, or services needed to support the project's supply chain activities and the supply chain logistics network (e.g., generators, warehouse administrative supplies, CVA equipment, clearing and forwarding agents, third-party shipping and handling, leasing costs for storage facilities, Third-Party Logistics (3PL) service provider costs [clearing and forwarding agents, surveyors], quality assurance [including testing and sampling laboratory fees, fumigation, dunnage], etc.).
- ☐ Communicates these requirements to the Procurement Manager and proposal development team.

The **Procurement Manager**, using the information from the **procurement needs analysis**:

- ☐ Calculates the estimated cost of the proposed services and goods, including D-goods and ND-goods.
- ☐ Requests quotes from suppliers, as needed.
- ☐ Estimates the costs of required supplies, equipment, or services needed to support the project's supply chain activities and the supply chain logistics network.
- ☐ Determines any insurance costs.
- ☐ Provides the cost information to the proposal team to include in the proposed project budget.

For goods that may need to be procured internationally, the **Procurement Manager**:

- ☐ Contacts the Global Procurement department (Global Procurement can then follow a similar process for estimating costs of those goods that may need to be procured internationally).

If the project has branding and marketing requirements, country program staff must include these costs in the budget. A branding strategy and marketing plan describe how the donor and CRS logos will be presented on project-related materials and products.

If the total cost exceeds the estimated budget, the proposal team collaborates with the Supply Chain Manager to identify ways to reduce costs such as decreasing the number of distributions or the quantities of goods or services, changing specifications, or other strategies.

Proposal Development

Proposal Development Process Checklist

CHECKLIST *Proposal Development Process*



As a member of the proposal team, the **Supply Chain Manager**:

- ☐ Contributes to pre-proposal information-gathering activities, such as the market and logistics assessments.
- ☐ Participates in problem analysis, response analysis, and design workshops.
- ☐ Provides support in the development of the theory of change, results framework, and project strategy.
- ☐ Develops the supply chain-related portion of the budget.
- ☐ Joins MEAL workshops to determine the activities and outputs and needed KPIs.
- ☐ Provides mitigation strategies for supply chain-related risks and corroborates identified risks with those maintained in the supply chain risk register.
- ☐ Writes/supports development of the "Resource Management" section, as applicable.

Proposal Review

Reviewing the project proposal involves several steps.

For most opportunities, the proposal is first reviewed (and revised as needed) at the country program level, including senior leadership and partner staff. Afterward, the proposal is sent to regional and at times headquarters staff for further review and validation.

For global opportunities (e.g., USAID-funded RFSA proposals and USAID-funded McGovern-Dole proposals), the proposal follows a separate review process that includes country program and regional reviews, as well as a phased color review managed by headquarters. For details, see the RFSA Proposal Development Guidelines.

Reviewers are often assigned specific sections of the proposal to review. The proposal includes the project narrative, attachments, and the budget. For guidance on how to conduct the review and validate the design, see the Compass Guidance for Project Operating Context Review and Design Validation and the Proposal Review section of ProPack I.

Proposal Review Process Checklist

CHECKLIST *Proposal Review Process*



Before beginning the proposal review, **supply chain staff**:

- ☐ Review the donor solicitation and the requirements it contains.
- ☐ Review all applicable donor rules and regulations (this list is not exhaustive).

During the proposal review, **supply chain staff**:

- ☐ Check that all required documents are available and included in the proposal package.
- ☐ Closely review the narrative and attachments sections about procurement, logistics, warehousing, distribution, security, and any other relevant operations-related information.
- ☐ Validate the following:
  - The quantification and forecasting assumptions to ensure that the estimates are consistent throughout the proposal.
  - The explanation for the chosen transfer modality (or modalities) and the justification for the modality choice.
  - The explanation for the chosen distribution and/or delivery mechanisms
  - The description of the market assessment, the potential impacts on markets to local production and prices and strategies to mitigate market disruption.
  - The rationale for the types of goods and services that are being proposed in addition to explanation of specifications of goods or scope of services, if detailed.
  - The proposed activity plan and procurement plan (see Procurement Planning in the Planning chapter), including pipeline analyses and call forward schedules, if required by the solicitation.
  - The budget narrative, especially staffing costs, international transportation, storage and handling costs, the costs of goods and services, and other costs related to supply chain activities etc.
  - The threat assessment and risk analysis, and proposed risk response strategies.
  - The explanation for the close out strategy.
- ☐ Confirm that the sources of supply chain information are properly cited.
- ☐ Confirm that the calculation assumptions and methods are explained in the proposal narrative or in an attachment. This is especially important for the generation of budget notes.
- ☐ Provide clear feedback to the proposal team, indicating budget threshold issues and proposed solutions.
- ☐ Be available to discuss feedback with the proposal team and writers in more detail, as needed.
- ☐ Follow up with the proposal team to ensure that threshold issues have been significantly addressed.

After-Action Review (AAR)

The purpose of the After-Action Review (AAR) is to learn from the design team's efforts and to produce future proposals with great quality and efficiency. For large or strategic proposals, business development teams at the country, regional, and/or global levels often lead the AAR.

Supply chain staff must participate in the AAR. The Supply Chain Manager or SCM Regional Technical Advisor may also choose to lead a supply chain specific AAR to delve into what worked well and what could be improved. This may be particularly beneficial for proposals that include new or diverse supply chain types or modalities, and/or in which supply chain staff took on new responsibilities in the proposal process.

Results of the AAR should be shared with the GSCM Department and SCM Communities of Practice (CoPs) to facilitate learning across country programs.

For more information, see IDEA's After Action Review Guidance for Proposal Development and Compass' After Action Review Guidance.



Photo by Jennifer Hardy

Chapter 4: Start-Up

4. START-UP

Purpose

This chapter enables CRS staff to plan and establish market monitoring, procurement, logistics, warehouse, and distribution activities related to a new project or program.

4.1 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

CRS GUIDELINES

- Compass Project Management Standards - Start-up
- Insight Inventory Management Reference Guide This reference guide will help users with various start-up activities required in Insight including adding warehouse staff to access Insight and setting up new warehouses in the system
- Insight Procurement Reference Guide This reference guide will help users with various start-up activities required in Insight including adding new procurement to access Insight
- MARKit, 2nd Edition Market Monitoring, Analysis and Response Kit
- Minimum Market Information Guide A quick guide to use for rapid market assessments in emergencies
- Smiler+ Guide to MEAL System Development CRS SMILER+ is a participatory process that enables teams to develop MEAL systems that are responsive to context and contribute to adaptive program management
- The Emergency Field Operations Manual (EFOM)

CRS PROJECT MANAGEMENT STANDARDS (COMPASS)

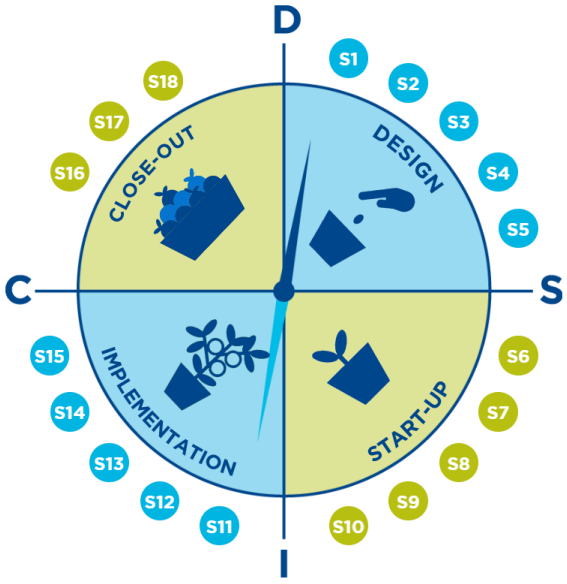
The Compass Start-Up site gives detailed guidance about key activities, standards, meetings, events, and actions during a project's start-up phase, which usually begins after an award is signed. The figure below provides context for the start-up phase as one of four project phases.

CLOSE-OUT

The close-out standards emphasize the importance of accountability and cross-disciplinary collaboration as projects come to an end.

IMPLEMENTATION

The implementation phase standards focus on timely, evidence-based, cross-disciplinary management of project activities and resources, in close collaboration with CRS partners.



DESIGN

The design phase standards focus on design issues that have a significant impact on a project's implementation.

START-UP

The start-up standards focus attention on this critical, and often challenging, phase of the project management cycle.

For USAID awards, the start-up phase often begins before an award is signed. In these cases, CRS incurs pre-award expenses for recruitment processes, activities, and announcements, which should also begin before an award is signed (and must be conditional on CRS winning an award).

The donor only refunds expenses incurred before an award if CRS submits a signed Pre-Award Letter (PAL) that outlines allowable pre-award expenses. In the PAL, CRS can request to use up to 20 percent of the total budget for pre-award costs.

Before submitting a PAL to the donor, CRS should discuss expenses for pre-award activities with the donor.

DONOR POLICIES AND REGULATIONS

USAID

- 2 CFR 700 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (especially 700.16)
- 22 CFR 211 (Reg 211) – Transfer of Food Commodities for Use in Disaster Relief, Economic Development, and Other Assistance
- 22 CFR 216 – Environmental Procedures
- 22 CFR 228 – Rules for Procurement of Commodities and Services Financed by USAID
- Mandatory Standard Provisions for U.S. Nongovernmental Organizations
- Mandatory Standard Provisions for Non-U.S. Nongovernmental Organizations

USDA

- 2 CFR 700 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards
- 7 CFR 1499 – USDA Food for Progress
- 7 CFR 1590 – USDA Local and Regional Food Aid Procurement Program
- 7 CFR 1599 - McGovern-Dole International Food for Education (FFE) and Child Nutrition Program

4.2 OVERVIEW

This chapter provides guidance on how to start specific supply chain activities. Many of these activities are affiliated with a project start-up, but some can occur after the start-up phase. For example, a new warehouse might be identified in the project proposal, but the warehouse space might not be needed until a later phase in project implementation.

SUPPLY CHAIN AND PROGRAMMING STAFF ACTIVITIES

During start-up, supply chain staff are responsible for leading the activities shown in the figure below, with participation and input from programming staff in forecasting and analyzing procurement needs.



During start-up, programming staff are responsible for leading the activities shown in the figure below, with participation and input from supply chain staff in all these activities.



KEY EVENTS AND DECISIONS

Supply chain staff and programming staff make decisions about start-up activities through various meetings and events.

- The Project Manager/Chief of Party usually leads the meetings/events.
- The Head of Operations ensures that meeting/event agendas include the required SCM elements and that meetings/events include the relevant SCM stakeholders.

For more information on start-up meetings and events, see Compass | Navigating the Project Start-up Journey.

Project Handover by Proposal Team

Members of the proposal team organize a handover event to the staff who are responsible for implementing the project (see Compass Start-Up Standard 6, Key Action 3).

During the handover, the proposal team and the implementing staff should review the proposal and the award document(s) and should discuss the project assumptions and donor feedback.

Review of Donor Agreement

Once the donor has signed the donor agreement, supply chain staff must read the agreement to identify and review donor-specific requirements and regulations for supply chain activities. For specific regulations that apply to any USAID or USDA award, see the Donor Policies section in this chapter.

The figure below lists key questions for different project activities that should be considered during review of the donor agreement.

Project Activity	Key Questions and Assignments of Responsibilities
Prior Approvals or Waivers	– Have all required approvals and waivers have been obtained? – Who will be responsible for obtaining the required approvals and waivers?
Unallowable costs	– Does the donor have any specific unallowable costs? – Are any of the unallowable costs related to supply chain activities? – Confirm whether CRS is planning to pay these costs.
Project Period/Period of Performance	– What does the agreement state as the date on which the award starts and the date on which the award ends?
Submission of Reports	– What are the requirements for the type of report to be submitted? – When are reports due? – Who will be responsible for completing and submitting them?
Supplies and Materials	– What is the donor's definition of property? – Does the definition include items classified as supplies or materials? – What are the criteria for classifying property as a supply or a material?
Equipment and Supplies	– What is the donor's definition of equipment and supplies? – Is the project purchasing any goods that would be considered equipment according to the donor's definition? – Does the donor require approvals before purchasing equipment and supplies? – Does CRS already have the required pre-approvals? – Who will be responsible for obtaining the required pre-approvals?
CVA Assets	– What modalities does the donor allow under the award? – Does the donor have specific policies or procedures for CVA, including reporting requirements, restrictions on what may be purchased, and suppliers that may be engaged? – Who will be responsible for ensuring completion of these requirements?

Project Activity	Key Questions and Assignments of Responsibilities
Equipment and Property Title Vesting	– Does CRS, the donor, or another third party hold the title for equipment and property that is purchased for the project?
Supplier Nationality	– Does the donor restrict the nationality of the suppliers from which goods or services may be procured? – Confirm that CRS is not planning to procure from such suppliers.
Restricted Goods and Services	– Does the donor have a list of restricted goods and services (e.g., motor vehicles, pharmaceuticals, food commodities, international air travel, etc.)? – Does the donor have a list of goods or services that require approval before procurement or have another procurement requirement? – Does the donor still require approval before initiating procurement for the list of goods or service in the approved award? – Does CRS have the required approvals?
Prohibited Goods and Services	– Does the donor have a list of prohibited goods and services that cannot be procured under the award under all circumstances (e.g., weapons, SCUBA gear)? – Confirm that CRS is not planning to procure such goods or services.
Sourcing of Goods and Services	– Does the donor require goods or services to be only procured or manufactured in certain countries or regions?
Environmental Requirements	– Does the donor have any environmental requirements? – Has CRS already submitted the required documents or received approvals?
Procurement Plan	– Does the donor require a new or revised procurement plan? – When is the procurement plan due? – Who on the program team will be responsible for filling out the procurement plan, with guidance from procurement staff? – For USG food distribution projects only: What is the call forward schedule?
Packaging, Branding, Marking, and Labeling	– Does the donor have specific branding, marking, or labeling requirements for the distribution and other goods and equipment? – Who will be responsible for ensuring these requirements are met?
Ports of Entry	– What are the ports of entry?
Points of Delivery	– What are the points of delivery?
Import Requirements ☐ See below for commodity-specific requirements that apply.	– Does the donor require goods to be imported free of all duties, taxes, etc.? – Does CRS have the appropriate duty-free or tax-free waivers or exemptions from the host country government for the donor's requirements? – Who will collaborate with the government to obtain the required duty-free or tax-free waivers or exemptions? – How long will it take to obtain donor-required waivers or exemptions for duty-free or tax-free importation of goods? – What is the impact on the procurement plan of obtaining donor-required waivers or exemptions for duty-free or tax-free importation of goods?

Project Activity	Key Questions and Assignments of Responsibilities
	– Who will pay the duties, taxes, and fees if the government does not grant duty-free or tax-free waivers or exemptions?
Shipping Instructions	– Does the donor have any shipping requirements? – Confirm that the shipping instructions are correct.
Safety and Quality Standards	– Does the donor have safety and quality standards that CRS must adhere to? – What are they? – If testing will be done locally, identify a qualified pre-approved testing facility.
Disposition of Goods	– What are the requirements for disposal of unfit food and other commodities, equipment, supplies, etc.? – Who will be responsible for ensuring compliance with these requirements?
Equipment and Property Disposition/Disposal	– What are the requirements for disposition/disposal of equipment or property that is no longer needed for the project? – Who will be responsible for overseeing disposition/disposal? – What are the requirements for approval and reporting of disposed equipment or property? – Who will be responsible for ensuring approval and reporting of disposed equipment or property?
Reporting Requirements for Damage, Loss, Disposal	– What are the requirements for reporting damaged, lost, or disposal of goods? – Who will be responsible for reporting to the donor?

Importing USG Food Assistance Commodities

USG-funded food assistance programs require all food to be imported free of all duties, taxes, and other fees. Supply chain staff should confirm this during the design phase and again during the start-up phase.

The host country agreement (HCA) must allow CRS to import the commodities without incurring any duties, taxes, or fees. If the agreement does not allow this, the Country Representative should negotiate accordingly with the respective government ministry.



Validation of Risk Register

A risk register for the project and supply chain is developed during the design phase of a project. This risk register must be validated and revised as necessary during the start-up phase by:

- confirming whether the threats identified during the design phase and the proposed actions for risk reduction are still valid (Compass Start-Up Standard 7, Key Action 1); and
- removing or adding new threats identified during the start-up phase (and including proposed actions for risk reduction).

Selection of MEAL4SCM Indicators

The selection of a project's MEAL4SCM indicators begins during the design phase and continues during the start-up phase.

Programming staff leads workshops to develop the MEAL system and the Supply Chain Manager should attend these workshops. For projects involving distributions, the Supply Chain Manager and other supply chain staff should attend all relevant MEAL workshops.

During MEAL workshops, for projects that distribute goods or services to program participants, programming staff and supply chain staff should **jointly**:

- select indicators that provide useful information for programs **and** operations; and
- design data collection tools and a data flow map to prevent redundant data collection and analysis.

For various reasons, the serial numbers of electronic CVA assets are not tracked in Insight. Instead, the status and movement of CVA assets can be tracked by either: (a) the electronic platforms of Financial Service Providers (FSPs) and the Cash and Asset Transfer (CAT) platform, **if** the selected CVA delivery mechanism includes this capability; or (b) a ledger maintained by the CVA Asset Custodian.

During MEAL workshops, programming staff and supply chain staff should **jointly**:

- decide whether to track CVA assets individually throughout the project (based on a tracking cost-benefit analysis),
- develop standard operating procedures for tracking CVA assets, and
- develop the tracking ledger and related tracking forms.

For examples of tracking procedures, ledgers, forms, see the CVA Design & Setup site on SharePoint.

MEAL4SCM indicators and MEAL survey questions posed to program participants should be aligned across modalities and delivery mechanisms to facilitate data comparison and to disaggregate responses by modality.

MEAL information should be shared throughout the project cycle for programming staff and supply chain staff to learn and make decisions together (e.g., how to respond to contextual changes, how to address community feedback, how to ensure project objectives are met, etc.).

Supply chain performance can be monitored during the project by MEAL4SCM indicators and by other indicators that are outside of the MEAL system (for more information, see the Monitoring chapter).

MEAL System Development Checklist

CHECKLIST *MEAL System Development*



During start-up, **programming staff, MEAL staff,** and **Supply Chain Manager** jointly:

- ☐ Develop a monitoring strategy for the expected flow of data from the point of collection to the point of analysis and reporting, including the data collection location, process, timing, frequency, roles, and tools/forms to be used at each stage.
- ☐ Develop standardized data collection tools (digital when possible) based on the selected MEAL4SCM indicators.
- ☐ Conduct training programs for data collectors to ensure understanding of forms and their roles in data flow.

Recruitment of New SCM Staff

During a project's design, start-up and award preparation phases, the Project Manager should work with the Supply Chain Manager to analyze the current capacity of existing supply chain staff and to identify any missing skillsets or other gaps based on the project's goals, needs, and requirements.

4.3 ROLES AND RESPONSIBILITIES

For a comprehensive list of activities lead by supply chain staff and by programming staff, see the Overview section.

The figure below lists the functions and activities of seven roles involved in the start-up process.

For more information about each of these roles, see the Roles and Responsibilities chapter.

Function/Activity	Supply Chain Manager	Warehouse Manager*	Procurement Manager	Logistics Manager	Program Manager/ Chief of Party	Head of Operations	Market Assessment Team**
Holds the project's start-up workshop for project handover from the proposal team to the implementation team	C	C	C	C	R	A	
Recruits and onboards new SCM staff	R	C	C	C	C	A	
Reviews donor agreement	C		C		R	C	
Establishes monitoring system for agreed-upon MEAL4SCM indicators	C	I	I	I	R	A	
Sets up market monitoring system	C		C		C	A	R
Revises procurement plan with updated costs based on current market data			C		R		
Starts procurement based on the project procurement plan	A	I	R	I	C		
Starts transportation route planning	A			R	I	I	
Selects storage facility based on project storage requirements	A	R	C	C	C	I	

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

* The **Administrative Manager** has a similar role as the **Warehouse Manager** for items stored in an office storage room. References to the Warehouse Manager in all RACIs and checklists throughout this chapter can also refer to the Administrative Manager.

An **Administrative Officer or Administrative Assistant** can be designated as the **CVA Asset Custodian** to manage CVA assets that are acquired for CVA programming and stored in an office storage room.

** This team should include at least one team member from supply chain and one team member from programming. For information about the composition, roles, and responsibilities of this team, see the "Market Assessment Checklist" in the Market Assessment section.

4.4 PROCESSES

MARKET MONITORING START-UP

Market monitoring provides evidence-based data to support any necessary adjustments to programs and/or supply chain operations. Monitoring can occur across locations or contexts (e.g., at a regional or country level for a specific commodity) or within specific project, activity, country program, or other contexts. Any activity that includes a distribution or resource transfer component (e.g., Gifts-In-Kind or LRP goods, CVA assets, etc.) should include a market monitoring system.

Although programming staff lead the market monitoring process, supply chain staff should understand how to analyze and use market data for quick responses to market changes that affect supply chain dynamics, forecasts, and plans (e.g., procurement, logistics, etc.).

Market monitoring depends on the collection and analysis of quantitative or qualitative data to understand trends in market dynamics over time such as market functioning, commodity availability, trader behavior, and prices. For goods and services, project staff should be aware of market changes that could affect the feasibility and relevance of the chosen response strategy.

The figure below lists the market monitoring steps covered in this section (adapted from the CRS MARKit Manual based on lessons learned since its publication). These process steps should:

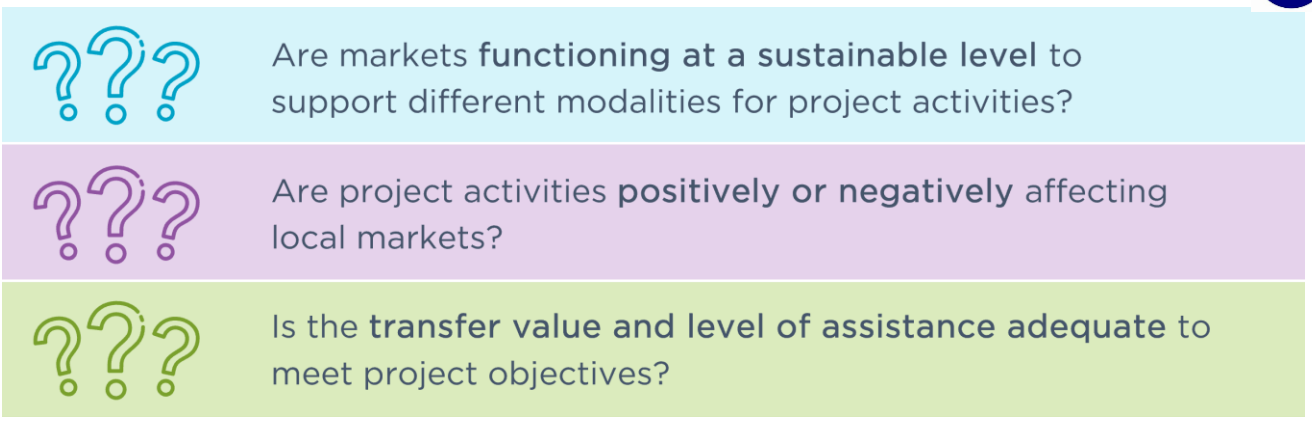
- Be completed sequentially before data is collected and analyzed.
- Be refined iteratively as the monitoring plan is developed and the market context changes.



Establish Monitoring Objectives

Market monitoring is important for answering questions about the specific needs of a country program or project to make data-informed decisions and adaptations, such as the questions shown in the figure below.

This task may extend beyond the start-up phase as decision-support requirements evolve (e.g., when transitioning from the preparedness phase to emergency response following a shock).



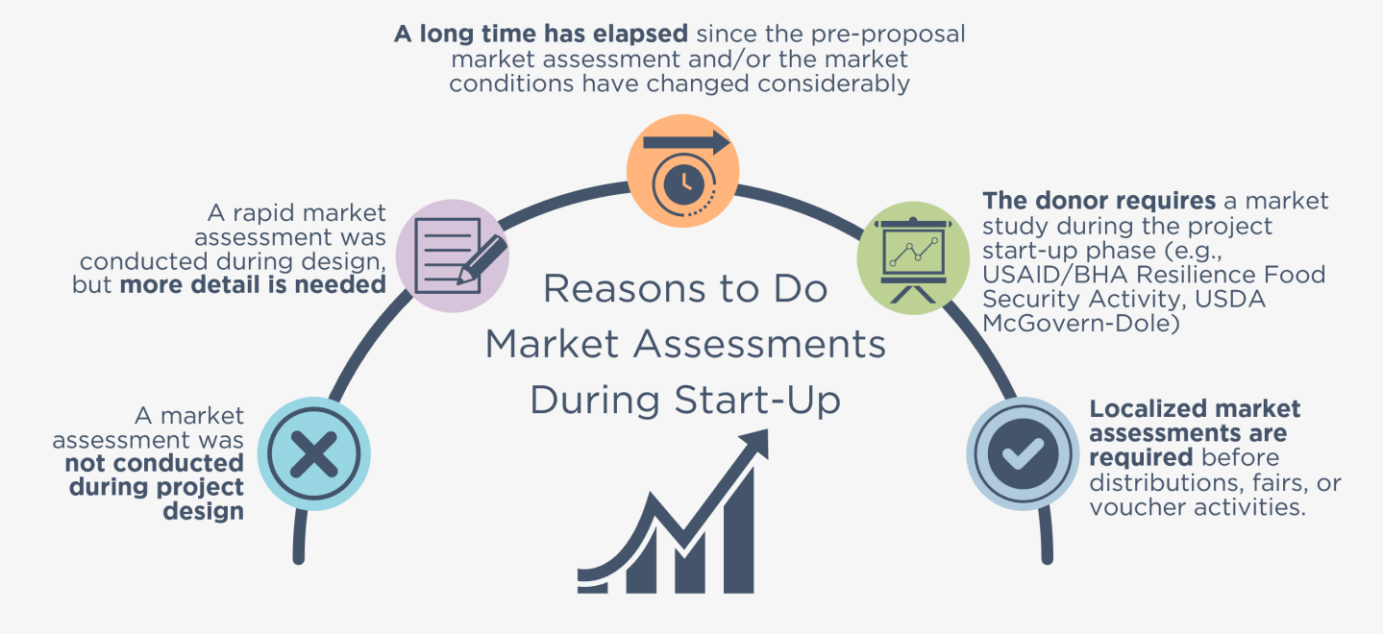
Monitoring objectives should be communicated to program stakeholders (e.g., field staff, senior management, market actors, etc.) so they understand how program-related decisions are informed by market data and market changes.

Conduct Market Assessment

Market assessments are important for understanding the larger market context for assistance provided to program participants (e.g., GIK, CVA, market system development), specifically how other indicators behave and change over space (between markets) and time (seasonally).

These assessments determine which markets and commodities to monitor, the frequency of market monitoring, indicators, and the threshold values of key indicators to trigger project adaptation actions.

Although market assessments are typically conducted during the design phase, they can be useful to conduct during the start-up phase too, for the reasons shown in the figure below.



For information on conducting market assessments and the CRS Minimum Market Information Guide, see the Market Assessment section in the Design chapter.

Select Market Indicators

Market indicators identified in the market assessment are important for achieving market monitoring objectives and for supporting program adaptation and learning through repeated observations of data indicators that can include:

This task may extend beyond the start-up phase as the context changes or as decision support needs evolve.

- **Geographic markets** that are in the intervention area or are linked to the intervention areas via the market system
- **Commodities** such as food or non-food items
- **Services** such as casual labor wages, milling costs, warehouse/storage costs, or transportation costs
- **Economic signs** (qualitative or quantitative information, content or proxy indicators) that are relevant to overall market functioning, supply (availability), demand (e.g., household purchasing power, income to food terms of trade), or price (e.g., retail, wholesale, Free On Board (FOB), etc.)

The table below provides more detailed information about how market monitoring works with different indicators.

Indicator	Monitoring Level	Notes
Overall market functioning	Market	Often assessed qualitatively
Commodity availability	Market or Vender	Can be assessed quantitatively or qualitatively
Individual commodity/service prices	Market	Quantitative
Cost of a basket of goods (e.g., Minimum Expenditure Basket, or MEB)	Aggregate of market level	Quantitative. Based on the price for a pre-defined basket of goods)
Household purchasing power (Terms of Trade)	Market	Quantitative. The ratio of revenue to cost (e.g., head of livestock divided by the cost of a sack of grain).
Time to restock	Vendor	Quantitative. Time (days, weeks, or months) it takes a vendor to restock to support an increase in demand.
Consumer price index	Aggregate of market level	Quantitative. Often reported at the regional or national level.
Exchange rate (local currency unit per USD)	Market or National	Quantitative. Should be monitored when a parallel exchange rate exists at the market level.
Transportation costs along key corridors (e.g., between program participants' residences and intervention market(s) or between commodity source and intervention market(s))	Market	Quantitative.

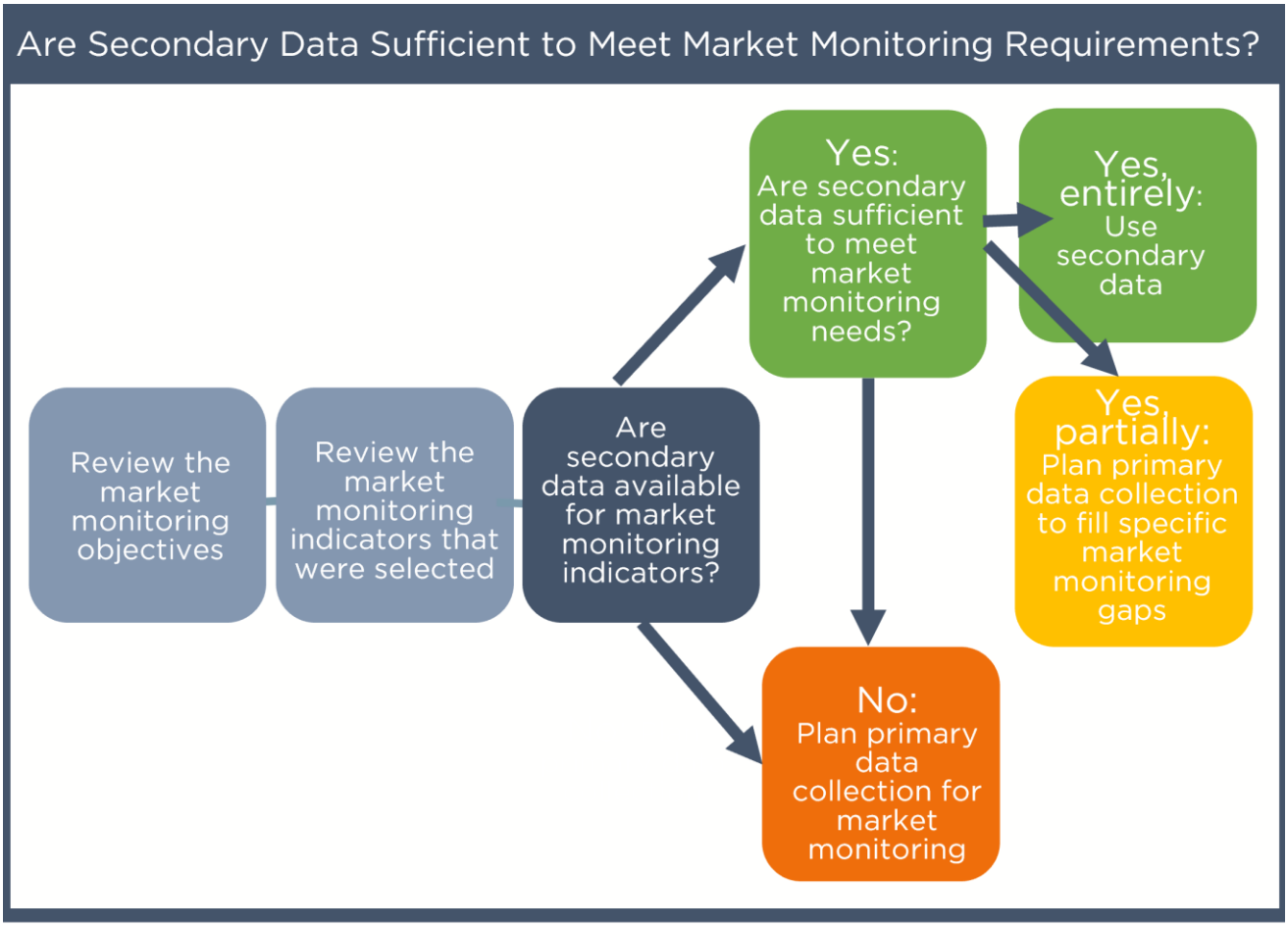
Supply chain staff can evaluate and improve supply chain efficiencies and costs across goods by monitoring indicators that influence the movement of goods through the supply chain (e.g., fuel prices, transport and warehouse costs, time for customs clearance, etc.)

Review Secondary Data

Before turning to primary data collection (which can be time- and resource-intensive), market monitoring data should be collected from any secondary sources that are available and sufficient to support monitoring activities largely or entirely (e.g., national market information system in a country where CRS operates). For the definitions of primary data and secondary data, see Sources of Market Information.

This task may extend beyond the start-up phase as new secondary data become available or as existing data streams become insufficient to meet CRS needs.

The figure below provides steps for determining whether available secondary data are sufficient to use or whether primary data might be necessary.



When reviewing secondary data, staff should use the questions in the table below to ensure the data meet decision-making needs.

Consideration	Question
Commodity coverage	– Are there adequate commodities to be monitored? – Are there well-defined descriptions of the commodities and their varieties to be monitored?
Geographic coverage	– Are there well-defined descriptions of the geographic areas to be monitored? – Are data collected in areas (the markets or market sheds being served) relevant for CRS programs?
Frequency of data collection	– Does the frequency of data collection meet CRS needs?
Length of historical time series and data gaps	– What is the length of the historical time series of data?
Other data quality questions	– Are there frequent and unexplained gaps? – Are there frequent and unexplained variations in the data? – Is data made available in a timely fashion?

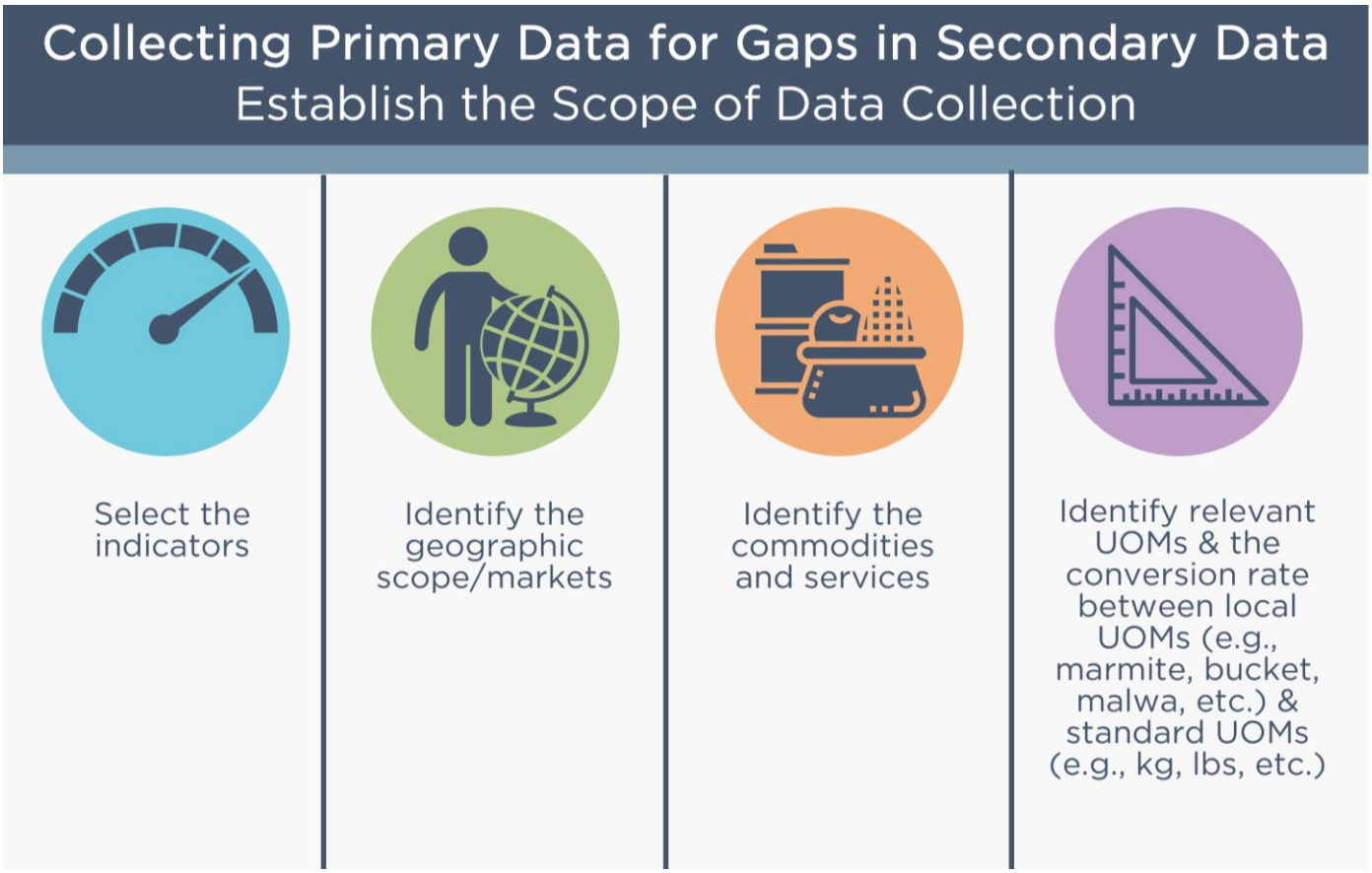
For more information on identifying and evaluating secondary data, see the Market Monitoring Secondary Data Resources and Annex 3 of MARKit: Market Monitoring, Analysis, and Response Kit.

Identify Primary Data (if needed)

Primary data should only be collected for market monitoring when secondary data is not available or sufficient to answer the key questions of the market monitoring objectives, not just to collect general data (e.g., commodity prices, exchange rates, and other supply chain indicators). For the definitions of primary data and secondary data, see Sources of Market Information.

For detailed information about best practices for primary data collection, see the MARKit: Market Monitoring, Analysis, and Response Kit. The figures below summarize important information from this resource about the scope, methods, and tools of primary data collection.

This task may extend beyond the start-up phase as new secondary data become available, existing data streams become insufficient to meet CRS needs, new technology and applications become available, or current technology and applications become obsolete.



Collecting Primary Data for Gaps in Secondary Data
Identify Methods and Tools for Data Collection



Frequency & Timing of Data Collection

Determine whether data are to be collected:
- From a pre-established set of vendors or other market actors (e.g., a vendor survey)?
- From a random sample of vendors during each physical market visit?
- In person at the marketplace and/or remotely by phone call or SMS?

Paper Data Collection

Determine whether data should be **collected on paper forms** to:
- Be discrete during market visits?
- Ensure the security of individuals who are collecting data?
- Capture information from open-ended questions that are difficult to pre-code?
- Keep and manage records generally?





Electronic Data Collection

Determine whether decentralized data should be **collected and/or transmitted electronically** to a centralized database (e.g., CommCare) if data is:
- Collected on paper forms during a physical market visit?
- Gathered directly from vendors or other market actors by phone call/SMS?
- Collected on simple forms during a physical market visit (if data is largely qualitative and pre-coded)?

Develop Data Management Plan

A data management plan is important to define how market monitoring data will be collected, managed, stored, and maintained. The plan may be developed once secondary and primary data sources have been determined and should include the following:

- Method(s) and tool(s) for data collection,
- Frequency and timing of data collection, and
- Expectations for data review, validation, cleaning, and flow.

The frequency and timing of data collection should be revisited regularly throughout the project as program needs evolve (e.g., monthly when distributions are not underway, weekly in the weeks preceding and following distributions, during the distribution week, etc.).

This task may extend beyond the start-up phase as new secondary data become available, existing data streams become insufficient to meet CRS needs, new technology and applications become available, or current technology and applications become obsolete.

Both primary and secondary market monitoring data can be stored in a common database or in separate databases at the country program level with common fields and metadata so data can be merged and easily compared using tools in Excel, PowerBI, and other applications.

Develop Data Analysis and Reporting Plan

A data analysis and reporting plan is important to allocate adequate resources (e.g., tools, staff, Excel or PowerBI dashboards, etc.) for the project's data analysis, visualization, and decision-making needs. All reports and templates should be developed and reviewed jointly with relevant stakeholders to ensure that they are sufficiently comprehensive and thorough.

This task may extend beyond the start-up phase as new market monitoring questions emerge. Templates for analysis and reporting should be flexible enough so information can be added or removed with contextual changes.



Develop Staffing Plan

A staffing plan ensures that adequate people resources are available to support the market monitoring objectives and the data collection and management activities. Staffing plans may be developed while the data management plan is under development and should specify the relevant roles and responsibilities to be incorporated into staff job descriptions, including training roles and responsibilities. The structure of a staffing plan can vary by country program and even by the project within a country program.

Endorsement of the proposed staffing plan by the Senior Management Team is critical to ensure clear expectations, adequate resource allocation, and accountability by staff (and potentially partners) for market monitoring responsibilities.

Orient and Train Staff

Staff at the country program, regional, or global levels with technical expertise in market monitoring should orient and train staff (and partners) with new market monitoring roles and responsibilities on specific tasks involved in data collection and processing, analysis, and reporting.

Although market visits are carried out during the market assessments, staff should still visit the market they are monitoring to understand the context of their work and become familiar with vendors and other market actors in that market.

PROCUREMENT START-UP

Procurement forecasts and plans that were created during the design phase should be reviewed and validated or updated during the start-up phase (see Design chapter, especially the Forecasting and Quantification and Procurement Needs Analysis sections). Forecasts and plans should be recalculated with more precise estimates using current demographic data, market prices, shipping and insurance rates, and other available data.

The Program Manager should provide all updated market data to staff who are responsible for market monitoring, so their forecasts and plans are based on the most current information available.

Identify Approved Goods and Services

During the start-up phase, programming staff reviews the award for goods and services that were approved for purchase: (a) at the beginning of a project (e.g., equipment and furniture for office set up, office space, vehicles, Internet services, etc.); and (b) for the project itself.

Programming staff and procurement staff should communicate regularly about goods and services with donor restrictions or required approvals that were identified during the Donor Agreement Review and discussed during the Project Handover by Proposal Team.

Programming staff send a list of the approved goods and services in the form of a procurement plan to procurement staff.

For more information on procurement plans, see the Procurement Planning section in the Planning chapter.

Submit Prioritized Requisitions

Programming staff should submit requisitions(s) for approval according to the dates when goods or services are needed and their related lead times, donor restrictions, or required donor approvals.

For Global Fund projects, the lead times for goods purchased through the Pooled Procurement Mechanism (PPM) can usually be obtained from the PPM.

Requisitions should be prioritized for goods or services that are needed at the beginning of the project or have long lead times.

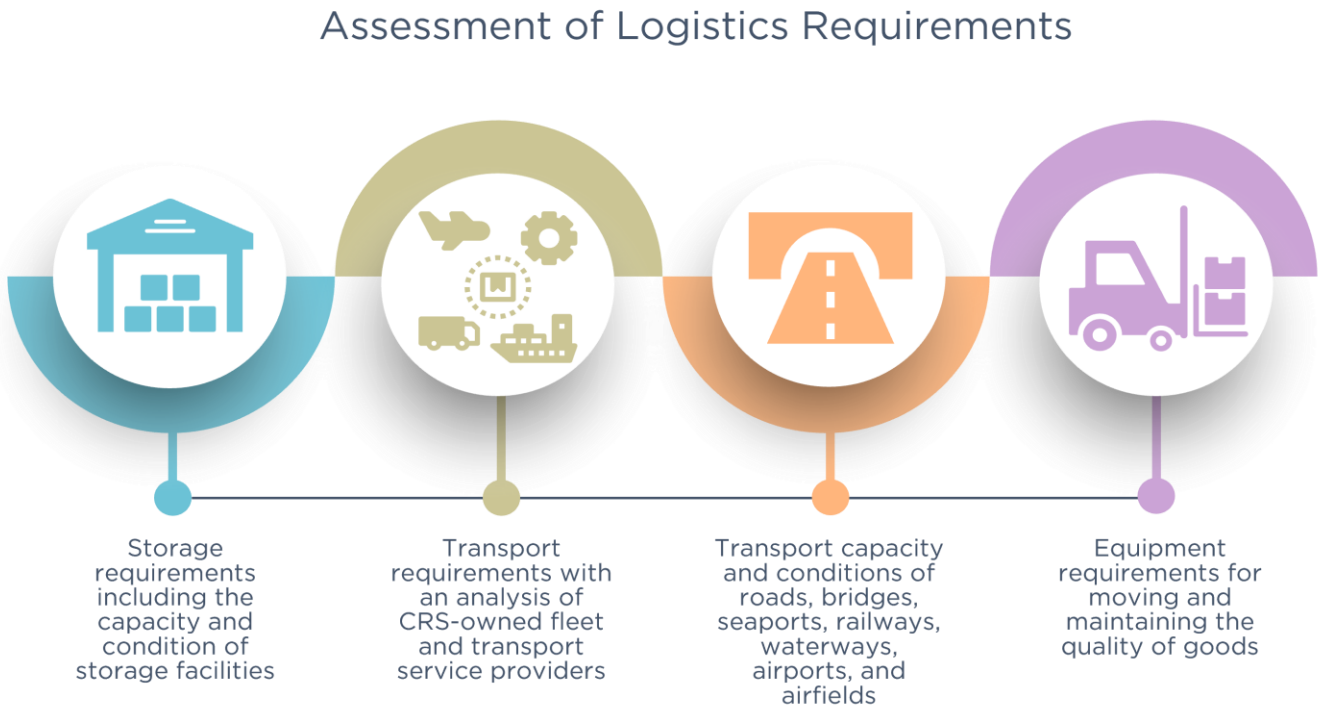
For questions around average lead times or optimal timing of requisitions, programming staff should contact procurement staff.

Pre-Select Suppliers

For information about pre-selecting suppliers, see the Supplier Pre-Selection section in the Procurement chapter.

LOGISTICS START-UP

A logistics assessment is conducted initially during the design phase to estimate the logistics requirements shown in the figure below.



The Logistics Manager reviews the logistics assessment report and updates it as needed. Using the information in the report and the risk register, the Logistics Manager works with the Warehouse Manager to develop the implementation plan for transportation and storage.

Plan Transportation Needs

A well-designed and well-executed transportation plan is important to achieve operational and cost efficiencies during a project.

The table below lists key actions for planning transportation needs during the start-up phase, including fleet, routes, and alternative modes of transportation. In every area below, all assumptions for assessments initially completed during the design phase should be reviewed and either confirmed or updated during the start-up phase.

Transportation Planning Roles and Responsibilities	
Fleet Staffing	
The Supply Chain Manager:	☐ Determines fleet staffing needs ☐ Determines whether any fleet staff need to be hired or discharged ☐ Submits recruitment needs and staffing requirements to GPR

Transportation Planning Roles and Responsibilities	
Route Planning	
The Logistics Manager:	☐ Marks on a map all locations where project activities will take place (storage of D-goods and ND-goods, service delivery point(s), etc.) for all CRS, partner(s), and any third-party managed sites ☐ Confirms all storage and delivery locations mapped for project activities ☐ Confirms or updates the route assessment jointly with the safety and security staff ☐ Confirms or adjusts the frequency of transportation
CRS Fleet	
The Fleet Manager:	☐ Reviews vehicle maintenance contracts and revises as needed to amend current contract(s) or sign new contract(s) ☐ Reviews driver training needs to determine whether driver training is required and to plan any required driver training ☐ Reviews vehicle insurance plans to determine whether additional coverage is required and if there will be a premium increase or decrease ☐ Reviews and revises requirements for fuel and spare parts
Leased Light Motor Vehicles	
The Fleet Manager:	☐ Determines whether there is a need to lease vehicles ☐ Confirms whether the donor allows and/or approves of leased vehicles (and confirms receipt of or obtains donor approval) ☐ Determines the specifications and quantities of vehicles to be leased and the duration of the lease period ☐ Submits requisitions to the Procurement Manager to launch tenders
Medium- to Heavy-Duty Vehicles	
The Fleet Manager:	☐ Confirms the capacity, type, and quantity of medium- to heavy-duty vehicles that are required to transport D-goods and ND-goods based on the tonnage and/or volume in the approved award ☐ Confirms the availability and market rates for the type and quantity of trucks required (and adjust the budget accordingly based on the validated market rates) ☐ Submits requisitions to the Procurement Manager to launch tenders
New Vehicles	
The Fleet Manager:	☐ Determines whether there is a need to purchase light trucks, SUVs, motorcycles, or other vehicles ☐ Confirms whether the donor restricts or requires prior approval of vehicle purchases ☐ **For donor-required prior approvals**: Ensures that CRS has approvals (and documents this) or works with Head of Operations and programming staff to obtain approvals
The Supply Chain Manager and the Fleet Manager:	If purchasing vehicles: ☐ Provide the Procurement Manager with specifications and quantities required and delivery date of vehicles to be purchased ☐ Submit a requisition to Procurement staff with sufficient specifications for needed vehicles
Procurement staff:	☐ Places order(s) for vehicles to be purchased

Transportation Planning Roles and Responsibilities	
Alternative Transportation Modes	
The Fleet Manager:	☐ Determines whether the operating environment requires the use of alternative transportation modes ☐ **If alternative transportation modes are required**: Determines whether aircraft (e.g., fixed wing or helicopter), watercraft, or other modes (e.g., pack mules, porters, etc.) will be used ☐ Determines the type, size, and quantity of alternative transportation modes that are required (using data collected during the design phase) ☐ Confirms the availability and market rates for the type and quantity of alternative transportation modes required (and adjust the budget accordingly based on the validated market rates) ☐ Identifies Third-Party Logistics (3PL) providers and contingency options for alternative modes of surface and air transport
The Fleet Manager and procurement staff:	☐ Prepare contract templates with KPIs and reporting requirements for transport services

Obtain Country Registration and Host Country Agreements

Before cargo may be shipped to a country, CRS must either: (a) be registered in the country(s) where programming activities are to be conducted **and** have a signed host country agreement (HCA) or Privileges and Immunities Agreement; or (b) identify a partner or common services provider (e.g., U.N. Logistics Cluster) that is authorized to import goods duty-free and sign a service agreement with that partner.

CRS often uses a common services provider (e.g., U.N. Logistics Cluster) when responding to emergencies in a country where CRS does not have an existing host country agreement (HCA).

Registration methods vary globally, and country programs must comply with all requirements. The Country Representative is responsible for securing the host country agreement (HCA).

Host Country Agreements for USG Food Assistance Projects

As a precursor to award approval and receipt of USG food commodities, CRS must have a signed host country agreement (HCA) with the host country government that contains the following clauses pursuant to 22 CFR 211.3.

- Import food commodities that are exempted from all customs duties and other charges
- Recognize the United States as the donor on product packaging, official reports, branded clothing, banners or fliers, etc.
- Open and maintain local bank accounts

If a country program is implementing a monetization program where duties and taxes will be charged on the monetized commodities, the sales contract or the terms and conditions attachment should contain a clause stating that the buyer will pay all customs duties and similar charges, since CRS cannot easily amend its host country agreement (HCA).

The Country Representative or designated staff manager must be aware of all approvals required by national government authorities before receipt, distribution, and monetization of food commodities and the amount of time it takes to process them and obtain approval.

When completing lessons learned or an after-action review, CRS staff should always document any problems that occurred during importation to prevent future recurrence of these problems.

Plan Transportation Mode(s)

Reducing CRS' Carbon Footprint

Trucks emit the largest amount of greenhouse gas per ton of material moved, followed by aircraft and ocean vessels. To reduce CRS' carbon footprint, procurement staff should consider shifting the mode of transportation when possible, depending on the length of the supply chain, the durability of goods, and the urgency of the delivery date. For example, cargo that is not time-sensitive and contains more durable goods could be transported by ocean vessel instead of aircraft.

Select and Certify Freight Forwarder

During the start-up phase, Global International Transportation works with country programs to determine if a freight forwarder must be contracted based on the type of freight certification required in the donor agreement.

When goods for a project are being shipped internationally and CRS has not already a contracted a freight forwarder to provide international shipping services, procurement staff must engage in a competitive procurement process to jointly select and contract with any Third-Party Logistics (3PL) provider(s) to provide such services (see Third-Party Logistics (3PL) Providers). The Logistics Manager should work with procurement staff to develop technical evaluation criteria to include in the tender and ensure that the specifications or scope of work are written out clearly. The Logistics Manager should also confirm with procurement and/or programming staff any existing regulations regarding freight forwarder selection and certification. For example, the USDA requires that NGOs provide a certification required by 7 CFR section 1599.7(c) and 1499.7(c) to the Foreign Assistance Division Director.

Clearing and forwarding services should be tendered every two years at a minimum, **even if** the contracted agent is a high-performing and reliable service provider **and especially if** the level of service starts declining.

Plan Importation of Goods

Supply Chain Managers and Logistics Managers should be familiar with all documents required by the national and local governments for the importation of food aid cargo and included in the country profile.

Country profiles are required for many USG food assistance programs and can be useful for all projects that involve international shipping.

A country profile includes import and custom clearance requirements for the goods, including actors, process steps, documentation, forms, fees, and timeframes (when LogCluster is activated, the LogCluster website generally includes this information).

What is a country profile?

A **summary of country program contact details and all local requirements for the importation of food assistance commodities** to ensure that communications, documents, and cargo all flow seamlessly once a request for goods has been submitted.

The Logistics Manager must routinely review and update the Country Profile. Updates should occur when there are staff changes or changes to any national-level import and customs clearance requirements.

Upon notification of receiving a new award in which food commodities will be procured and/or shipped internationally to the country, **the country program**:

- ✓ Notifies Global International Transportation promptly of the award.
- ✓ Completes or updates the country profile with a thorough description of import clearance requirements for the awarded goods (for programs with multiple food aid awards requirements should be identified as program-specific or goods-specific).
- ✓ Emails the finalized country profiles to Global International Transportation and the U.S. Freight Forwarder.

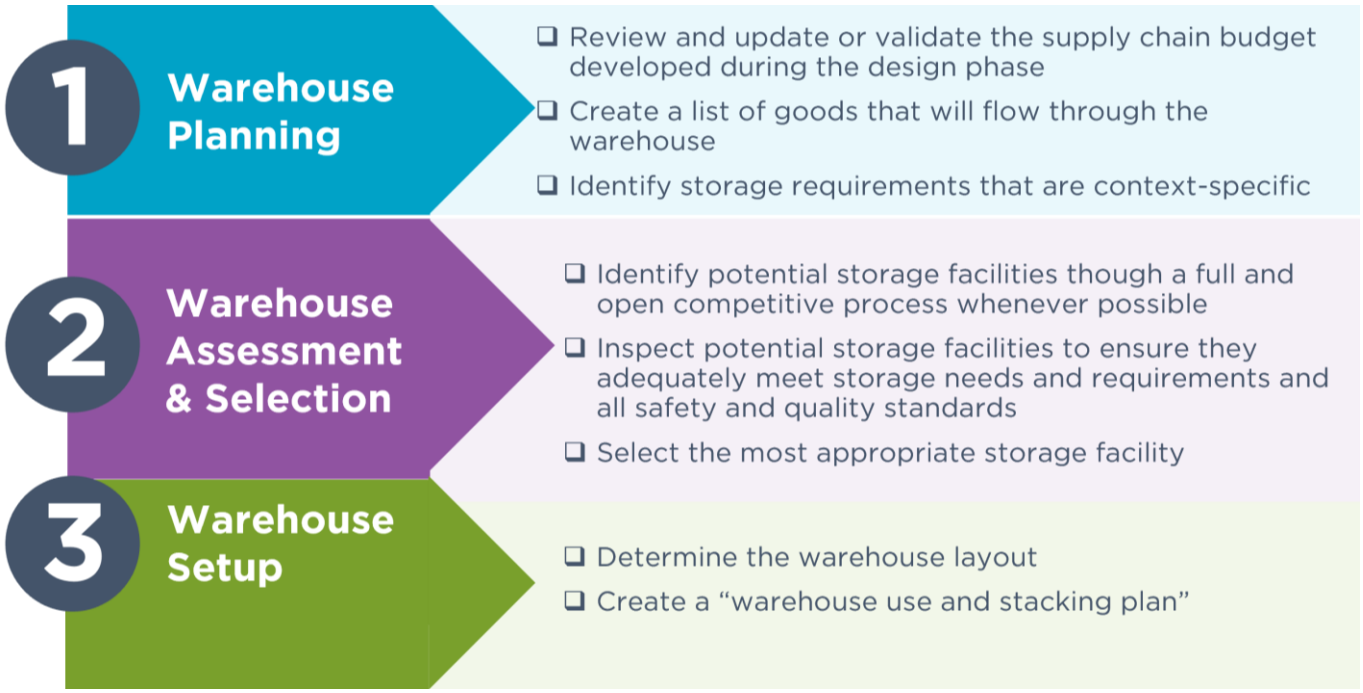
Country profiles should include the details listed below as they should appear on transportation documentation such as the Bill of Lading, Certificate of Origin, etc. (see Country Profile Sample).

- Consignee's name and address (consignee often acts as the receiver of goods).
- Physical address of the delivery location if/when the Ocean Carrier is responsible for the movement of cargo to a named delivery location outside the marine terminal at the final port of discharge.
- Name of entity to be notified.
- Name of country program staff acting as the approver for information provided within the Country Profile (i.e., certifying that the provided information is complete and accurate).
- Country program contact names, titles, email addresses, and office telephone/fax number(s).
- All documentation required for clearance or needed for internal record keeping, specifying:
    - whether an original or copy of each document is required.
    - the number of originals and/or copies of each document.
    - special documentation features (e.g., original certificates required are to be marked with a blue ink signature).
- Any documentation required by the country program (e.g., original Bill of Lading, non-negotiable Bill of Lading, Phytosanitary Certificate, gift certificate, Certificate of Origin, Packing List, commercial invoice, export certification for food aid, fumigation certificate, and others).
- Documentation of any additional special requirements (e.g., best-used-by dates, containerization, free time requirements, etc.).
    - For example, if a program approved for containerization determines that additional free time (above the standard and allowable amount) is required, then the advance approval by the USG donor for such additional free time (above the standard and allowable amount) must be reflected in the country profile.
- Mailing address for overseas transmittal of documents.
- Discharge/delivery terms.
- Billing and POET codes for documents dispatched via courier.
- POET code for commodity and freight (so Global International Transportation can initiate inventory transactions in Insight and set up freight POs).
- Any other requirements not already specified that could impact the flow of communication, documents, and cargo.

WAREHOUSE START-UP

Warehouse start-up is critical for ensuring that the right quantity and quality of goods are at the right place at the right time. Supply chain staff must maintain a secure storage facility of adequate size to facilitate the efficient flow of goods.

The figure below describes key actions during three stages involved in warehouse (storage facility) start-up.



For information about stacking guidelines and methods for the storage of goods, see the Receiving chapter.

For information about location planning, safety and security planning, and warehouse set-up, see the Warehouse and Inventory Management chapter.

Warehouse Set-Up: Planning & Assessment Checklist

CHECKLIST *Warehouse Set-Up: Planning & Assessment*



The **Supply Chain Manager,** in collaboration with the **Head of Operations** and **Finance Manager**:

- ☐ Validate and (as allowed) update the estimated costs for storage and inventory management, facility rental, utilities, salaries and wages, facility upgrades, repair and maintenance services, security, insurance, and general operations (see Functional and Operational Requirements).

The **Warehouse Manager**:

- ☐ Estimates the types of goods that will flow through the storage facility at any given time, including calculations of the quantities, weights, and volumes of each type of good (see Identify Storage Requirements and Estimate Space Requirements).
- ☐ Estimates the warehouse capacity requirements and other space considerations based on the estimated volume and weight of goods (see Estimate Space Requirements and Capacity Requirements).

The **Warehouse Manager and Supply Chain Manager**:

- ☐ Determine the most appropriate type of storage facility for the estimated types of goods to be stored (see Storage Facility Classification)

Warehouse Planning

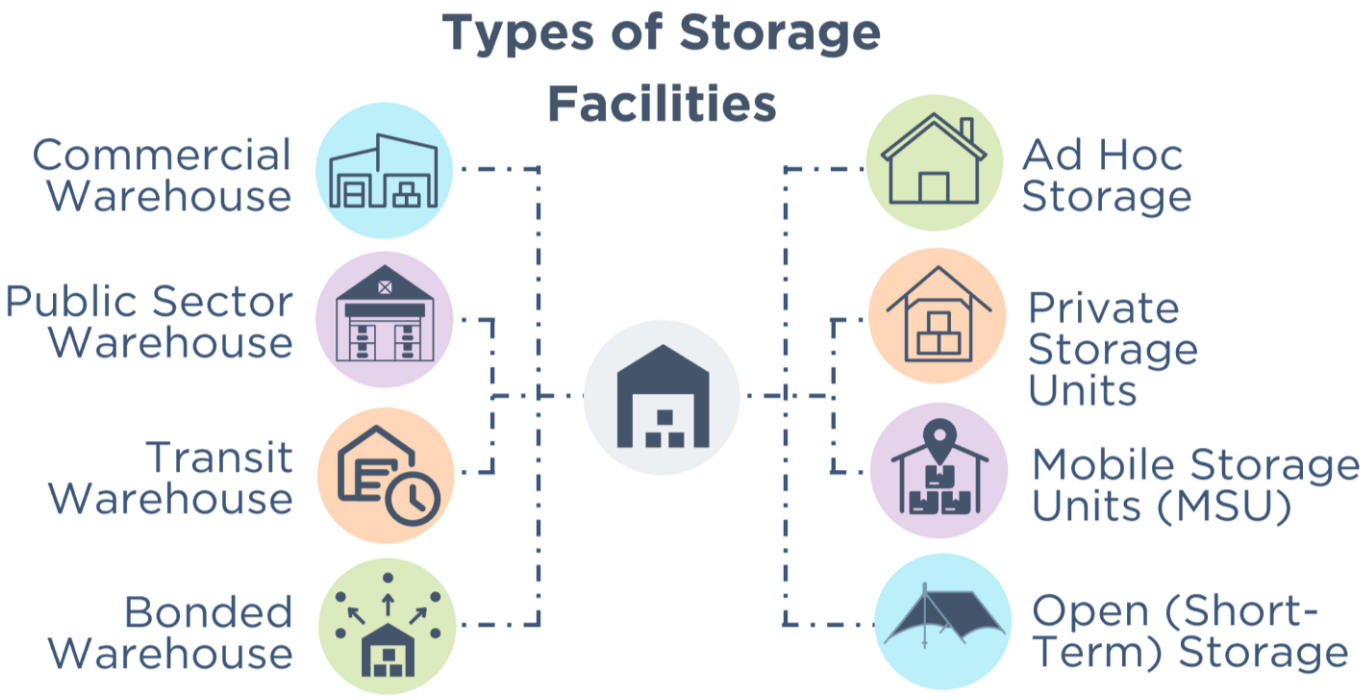
Proper warehouse planning is critical to make sure that the right quantity and quality of goods are maintained in a secure storage facility that is sized and laid out for the efficient flow of goods in and out of the warehouse.

Confirm Facility Requirements

After confirming that the project's budget is sufficient to lease and maintain a new storage facility (or multiple facilities, for large projects), the Supply Chain Manager and warehouse team may begin warehouse planning and storage facility selection by using the approved program description and the approved budget.

Storage Facility Types

The figures below define eight different types of storage facilities that can be used (for the different types of warehouse capacities, see Storage Facility Classification under Capacity Requirements below).



Commercial warehouses are privately-owned storage facilities that can be rented in whole or in part. These facilities are usually large- or medium-capacity warehouses.

Public sector warehouses are often owned and managed by national or local government authorities and can usually be used or leased by CRS at the central, provincial, district, and community levels (e.g., health district warehouse to store Global Fund goods, store adjacent to a state school for storing school feeding food commodities, etc.). These facilities are usually large- or medium-capacity warehouses.

Transit warehouses are used for the temporary short-term storage of goods destined for different locations. These facilities are usually large- or medium-capacity warehouses.

Bonded warehouses are used for the temporary storage of goods to be transported to another country that have not cleared customs (e.g., regionally pre-positioned stock). These facilities are usually large or medium-capacity warehouses.



Ad hoc storage is usually located at a service delivery point (e.g., a small house or a room in a church, school, or clinic). These facilities are usually small-capacity warehouses.



Private space is a room in an organization's office that is used for storage. These facilities are usually small-capacity warehouses.



Mobile Storage Units (MSUs) are used when permanent structures for storage are not available, most commonly in emergency response situations. These facilities are prefabricated and usually medium-capacity warehouses (an MSU's standard capacity is 320 m^2 and 1,280 m^3).



Open short-term storage is used when non-perishable goods are to be stored outside (stacked on dunnage and covered with tarps), usually in emergency response situations for only one to two days, or in isolated locations that receive very low quantities of goods for immediate distribution. In non-emergency situations, this storage solution should be an option of last resort.

Identify Storage Requirements

The Supply Chain Manager and warehouse team should work jointly with the Head of Programming and the Head of Operations to develop a list of D-goods and ND-goods required by the project during its operation period(s). The list should include the quantities, weights, and volumes of each good for each operation period.

The figure below lists questions that can help identify different types of goods and their respective requirements.



Estimate Space Requirements

The type, size, and layout of a storage facility depends on the types of goods being stored in the facility. CRS warehouses must accommodate the inflow, storage, and outflow of many different types, quantities, weights, and volumes of goods. The Warehouse Manager must estimate the required space for a storage facility based on the total weight and volume of the goods to be stored, the number of different types of goods, and the flow rate (e.g., time spent in the warehouse).

Stacking Limits

When determining the space requirements of a potential warehouse, the Warehouse Managers should follow industry recommendations for the stacking limits for common types of items listed in the table below (the list is not exhaustive).

Item Type	Standard Packaging	Stacking Limit
Grains, Cereals, Pulses	50 kg Poly Sacks	40 layers, 4 m high
Blended Food, Flours, Meals	25 kg Lined Paper Bags	20-30 layers, 2.5–4 m
Vegetable Oil	22 kg Cartons, 6 tins each	20 layers, 3-3.5 m
Ready to Use Therapeutic Food (RUTF)/ Ready to Use Supplementary Food (RUSF)	14 kg Cartons	20 layers, 3-4 m
Bagged NFI (e.g., cement)	50 kg Paper Bags	20 layers, 2.5–3 m
Kits (e.g., hygiene, kitchen set)	Cartons	20 layers, 4 m (assess packaging quality)
Bales (e.g., Long-Lasting Insecticide Nets, or LLINs, blankets, plastic sheets)	Bales	Depends on dimensions, 4 m
Small boxes (e.g., car parts, nails)	Cartons, bags, open (e.g., tires)	Depends, stack on shelves
Irregularly shaped items (e.g., hoes, shovel heads)	Varies	No limit on layers, 1-2 m (avoid stack shifts)
Wood	Varies	No limit, avoid stack shifts/collapses
Light equipment (e.g., computers)	Varies	4 – 8 layers, 1.5 – 2.5 meters, avoid crushing
Heavy equipment (e.g., generators)	Varies	Should not be stacked
Interagency Emergency Health Kits (IEHKs)	Cartons (weights and dimensions vary)	2 – 3 layers, 1 – 3.5 meters
Unpacked medical supplies and pharmaceuticals	Varies	Stack on shelves (by Lot/Batch and Expiration Date)
Bales of bed nets	Bales	Stack on pallets, cross stack for added stability.

Actual stacking heights may exceed recommendations provided in the figure above, depending on the following factors:

- packaging materials used (including outer packages/cartons and inner packaging),
- storage facility ceiling height,
- environmental and climatic conditions,
- the equipment used for stacking (e.g., forklifts),
- the skill of day laborers, and
- manufacturer or supplier instructions.

To determine the most appropriate stack sizes and heights, warehouse staff must follow the guidelines discussed above and use their own judgment. For example, polypropylene or burlap bags that are supplied by local vendors can be irregular in size or shape, thus reducing safe stacking height limits.

Space Guidelines

When considering potential storage facilities, it is important to confirm the usable volume and useable floor space, not just the gross dimensions of a warehouse. Useable space in any storage facility is impacted largely by the number, type, and size of stacks because of the associated number and sizes of alleys required between stacks and between stacks and walls. For example, a shelf unit measuring 250 cm length x 70 cm width x 250 cm height requires a surface area (floor space) of 1.75 m^2 and a volume of 4.375 m^3.

Alleys and other general workspace needed in storage facilities consume a greater proportion of usable space in small warehouses than in medium or large warehouses.

When determining the space and capacity requirements of a potential warehouse, the Warehouse Manager:

Should follow the best practices listed below; and

- ✓ Usable floor space should be calculated in meters squared (the metric commonly used to communicate warehouse capacity and determine rental costs).
- ✓ Alleys should be at least one meter wide (or a minimum of 1.2 meters if possible) between stacks, racks, and shelves and between palletized stacks and walls.
- ✓ Racks, shelves, and stored goods should be at least 1 meter below the ceiling when possible (e.g., this might not be possible in smaller storage facilities like office supply rooms).
- ✓ Heavy-duty shelving units or racks should be 2.5 to 3 meters in length and have 3 to 5 levels; and each level should have a minimum height of 2 meters and a minimum depth of at least 60 to 70 cm.

Should ensure that sufficient space can be designated for the administrative purposes listed below.

- ✓ **Office space:** a floor area of 4 to 5 m^2 for each supply chain staff working in the office, and a minimum floor area of 15 m^2 for desks, chairs, shelves, and file cabinets
- ✓ **Stock receiving, staging, and dispatch space:** a minimum floor area of 15 to 30 m^2 (larger if necessary, depending on the expected flow rates of goods)
- ✓ **Unpacking, control and verification, reconditioning, repackaging, and kitting space:** a minimum floor area of 5 to 30 m^2 (may be larger if necessary, depending on the expected level of activity and flow rate of goods, and/or may be combined with the receiving, staging, and dispatch area depending on the expected flow rate of goods)
- ✓ **Quarantine space** for flammable, hazardous, or potentially damaged goods that require further inspection.

For health products that must undergo QA testing before put away, the storage facility should have a quarantine area.



If a suspect item could cause cross-contamination, it should be quarantined outside of the primary warehouse (e.g., fuel, some lab reagents).

Before determining the minimum alley size in a large warehouse where forklifts are used, the minimum space needed for full movement of the forklift should be calculated first.

Warehouse Assessment and Selection

Procurement staff should make every effort to issue tenders through a full and open competitive process whenever possible to identify, assess, and select potential CRS storage facilities.

When assessing and eventually selecting a storage facility, the Supply Chain Manager (in collaboration with the Warehouse Manager) should confirm that the facility meets the criteria listed below.

Functional and Operational Requirements

General

- ✓ Has adequate and continuous electrical supply (or can procure and install a generator).
- ✓ Has adequate interior and exterior lighting.
- ✓ Has reliable or semi-reliable access to internet service connectivity (if no internet access is possible at the facility, a connectivity solution must be identified).
- ✓ Is equipped with water and bathrooms/latrines on site.

Budget

- ✓ Is cost-effective.
    - When possible, use existing facilities or use common services storage to share facilities with or through other agencies (e.g., U.N. agencies, LogCluster).
    - Although facilities close to airports, rail stations, or ports are ideal, they can be difficult and expensive to lease due to high demand.

Accessibility

- ✓ Is easily accessible from road corridors.
    - When possible, use facilities that are located away from areas of heavy traffic or congestion, keeping in mind that isolated facilities can have higher security concerns.

Quality Management

- ✓ Meets all requirements to maintain the quality all products to be stored there with limited infrastructure improvements or investment by CRS.
    - Is on elevated ground and/or have good drainage systems in place.
    - Is protected from the elements, pollution, and infestations, and located away from flood plains, streams, bodies of standing water, areas prone to mud and landslides, landfills, industries, and other threats.
    - Is dry and well-ventilated (or additional ventilation, temperature, and humidity monitoring equipment should be installed).*
    - If required, has an appropriate power supply to install a cold chain, cold storage room, or air conditioning to keep products at optimal storage temperatures.

* See https://www.logtag-recorders.com/en/ for an inexpensive, proven technology option.

Safety and Security

- ✓ Provides controlled access through a staffed guard station (normally a single-entry point into the compound) with sufficient space for large truck and pedestrian traffic.
- ✓ Is equipped with adequate and continuous security.
    - The compound and all building(s) must be under guard surveillance and equipped with the appropriate security infrastructure (e.g., strong compound entry gates, locks, barred windows, security doors, a secure room or cage for high-value goods and equipment, etc.).
- ✓ Has secure handling zones for brief periods of increased receipt and dispatch activities.

Storage

- ✓ Provides adequate (including surplus) capacity for the types of expected goods, the estimated maximum quantities (by weight and volume) at any time, and the forecasted flow rates.
    - Any inventory stored outside can be placed on pallets with dunnage and covered by tarps.

In a CRS storage facility or office, CVA assets **must** be stored in a secure safe or lockable room, closet, or cabinet with restricted access (and must never be left unattended or stored outside the locked location when not in the processes of receipt, dispatch, or transport).

Receiving and Delivery

- ✓ Is ready to receive the delivery of goods according to the planned schedule.
    - The Supply Chain Manager or Warehouse Manager should ensure that there is adequate time for any required cleaning, repairs, and improvements of the facility.

Local Procurement Opportunities

- ✓ Prioritizes local supply for basic warehouse consumables, equipment, and specialized services.
    - The Supply Chain Manager or Warehouse Manager should check the local availability of procuring goods (pallets, sacks, jerry cans, sewing equipment and supplies, scales, cardboard boxes, other materials) and services (fumigation services, grain mills, phytosanitary, and service providers).

Capacity Requirements

To ensure that the selected facility meets the project's storage requirements, the Supply Chain Manager (with the support of the Warehouse staff) should use the formulas in this section as a guide for estimating the weight and volume capacity and the usable surface area (floor space) of potential storage facilities. To fully understand the capacity of facilities and their potential limitations under various use scenarios, the Supply Chain manager should use all three calculations of capacity.

The formulas below have different multipliers that factor in space requirements between stacks and the roof, between alleys between stacks, and in alleys between stacks and walls for different size facilities (for weight and volume calculations) and for different storage types (pallets versus shelves, for surface area calculations).

- For example, the percentage of usable space needed for alleys in small warehouses (or larger warehouses where shelves and/or racks are installed) is generally greater than in medium or large warehouses, reducing their overall storage capacity.

The formulas below provide an estimate of capacity, not a precise calculation. Many other factors influence capacity requirements such as how storage space will be set up and used. Other tools that can be used for estimating the capacity of a warehouse and goods to be stored include the Warehouse Capacity Calculator and the Weight and Volume Calculator.

Surface Area (Square Meters)

The capacity of a warehouse in terms of surface area is important for all goods and supplies to be stored.

CRS calculates warehouse **surface area capacity in square meters (m^2)** using the formulas and multipliers listed below, which are preferred by the U.N. World Food Program (WFP) and other humanitarian organizations and are used by warehouse owners to determine lease rates.

- Usable floor space (**palletized**): [Length (m – 2) * Width (m – 2)] ***0.80**
- Usable floor space (**shelved**): [Length (m – 2) * Width (m – 2)] ***0.50**

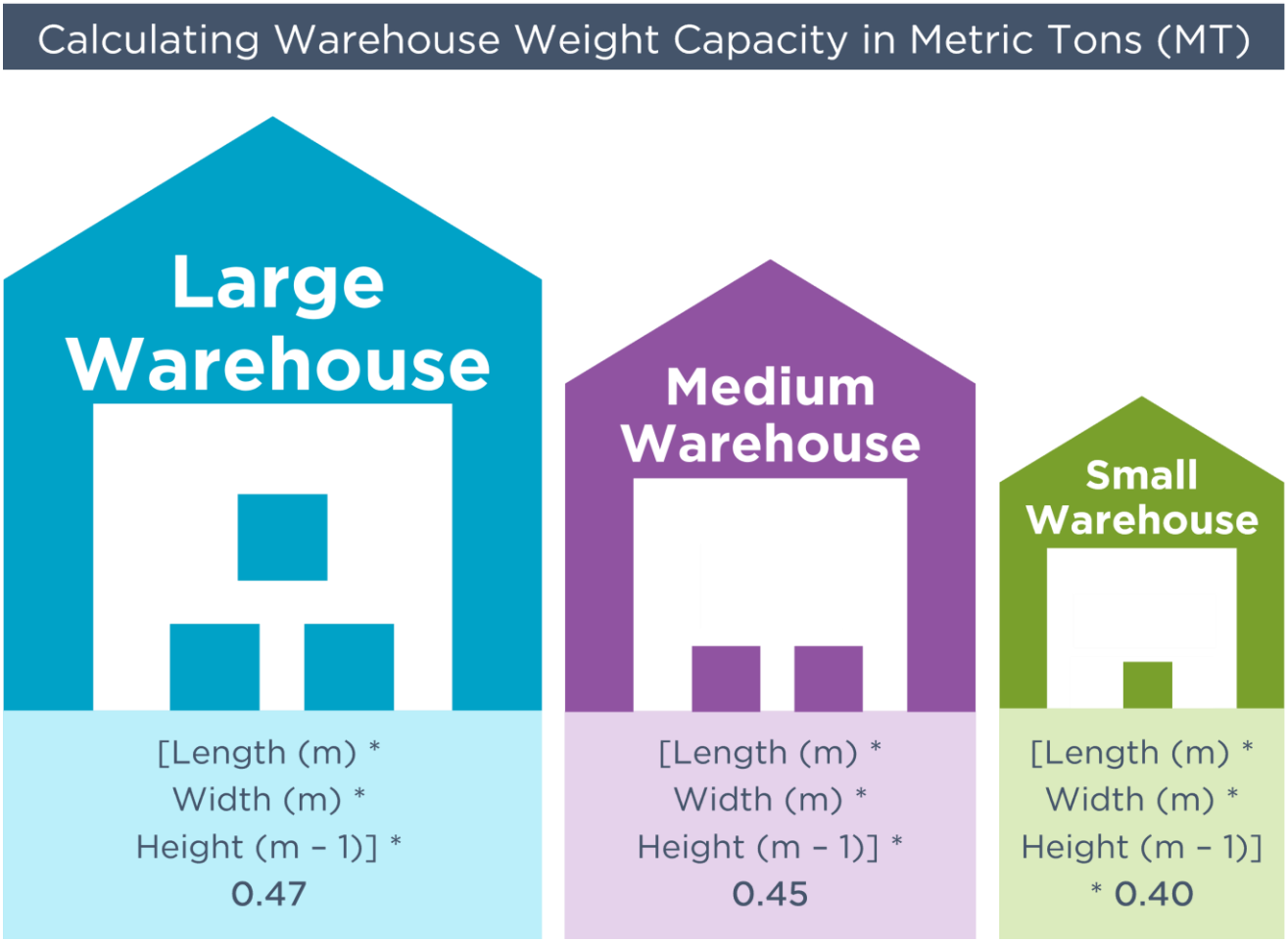
Calculations of weight and volume can be converted to estimate usable floor space by using the formulas and multipliers listed below.

- Usable floor space (**conversion from weight/metric tons**): [(Total Estimated metric tons * m^3 per metric ton) / stack height (m)] * 1.2
- Usable floor space (**multiply volume/cubic meters by factor of 3**): Generally, 3 m^2 of surface area (floor space) is required for every 1 m^3 of goods and supplies to be shelved.

Weight (Metric Tons)

The capacity of a warehouse in terms of weight is especially important when storing bagged food commodities (primarily or exclusively).

CRS calculates warehouse **weight capacity in metric tons (MT)** using the formulas and multipliers shown in the figure below.

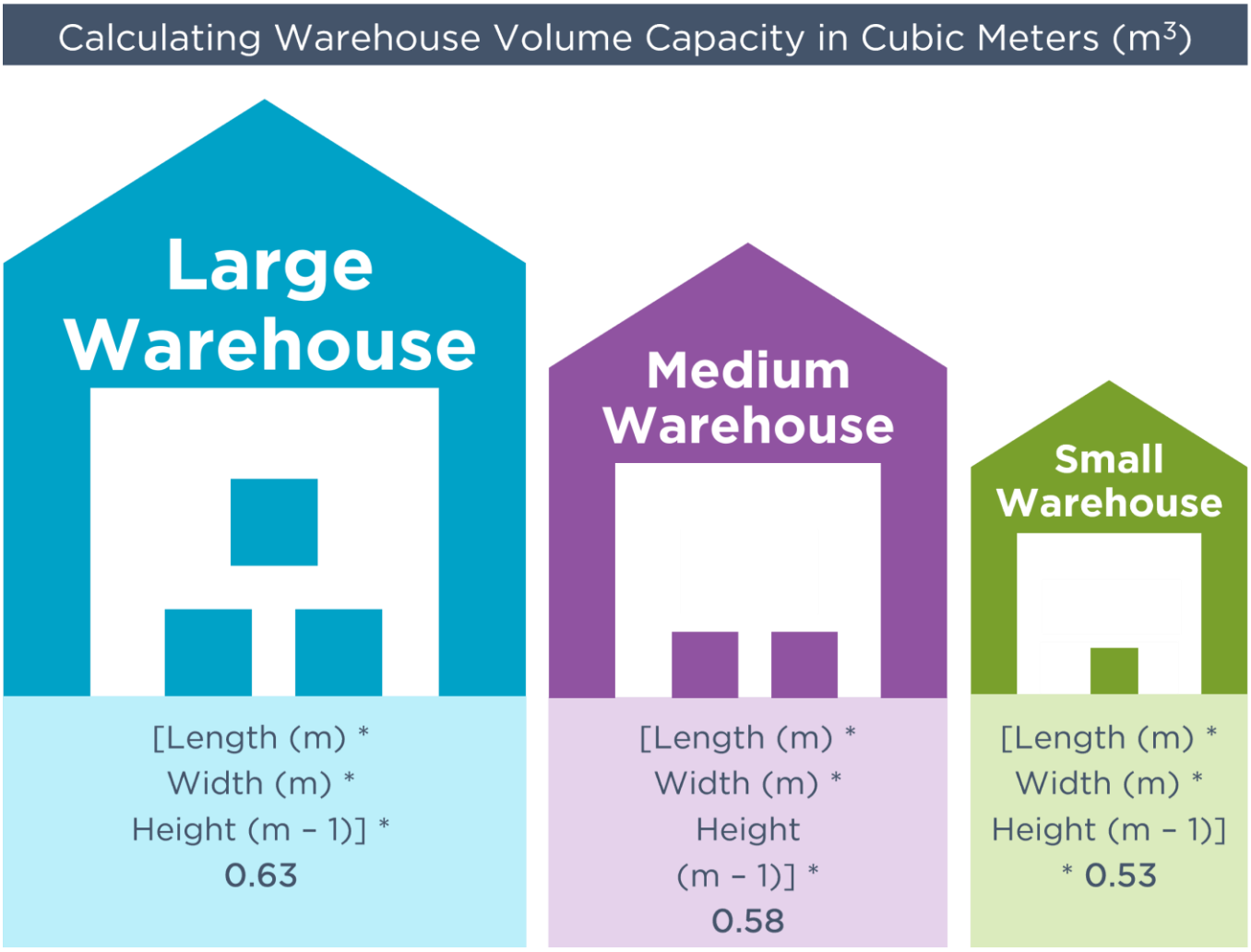


Volume (Cubic Meters)

The capacity of a warehouse in terms of volume is especially important when storing goods that can be stacked vertically.

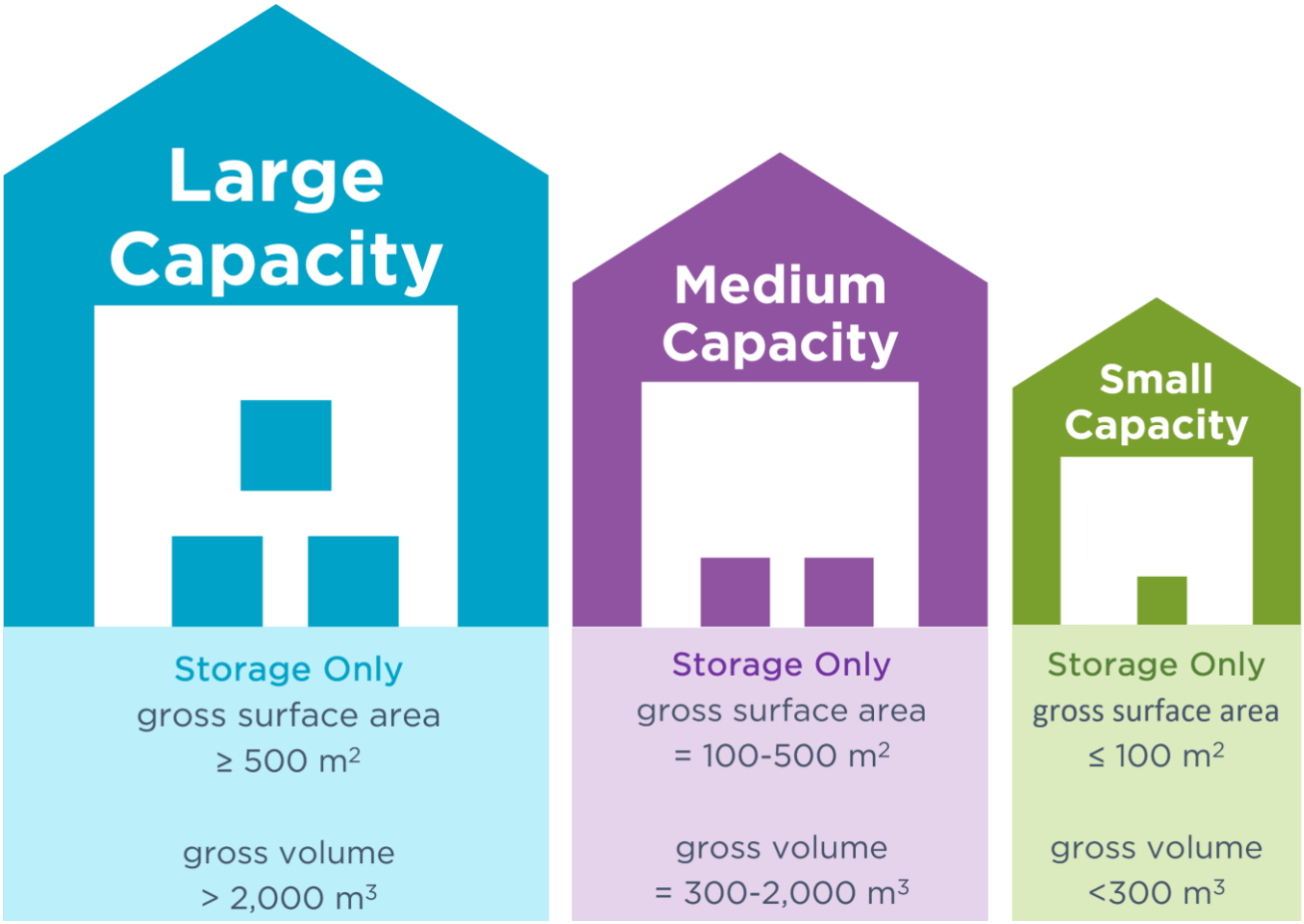
CRS calculates warehouse **volume capacity in cubic meters (m^3)** using the formulas and multipliers shown in the figure below.

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Storage Facility Classification

Storage facilities are classified by size and capacity as shown in the figure below. These classifications **only include the area for storage** (surface area and volume) **and exclude non-storage areas** (e.g., space for administration, lunchrooms, toilets, kitting, repackaging, etc.).



For information about different types of storage facilities, see Storage Facility Types.

Sample Warehouse Capacity Calculation

The figure below shows a sample warehouse capacity calculation for the hypothetical set-up of a facility serving a health and nutrition project, where CRS stores and distributes medicines, medical supplies, and PlumpyNut®. This hypothetical warehouse includes a pharmacy for routine distribution, an office, kitting/repackaging table, and a secure area to store damaged and expired medicines pending quality testing or disposal. Inventory is stacked on standard-sized pallets and shelf units measuring 2.5 m (L) x 0.7 m (W) x 3 m (H).

BUILDING DIMENSIONS: 25m (L) x 15m (W) x 4m (H) (Medium size facility)	Office Space: 6.5m x 6m x 4m (52.7 MT, 19.5 m^2, 67.9 m^3) Pharmacy Space: 6.5m x 5m x 4m (43.9 MT, 16.3 m^2, 56.6 m^3) Workspace: 4m x 6m x 4m (32.4 MT, 12 m^2, 41.8 m^3) Receiving/Staging Space: 6.5m x 10m x 4m (89.8 MT, 32.5 m^2, 113.1 m^3)

Capacity Type	(A) Total Usable Capacity	(B) Office/Pharmacy/Workspace	Usable Storage Capacity (A-B)
Metric tons	[25*15*(4-1)] * 0.45 = **506 metric tons**	(52.7 + 43.9 + 32.4 + 89.8) = **219 metric tons**	287 metric tons
Square Meters (m^2)	[(25*15) *0.50] = **188 m^2**	(19.5 + 16.3 + 12 + 32.5) = **80 m^2**	108 m^2
Cubic Meters (m^3)	[25*15*(4-1)] * 0.58 = **653 m^3**	(67.9 + 56.6 + 41.8 + 113.1) = **279 m^3**	374 m^3

Warehouse Setup

A warehouse can be set up in many different configurations. This section provides considerations for determining the best set-up and layout for the unique requirements and needs of each warehouse being managed by CRS or CRS partners.

CHECKLIST *Warehouse Setup*



After the warehouse assessment is complete –

Procurement staff, after receiving a requisition with specifications for a new storage facility:

- ☐ Conducts a competitive process to identify potential storage facilities.

The **Warehouse Manager**, in collaboration with the **Supply Chain Manager**:

- ☐ Inspects potential storage facilities that are desired for use, identifies required improvements, and creates a budget.

The **Supply Chain Manager**, with support from the **Warehouse Manager**:

- ☐ Verifies the availability of adequate and appropriate storage space, equipment, supplies, and personnel (including third-party service providers for storage and inventory management).
- ☐

Once all storage facilities have been identified, the **Warehouse Manager**, in collaboration with the **Supply Chain Manager**:

- ☐ Makes a recommendation on all storage facilities to be used for the project (i.e., managed by CRS and its partners), for final approval of the warehouse selection by the Head of Operations.

Upon selection of a warehouse through a full and open competitive process (whenever possible) –

The **Supply Chain Manager**, with support from **procurement staff**:

- ☐ Prepares contract templates for storage services, including KPIs and reporting requirements (for information related to transport needs, see the Calculating the Volume and Weight of Goods section in the Design chapter).

The **Warehouse Manager**:

- ☐ Designs the warehouse layout to maximize efficiency in the flow of goods.

Please see below for context-specific callout boxes that also apply.

Creating a New IO in Insight for New Storage Facilities

If a country program is planning to open a new warehouse or field office where goods will be stored, then a new Internal IO must be created in Insight.

To create a new IO, the **Supply Chain Manager**:

- ☐ Completes the Inventory Org Request Form and submits it (with the physical warehouse map attached) to the Head of Operations.

Once the IO request is approved by the Head of Operations, the **Master Data team**:

- ☐ Can create new subinventories and IOs as needed.

After new IOs and subinventories have been created, the **Warehouse Manager**:

- ☐ Can create locators.



Warehouse Layout

Storage facilities should have a logical layout with a clear system of racks, shelves, and bins for easy identification and location of items in storage and for efficient management of goods by their appropriate flow methodology. The warehouse layout has three components: stock-keeping methods and equipment, bin address system, and flow of goods.

Stock-Keeping Methods and Equipment

The Warehouse Manager should determine the appropriate stock-keeping methods and equipment for each item in inventory according to the guidelines listed below and in the table further below.

- ✓ Stored goods should never touch a wall or the floor.
- ✓ Shelved goods should be at least 5 to 10cm from walls.
- ✓ Racks, shelves, and stored goods should be at least 1 meter below the ceiling when possible (e.g., this might not be possible in smaller storage facilities like office supply rooms).
- ✓ Alleys for pallets and skids should be 1.2 meters between stacks and between stacks and walls.

Pallets are useful for storing heavy, high-volume goods (e.g., food and boxed NFIs) in small or large stacks (for pallet and stacking guidelines, see Stacking on Pallets in the Receiving chapter). Pallets are mobile, cost-effective, and less equipment-intensive than racks and shelves. But pallets do not always permit optimal space usage (depending on the flow rates, quantities, and types of goods).

Shelves are useful for storing and segregating goods that are fragile and/or small in unit or package weight and volume. Shelf units can be placed against walls, lined up, and attached end-to-end and back-to-back. They can be stacked up to one meter from the ceiling/roof, which enhances space utilization and saves space

for alleys. Heavy-duty shelving units or racks can have 3 to 5 levels, with each level having a minimum height of 2 meters and a minimum depth of at least 60 to 70 cm.

Racks are useful for storing goods with large weights and volumes, especially palletized packages. But racks can require special equipment (e.g., a forklift) and more knowledgeable warehouse staff. For examples of appropriate racks, see Rackonline.com.

The figure below lists common standards for different types of stock-keeping equipment.

Equipment Type (material)	Dimensions (length x width x height)	Maximum Weight (static/not moved, dynamic/movable)	Comments (special requirements for alleys or deck/shelf unit construction)
Pallet (wood)	1.2m x 1.2m x 10cm	1,600 kg static 1,000 kg dynamic	None
Pallet (plastic)	1.2m x 1.2m x 10cm	2,000 kg static 1,000 kg dynamic	None
Skid (aluminum)	1.2m x 1.2m x 10cm	2,000 kg static 750 kg dynamic	None
Rack (wood)	Each deck Length: 120 – 150cm Width: 75 – 100cm Height: 70 – 120 cm	Varies depending on unit weight of item (often built for a specific storage purpose)	Construction Use quality dried wood Cross braces for each unit to keep square Support decks every 1.5 m Alleys Racks can be tight to walls Between racks: 1.2 m
Rack – pallet (metal)	3m x 1m x 2.4m	3,120 kg per deck	Construction Modular with 2 upper decks Alleys Dimensions depend on requirements for forklift maneuvering through alleys
Shelf (wood)	Each deck (4 – 5 maximum) Length: 2.5 – 3m Width: 60 – 70cm Height: 2 – 3m	100 kg per deck	Construction 4-5 decks maximum (shelf measuring 2.5m x 70cm has footprint of 1.75 m^2) Top deck should be at least 1.5 m below ceiling
Shelf (metal)	Each deck Length: 1.2m Width: 60 – 75cm Height: 1.8 – 2.4m	525 kg per deck	Construction Modular with 4 to 5 decks (shelf measuring 1.2m x 70cm x 2m has footprint of 0.84 m^2) Top deck should be at least 1.5 m below ceiling

Bin Address System

The Warehouse Manager should create a "bin address" system that clearly and easily identifies the location of goods within the various storage zones, stacks, and bins.

Depending on the size, layout, and type of goods in the warehouse, the Rack locator can refer to a zone, shelf, or stack. The Rack locator indicates the general location where goods can be found in the warehouse or office. The bin indicates a more specific area within each rack.

Zones, racks, and bins should be labeled clearly. Warehouse staff should affix large, easy-to-read signs where they will be visible to workers (e.g., on the wall, shelf unit, or rack) to identify each zone and should affix smaller, easy-to-read signs to each bin.

Items should be stored together in the warehouse according to grant and item category (i.e., Agriculture, Shelter and Construction, Office Administration, etc.).

CVA assets should be stored by type of asset (e.g., paper vouchers, smart cards), value, purpose (e.g., food vouchers, agriculture input vouchers), activation status, and any other distinguishing characteristics that are applicable.

Goods should be stored by item number, lot or batch number, POET code, and expiration date or date of manufacture. For more information on item number, see the Warehouse and Inventory Management chapter.

Goods should be labeled with the item number **and** a full description of the item. Warehouse staff should affix labels where they will be visible on the pallet/rack/shelf where the items are stored.

Project and Bin Address Locators in Insight

During the start-up phase, new project-specific locators must be created in Insight. For detailed guidance on this, see the Create and Deactivate Locators Job Aid.

The bin address system should map to the four components of Insight locators: warehouse location, grant number, rack, and bin. For information on locators, see the Insight Inventory Reference Guide.

Lot- and Serial-Controlled Items

Lot control and serial control are stock-keeping methods used to identify and locate goods if there is an item recall or a need to differentiate between identical products with different production dates, or when items have reached their expiration date.

Warehouse staff should ensure that all items in the same lot are grouped and stored together.

Lot and Serial Numbers in Insight

Certain item codes in Insight must be lot- or serial-controlled. For detailed guidance on lot- and serial-controlled items in Insight—including how to create a lot number or serial number if it is not provided by the supplier—see the Insight Inventory Reference Guide.

When receiving items that have a lot or serial number, enter that exact number in the Lot Number field in Insight.

Paper-based CVA assets (Item Name = VOUCHR01) are **not lot-controlled or serial-controlled in Insight, even if serial numbers are printed on the assets**.

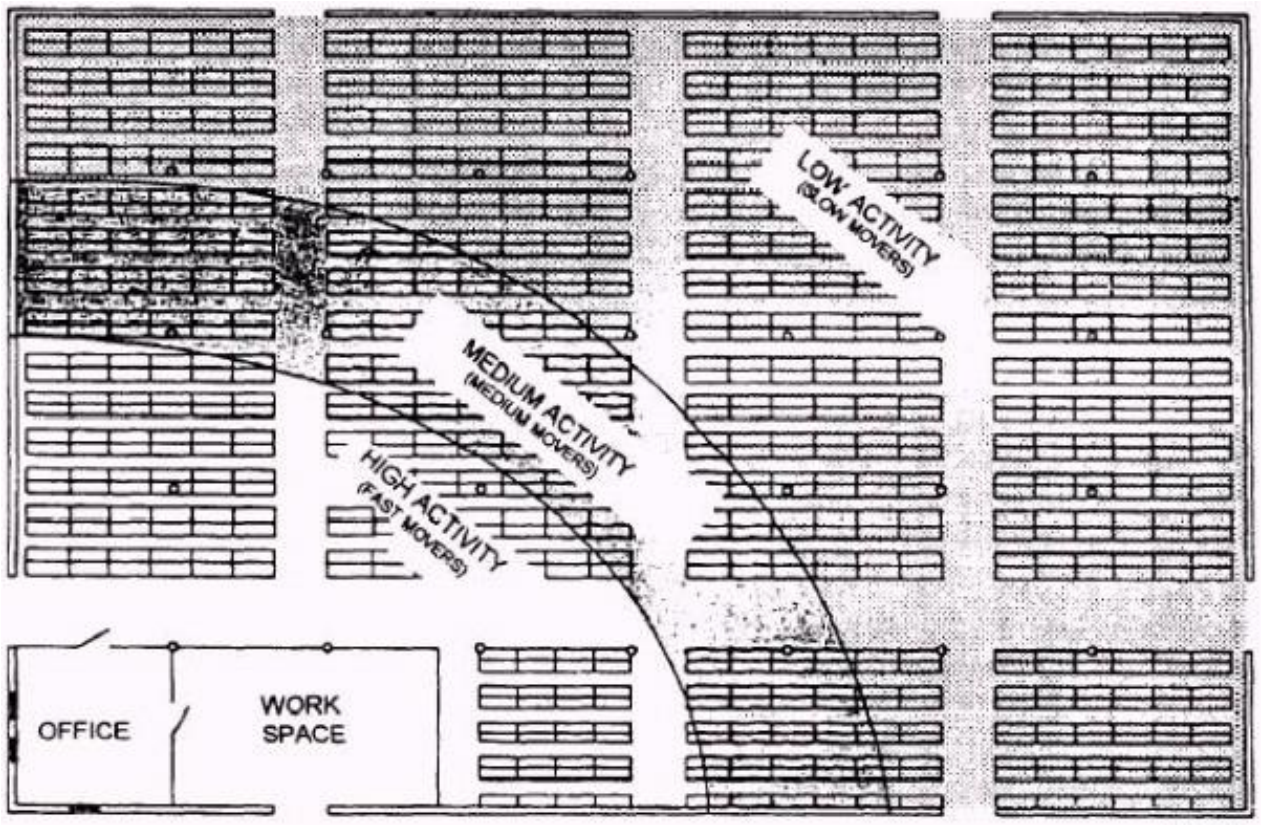
Electronic CVA assets (Item Name = VOUCHR02) **are lot-controlled** in Insight to manage software/technology upgrades that may impact the usability of the cards but are **not serial-controlled in Insight**.

Flow of Goods

The Warehouse Manager should analyze the flows of goods to place bins and stock-keeping equipment logically for maximum access to items and efficient movement of goods.

Three commonly used systems for controlling the flow of goods are by popularity, by reserve/active use, and by FIFO/FEFO stock rotation methodology.

The **popularity system** is based on the distribution frequency of each product. This system minimizes carrying distances and times by storing fast-moving goods as close as possible to the kitting, packaging (if needed), and dispatch areas. The figure on the following page from "Storage Techniques," *Integrated Publishing* illustrates the warehouse layout and flow of goods in the popularity system.

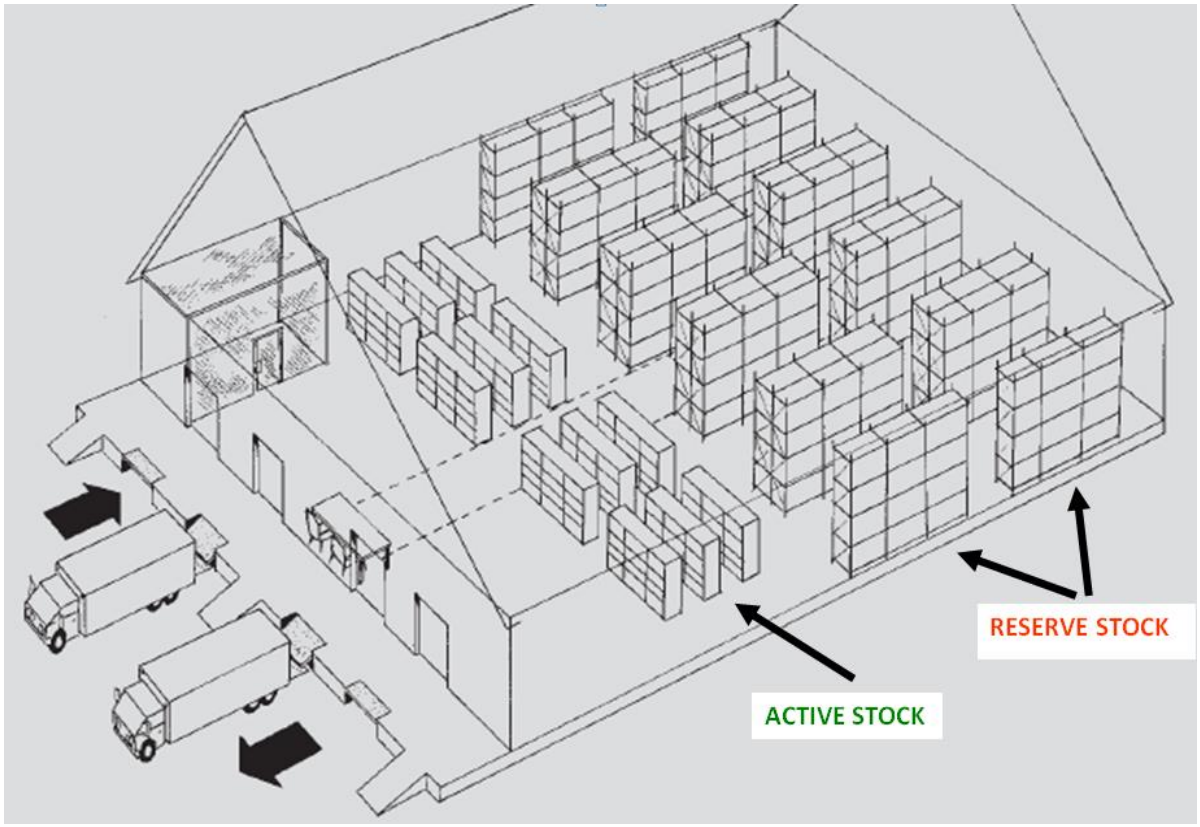


Source: "Storage Techniques," *Integrated Publishing*, www.tpub.com

The **reserve/active system** is a variation of the popularity system that works as follows:

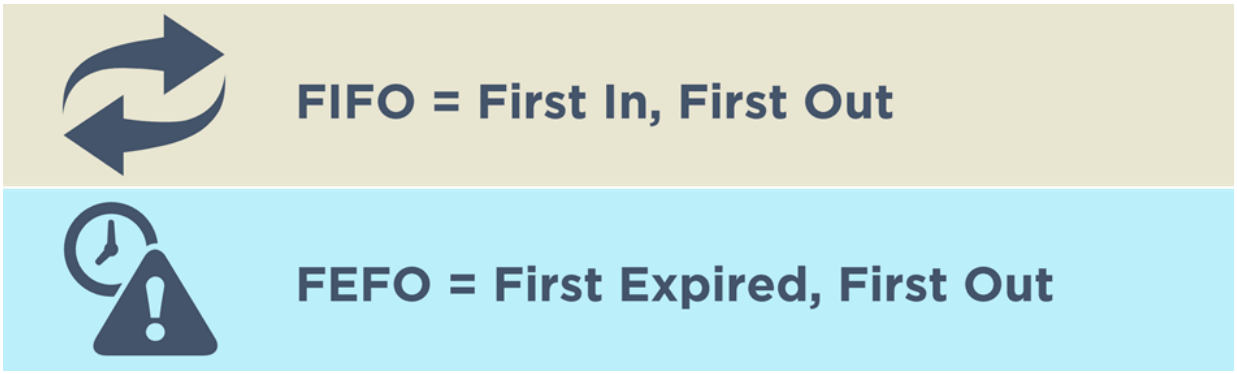
- Goods that are prioritized for frequent dispatch (e.g., close to their expiration date or best-used-by date) are stored in smaller "active" storage area near the receiving area.
- Goods that are dispatched less frequently or stocked for long-term periods are stored in a larger "reserve" storage area further back in the warehouse.
- When stock runs low in active storage, it is replenished from reserve storage.
- When stock begins to run low in reserve storage, it is replenished through the procurement process.

This system is useful when several goods have a similar flow rate and there is a significant assortment of goods to ship to several endpoints. The figure below from the *Warehouse Distribution and Operations Handbook* by David E. Mulcahy illustrates the warehouse layout and flow of goods in the reserve/active system.



Source: Mulcahy, David E. *Warehouse Distribution and Operations Handbook*, McGraw Hill, 1994.

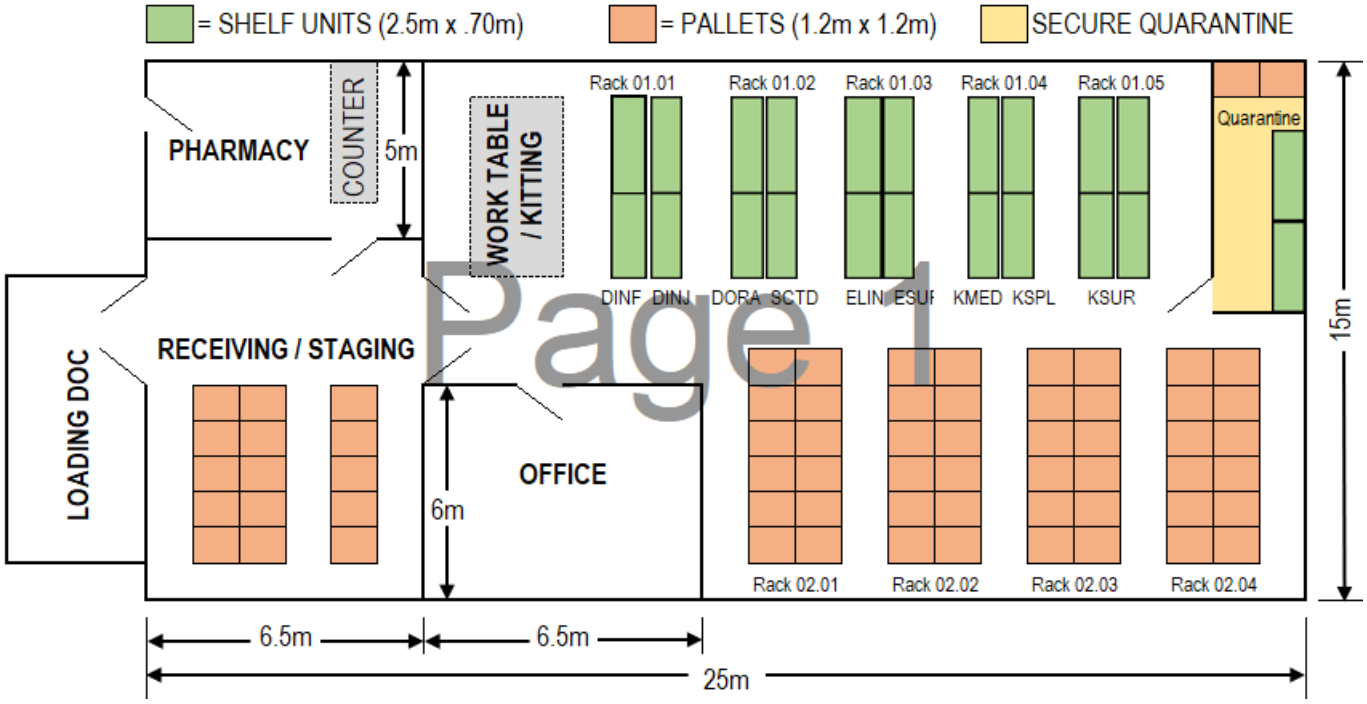
The **FIFO/FEFO stock rotation methodology** tracks goods by item number and by expiration date/best-used-by date/manufacture date to track their quality throughout the supply chain. This system prioritizes goods for dispatch based on the date they are received (FIFO) or the date on which they expire (FEFO), as these acronyms are defined in the figure below.



Goods with expiration dates, best-used-by dates, and manufacture dates should follow FEFO and be prioritized for accessible dispatch.

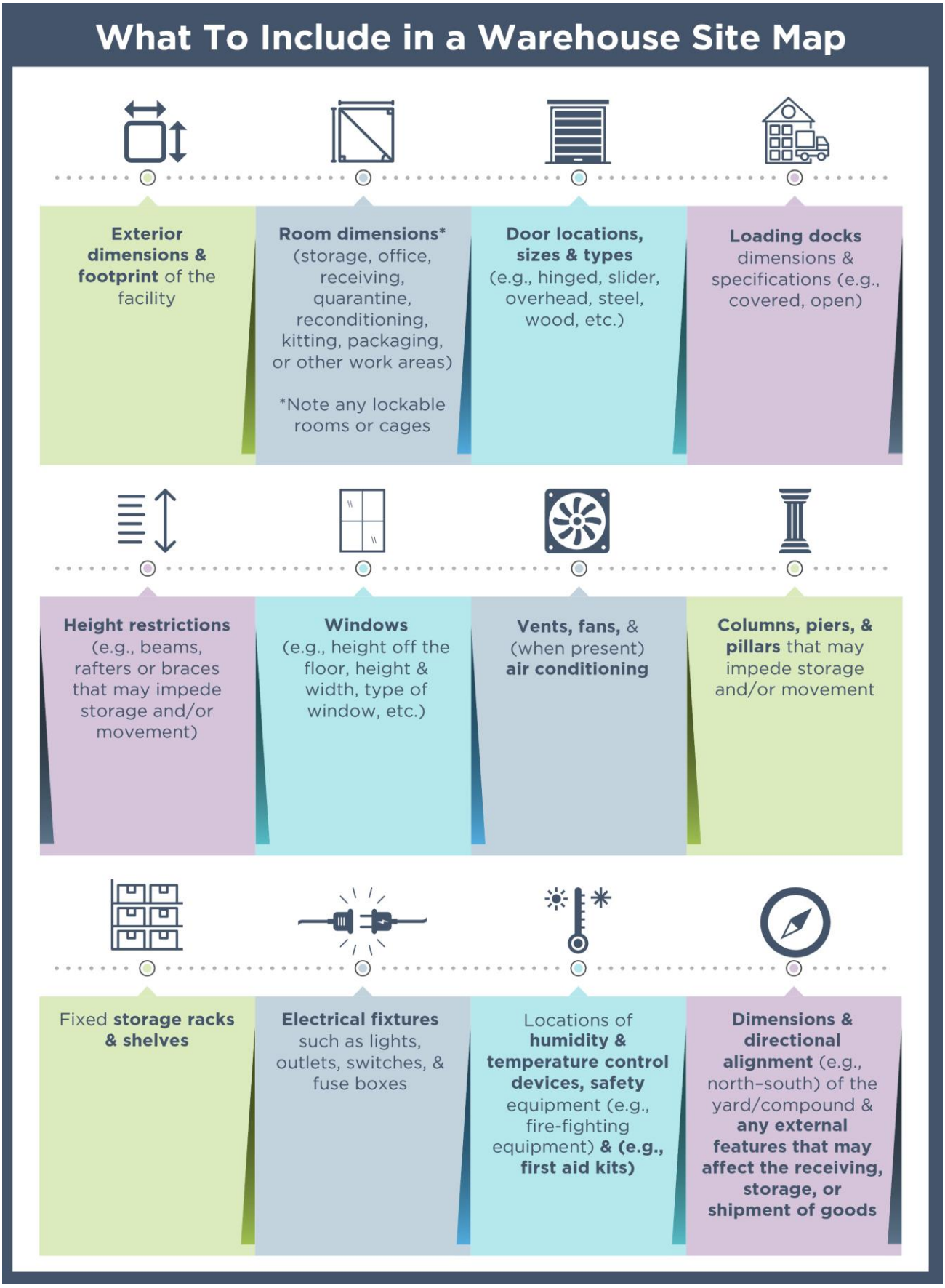
Sample Warehouse Layout Plan

The figure below shows a sample warehouse plan and layout.



Warehouse Site Map

The figure on the following page lists what should be included in the warehouse site map (this is not an exhaustive list).


What To Include in a Warehouse Site Map
Exterior dimensions & footprint of the facility
Room dimensions* (storage, office, receiving, quarantine, reconditioning, kitting, packaging, or other work areas)
*Note any lockable rooms or cages
Door locations, sizes & types (e.g., hinged, slider, overhead, steel, wood, etc.)
Loading docks dimensions & specifications (e.g., covered, open)
Height restrictions (e.g., beams, rafters or braces that may impede storage and/or movement)
Windows (e.g., height off the floor, height & width, type of window, etc.)
Vents, fans, & (when present) air conditioning
Columns, piers, & pillars that may impede storage and/or movement
Fixed storage racks & shelves
Electrical fixtures such as lights, outlets, switches, & fuse boxes
Locations of humidity & temperature control devices, safety equipment (e.g., fire-fighting equipment) & (e.g., first aid kits)
Dimensions & directional alignment (e.g., north-south) of the yard/compound & any external features that may affect the receiving, storage, or shipment of goods

When working with partners who manage inventory, the Warehouse Manager should work closely with the partner to map their storage facility so CRS can calculate capacity, ensure an appropriate flow rate of goods through the facility, and prevent oversupply (excess inventory), undersupply (low inventory), or stockouts.

Warehouse Site Map Checklist

CHECKLIST *Warehouse Site Map*



After deciding on the warehouse layout, the **Warehouse Manager**, in consultation with the **Supply Chain Manager**:

- ☐ Drafts a warehouse site map by using information and specifications from architectural drawings (if available) or by measuring and drawing the warehouse footprint on large format paper (e.g., flip chart paper).
- ☐ Develops a warehouse use and stacking plan to scale on a computer, flip chart, or whiteboard.
- ☐ **For stacking guidelines:** Reviews and follows any specific instructions provided by the item's manufacturer and/or supplier (often printed on packages or labels).
- ☐ Documents the relevant positions and dimensions of warehouse and site components listed in the figure below (this list is not exhaustive) and keeps this information on file for future deliveries or insurance purposes.


Positions & Dimensions To Be Documented in a Warehouse Site Map
Facility perimeter
(e.g., fence or wall)
Primary & secondary warehouses
Other structures in the yard
(e.g., generator shed, office, fuel storage shed, containers, toilets, water taps)
Trees, shrubs, walls, & septic system leach fields
that may impede movement or use
Points of ingress/egress
Window Security
(e.g., bars on windows)
Guard shacks/posts
Ingress & egress routes
Paved & unpaved areas
Parking Structures
Lighting & video cameras

DISTRIBUTION PLANNING START-UP

Assess Service Delivery Point(s)

The Program Manager or Chief of Party is responsible for leading the effort to assess service delivery point(s).

Develop Distribution Plan

The Program Manager or Chief of Party is responsible for developing the Distribution Plan by using the Detailed Implementation Plan (DIP) to determine the dates, locations, and types and quantities of goods or services to be provided.

> The Distribution Plan should be reviewed and updated as needed throughout the project cycle, especially during the implementation phase. All updates should be communicated to supply chain staff (for more information about the distribution plan, see the Dispatch and Distribution Planning section in the Planning chapter).

Supply chain staff are responsible for using the Distribution Plan to confirm that the right quantities of goods are available or will be available for dispatch as required.

Supply chain staff are responsible for creating a dispatch and transportation plan to efficiently move D-goods in the right quantities, to the right place, and at the right time for distribution.



Photo by Jake Lyell

Chapter 5: Planning

5. PLANNING

Purpose

This chapter enables supply chain staff to understand the processes and data that can be used to make finance, procurement, and logistics decisions about the supply chain itself and about the delivery of goods and services to end users through the supply chain.

The planning processes and related data analyses covered in this chapter include pipeline and lead time quantification and forecasting, market and price monitoring, procurement planning, warehouse planning, replenishment planning, and dispatch and distribution planning.

5.1 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

CRS GUIDELINES

- Compass Project Management Standards - Implementation Phase
- Cost Application Guidance
- Emergency Field Operations Manual (EFOM) – Rapid Response Programming Analysis
- Market Monitoring, Analysis and Response Kit (MARKit)
- Markets and Supply Chain Monitoring (MSC) Resources

DONOR POLICIES AND REGULATIONS

- 2 CFR 700 – Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards
- 7 CFR 1599 – McGovern-Dole International Food for Education and Child Nutrition Program
- 7 CFR 1590 – USDA McGovern-Dole Local and Regional Food Aid Procurement Program
- 22 CFR 211 – Transfer of Food Commodities for Use in Disaster Relief, Economic Development and Other Assistance
- 22 CFR 216 – Environmental Procedures
- The Global Fund – Guide to Global Fund Policies on Procurement and Supply Management of Health Products

DONOR OR OTHER GUIDELINES

- CashHub.org - Cash in Emergencies Toolkit
- Logistics Cluster – Logistics Operational Guide (LOG)
- USAID/BHA Pipeline and Resource Estimate Proposal (PREP) Guidance
- USAID|DELIVER - The Logistics Handbook: A Practical Guide for the Supply Chain Management of Health Commodities
- USAID|DELIVER – Quantification of Health Commodities: A Guide to Forecasting and Supply Planning for Procurement

5.2 OVERVIEW

Planning is essential to ensure that goods and services are available in the supply chain when and where they are needed. Planning for supply chain activities happens regularly during the implementation phase of a project cycle when project plans that were first developed during the start-up phase are reviewed, updated, and shared.

Supply planning is a continuous process of using **data** to make finance, procurement, and logistics **decisions** about the supply chain itself and the delivery of goods and services to end users through the supply chain.

- The **data** used for supply planning include forecasted amounts, stock on hand, stock on order, lead times, expiration dates, freight and logistics costs, unit costs, and minimum and maximum stock levels.
- The **decisions** informed by supply planning include which goods or services to source, how much of these goods or services to source, when these goods or services should be delivered, and how much it will cost to source, store, transport, and deliver these goods or services.

For market-based programs (including local procurement), supply planning also involves forecasting and monitoring market availability and the per-unit prices of targeted goods and services.

For more information about supply planning for health products and services, see the Health Annex.

PUSH/PULL LOGISTICS STRATEGIES

Supply chain systems use a hybrid of push and pull strategies to source and move goods based on user demand. The volume of goods moving through the supply chain depends on which logistics strategy is used at the time: push or pull.

In a push system, goods are sourced and moved based on projected user demand **data**.

- For CRS push systems, the Supply Chain Manager and Program Manager monitor inventory levels to make these **decisions**.
- In the earliest stages of emergency response (when needs are not clearly defined), a push system is often used.

In a pull system, goods are sourced and moved based on actual user demand **data**.

- For CRS pull systems, these **decisions** are informed by CRS or partner staff supply requests and goods are kept in a storage facility.
- In the later stages of emergency response (when the situation stabilizes and needs are more clearly defined), a pull system may be used.

Push and pull systems can be combined at times (particularly in more complex supply chains) and can fluctuate during a project's lifecycle. For example, a pull system might be used to replenish stock from a central level to a regional level, and a push system might be used to move stock from a regional level to a service delivery point.

For more information on push/pull strategies, see the Certification in Humanitarian Logistics Learning Materials: Unit 2 – Warehousing and Inventory.

IMPLEMENTATION PHASE STANDARDS (COMPASS PROJECT MANAGEMENT)

CRS projects can last several weeks, months, or even years. For all projects, the implementation phase begins after the start-up phase.

The implementation phase involves ongoing supply chain activities such as procurement, transportation, warehouse and inventory management, distribution, and reverse logistics. Planning happens continuously throughout implementation. Any necessary changes to the project's supply chain plans or activities are made throughout the implementation phase.

During the implementation phase, programming staff are responsible for managing the project schedule, overseeing actual spending against the budget, addressing issues and threats, making improvements, monitoring and evaluating project outcomes, and preparing reports to donors.

Data from different parts of the supply chain inform ongoing project activities such as planning, risk mitigation, and process improvement. Throughout a project's lifecycle, supply chain staff should be involved in discussions about changes to the project schedule and activity plan.

For more information about project implementation, see the Compass Implementation Phase Standards.

5.3 ROLES AND RESPONSIBILITIES

The figure below lists the functions and activities of six roles involved in the process of supply planning.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Function/Activity	Supply Chain Manager	Warehouse Manager*	Procurement Manager	Logistics Manager	Program Officer/ Chief of Party	Head of Operations
Conducts regular supply planning meetings between programming and supply chain teams during project implementation	C	C	C	C	R	C
Reviews and updates forecasts regularly based on distribution, consumption, and market monitoring data	R	C	C	C	C	A
Collects market data (e.g., prices, availability indicators, etc.) based on the market monitoring plan	A		R	C	I	I
Analyzes market data regularly based on the market monitoring plan	A		R	C	C	I
Maintains and updates the procurement plan	I		C		R	
Monitors the procurement plan and prioritizes procurement activities and strategy accordingly	A		R		C	I
Maintains, shares, and communicates pipeline and lead time analyses and forecasts	A	I	R	R	I	I
Determines the most appropriate replenishment strategy and revisit the strategy as needed during project implementation	A	R	C	C	C	I
Monitors stock levels and provide information and reports on inventory status	A	R	C	C	C	I
Re-orders inventory when needed	I	C	I	I	R	
Updates logistics assessments as needed with any changes to context or implementation strategy	A			R	C	C
Creates dispatch plans and monitor transportation requirements	A	I		R	I	I

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

* The **Administrative Manager** has a similar role as the **Warehouse Manager** for items stored in an office storage room. References to the Warehouse Manager in all RACIs and checklists throughout this chapter can also refer to the Administrative Manager.

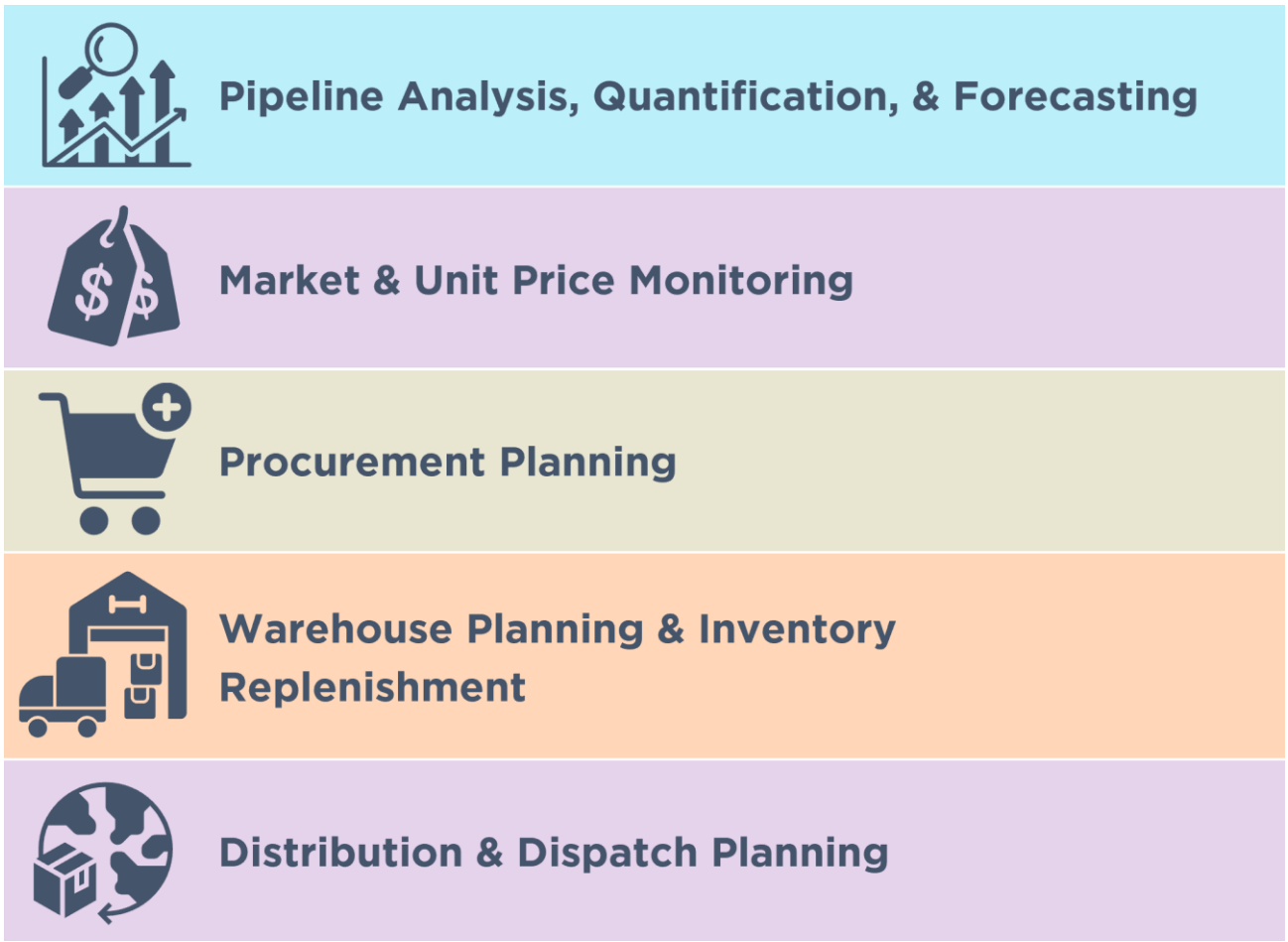
An **Administrative Officer or Administrative Assistant** can be designated as the **CVA Asset Custodian** to manage CVA assets that are acquired for CVA programming and stored in an office storage room.

5.4 TOOLS

- Calculator - Commodity (Metric Ton) Valuation
- Calculator - Warehouse Capacity
- Calculator - Weight and Volume
- Distribution and Dispatch Plan
- Sample – Transport Service Providers Performance
- Sample - Warehouse Budget
- Template - Logistics Rapid Assessment
- Template - Pipeline Analysis
- Template - Procurement Plan
- Template - Vehicle Disposal-Acquisition Plan

5.5 PROCESSES

Below is a list of the supply planning processes that are covered in this chapter. These processes involve staff in different supply chain functions to manage the flow of goods seamlessly through the supply chain.



PIPELINE ANALYSIS, QUANTIFICATION, AND FORECASTING

Accurate pipeline and lead time planning are essential to quantify and forecast the quantity and flow of goods for project activities.

- All projects should use lead time estimates and keep them up to date for commonly procured goods.
- Longer-term assistance programs (more than 12 to 18 months) should use pipeline analyses for precise scheduling of procurements and calls forward, contracting with Third-Party Logistics (3PL) providers, storage facility preparation, dispatch planning, and other logistics (see also the Pipeline Analysis Template).

Pipeline & Lead Time Analysis Checklist

CHECKLIST *Pipeline & Lead Time Analysis*



For projects scheduled to last longer than one year, the **Supply Chain Manager:**

- ☐ Prepares a pipeline analysis report.
- ☐ Updates the pipeline analysis annually at a minimum throughout the project lifecycle.
- ☐ Shares the pipeline analysis with the Program Managers, Logistics Manager, Warehouse Manager, Procurement Manager, and Head of Operations.

For all projects, the **Supply Chain Manager, Procurement Manager,** and **Logistics Manager:**

- ☐ Review lead time estimates for D-goods and ND-goods.
- ☐ Update lead time estimates when there are any changes to the local, regional, or international context that may delay or expedite the delivery of goods.
- ☐ Communicate updated lead times to relevant stakeholders on the programming team.

☐ **Please see below for context-specific callout boxes that also apply**.

USG food assistance projects should use an 18-month horizon for pipeline analyses and should update these analyses every four to six months (before submitting a new call forward).

Accurate quantification and forecasting ensure that the right goods are in the right place at the right time for project activities. Precise quantification and forecasting are important for the reasons listed below.

- Balancing stock levels of essential products at all levels of the supply chain.
- Reducing the risk of stockouts, excessive stock, and losses due to obsolescence or expiration.
- Ensuring an appropriate level of safety stock.
- Maintaining a flow rate that maximizes both storage facility and transport capacities.
- Incorporating an understanding of local and regional market information and regular market monitoring.
- Contributing to good stewardship of CRS and donor financial resources.

Quantification and forecasting activities should use reliable data, monitor markets and market forecasts regularly, and coordinate among CRS teams and other stakeholders, including partners, peer organizations, and government ministries.

For some Global Fund projects, national authorities (e.g., national quantification committees) lead or participate in quantification exercises or conduct quantification outcome reviews.



For USAID's Bureau for Humanitarian Assistance food assistance programs, CRS must complete and submit the Annual Estimate of Requirements (AER) to quantify food commodity requirements.



For more in-depth guidance on quantification and forecasting, see the Design chapter.

Pipeline Quantification & Forecasting Checklist

CHECKLIST *Pipeline Quantification & Forecasting*



The **Supply Chain Manager and Program Manager:**

- ☐ Coordinate information and data sharing regularly (especially using distribution and consumption reports) to quantify needs and update forecasts on a quarterly basis (at a minimum).
- ☐ Set up regular meetings to review information and data, inviting other team members as appropriate.
- ☐ Regularly update plans, including the Detailed Implementation Plan (DIP) as forecasts change during the project lifecycle.

☐ **Please see below for context-specific callout boxes that also apply.**

Pipeline Quantification and Forecasting for Health Products

Some donors (e.g., The Global Fund) require a "micro plan" or other similar planning documents for the forecasting and distribution planning of health products.

MARKET AND PRICE MONITORING

Throughout a project's design and implementation phases, market data and price data are monitored to inform and adjust decision-making for supply planning.

The market monitoring plan is determined during the project's start-up phase and is based on the project schedule. The monitoring activities listed below should happen regularly (weekly, monthly, or quarterly) according to the project schedule:

- Gathering market data (including the collation of secondary data and/or collection of primary data).
- Analyzing data to inform project design and adjustment.
- Reporting and disseminating market information to stakeholders.
- Following up with updates as necessary (e.g., additional market assessments, adjustments to procurement plans, and/or programming activities).

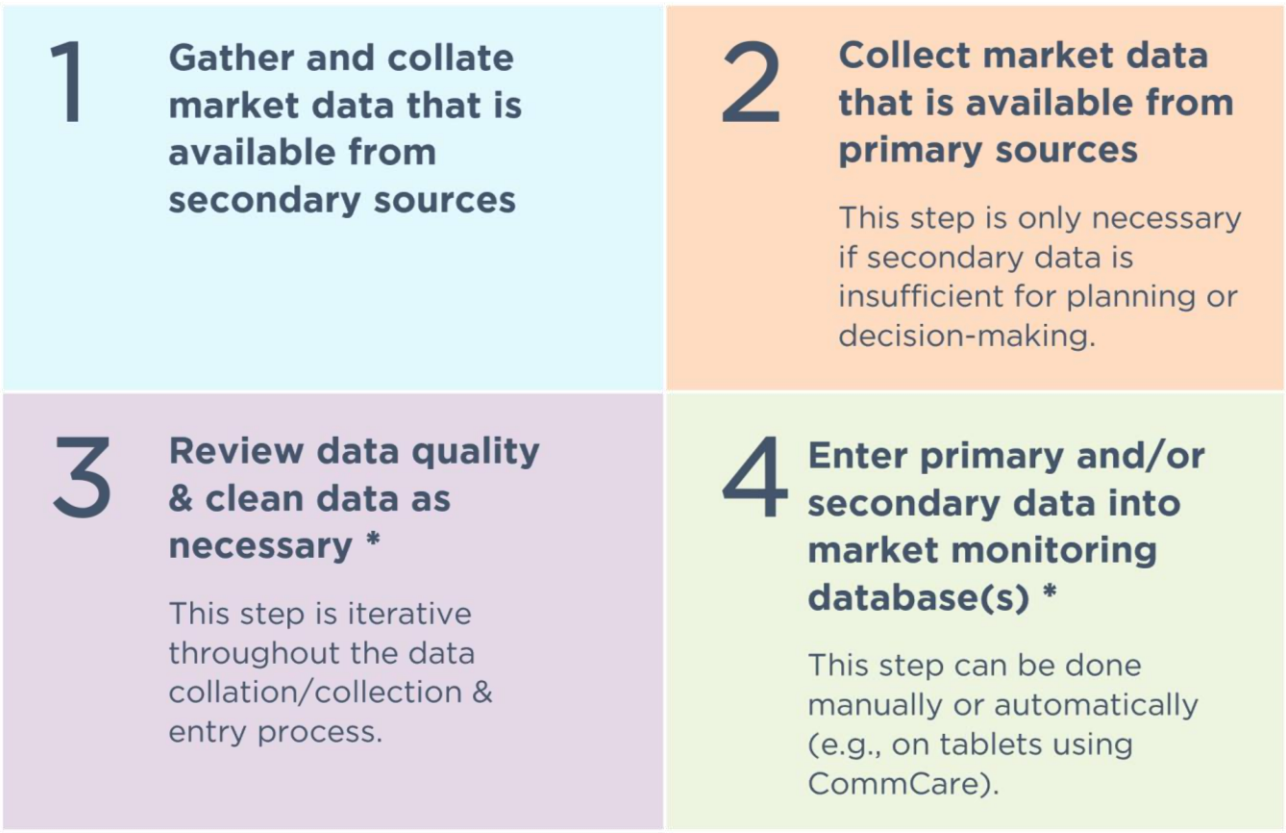
For the definitions of primary data and secondary data, see Sources of Market Information in the Design chapter.

For in-depth guidance on market monitoring start-up, plans, and activities, see the Start-Up chapter.

Collate/Collect Data

Staff collate secondary market data and/or collect primary market data at pre-determined frequencies based on the indicators and data sources identified in the market monitoring plan.

Data collation/collection involves the steps listed in the figure below.



* Data should always be entered in the same form as it was collected. Any conversions (e.g., unit measures, currencies) or calculations (e.g., averages, modes) should be made in the database while retaining the original data.

For more information on collecting price data from primary sources, see the Market Monitoring, Analysis, and Response Kit (MARKit).

Analyze Data

Analysis of market and price data should focus on answering core questions related to supply planning requirements (programming needs, project adjustments, and planning decisions).

Before starting a market monitoring analysis, staff should understand the structure of their databases and the quality of their data. For example, data might need to be manipulated (restructured, coded, or otherwise converted) for comparability over space and time. Missing data points in spatial or time series might need to be inserted into other data points for comparative analysis. Staff should also understand data cleaning as an iterative process and should review and clean their databases regularly.

Below are examples of supply planning requirements, core market monitoring questions, and corresponding analysis steps.

Supply Planning Requirement	Core Market Monitoring Question	Market Data Analysis Step
Programming Needs	Are the prices of goods that were recently distributed or procured in intervention markets typical for this time of year? If not, can any atypical findings be linked to the intervention, or are other factors at play?	• Visually inspect monthly price trends in a chart • Compare current price trends (using a time series) to expected price trends from the average seasonal index
Project Adjustments	How does the current cost of the minimum expenditure basket (MEB) compare to the cost of the MEB during previous cash distributions (or outlined in the project proposal)?	• Compute the MEB based on the current market monitoring data • Calculate the % change in the MEB between the current and previous time periods
Planning Decisions	When should we inform vendors of a planned voucher activity?	• Use data on commodity availability to determine whether markets are generally or currently well-supplied • Compute the median and maximum reported vendor time required to restock key commodities

Report/Communicate Data

Findings from the market monitoring data analysis should be communicated clearly and simply across stakeholders (e.g., between programming, partners, operations, humanitarian clusters, donors, and country leadership) to inform supply chain and programming decisions and planning adjustments.

Below are the key steps involved in reporting and communicating the findings of a market monitoring analysis.

1. Write a short report summarizing key findings of the analysis using graphs, market maps, and other visual aids to convey important or complex information.
2. Give the report to key internal stakeholders, including supply chain teams, programming teams, MEAL teams, and country leadership.
3. Discuss the analysis and findings of the report in cross-departmental planning meetings and determine any necessary adjustments to make or other planning actions to take.
4. Share lessons, findings, and ensuing actions among internal and external stakeholders (as appropriate).

Updates may be shared monthly in a short report (less than five pages), so the information is easily accessible for stakeholders to review. This report can be useful when advocating for operational or programming adjustments to senior management and donors.

Adjust Plans and Activities (As Needed)

Supply chain and/or programming interventions (i.e., projects, strategies, plans, and activities) might need to be adjusted due to unanticipated changes in the market, depending on the findings of the market and price monitoring analysis.

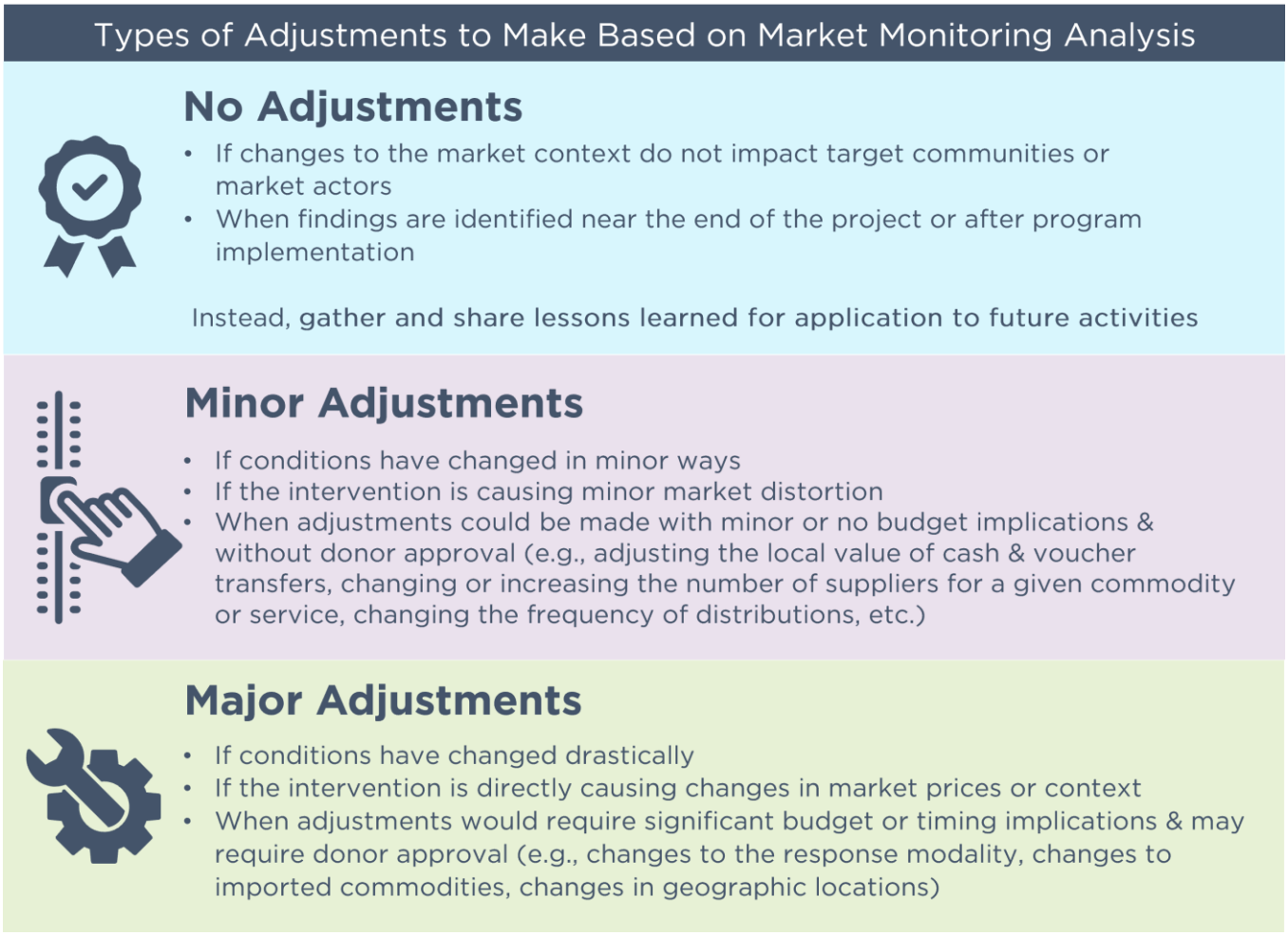
If analysis of market monitoring indicators does not reveal the underlying issues and potential consequences, a more in-depth investigation might be necessary. For more information on market assessment, see the Design chapter.

Below are factors to consider when determining whether adjustments to the intervention are necessary.

- The severity and duration of changes to prices and other market indicators.
- The impact of these changes on program participants and non-participants.
- The risk that these changes will worsen if no adjustments are made to the intervention.
- The current response or plans of other market stakeholders (commercial market actors, government, other organizations) that are working in the same area(s).

Depending on the severity and impact of the factors listed above, it might be appropriate to make no adjustments, minor adjustments, or major adjustments to the intervention.

The figure below summarizes factors to consider when determining what level of adjustment to make.



For a detailed table of market scenarios and corresponding adjustments that may be necessary in USG food assistance programs, see Table 10 in the Market Monitoring, Analysis and Response Kit (MARKit).

Follow the steps listed below when adjusting interventions based on market monitoring information.

1. Hold cross-departmental meetings to discuss the results of the market monitoring analysis and whether adjustments or other follow-up actions are required.
2. Determine the necessary supply chain and/or programming adjustments based on and supported by relevant data and findings.
3. Present recommendations to decision-makers for approval, both internally and externally (e.g., host government, donors, and partners) as necessary.
4. Plan and implement the supply chain and/or programming adjustments.
5. Continue to monitor market indicators and the effects of the adjustments.
6. Adjust monitoring scope and plan as necessary.

PROCUREMENT PLANNING

Every project should have a procurement plan that is accurate and aligns with procurement-specific Compass standards and key actions during the start-up and implementation phases of a project (see also the Procurement Plan Template).

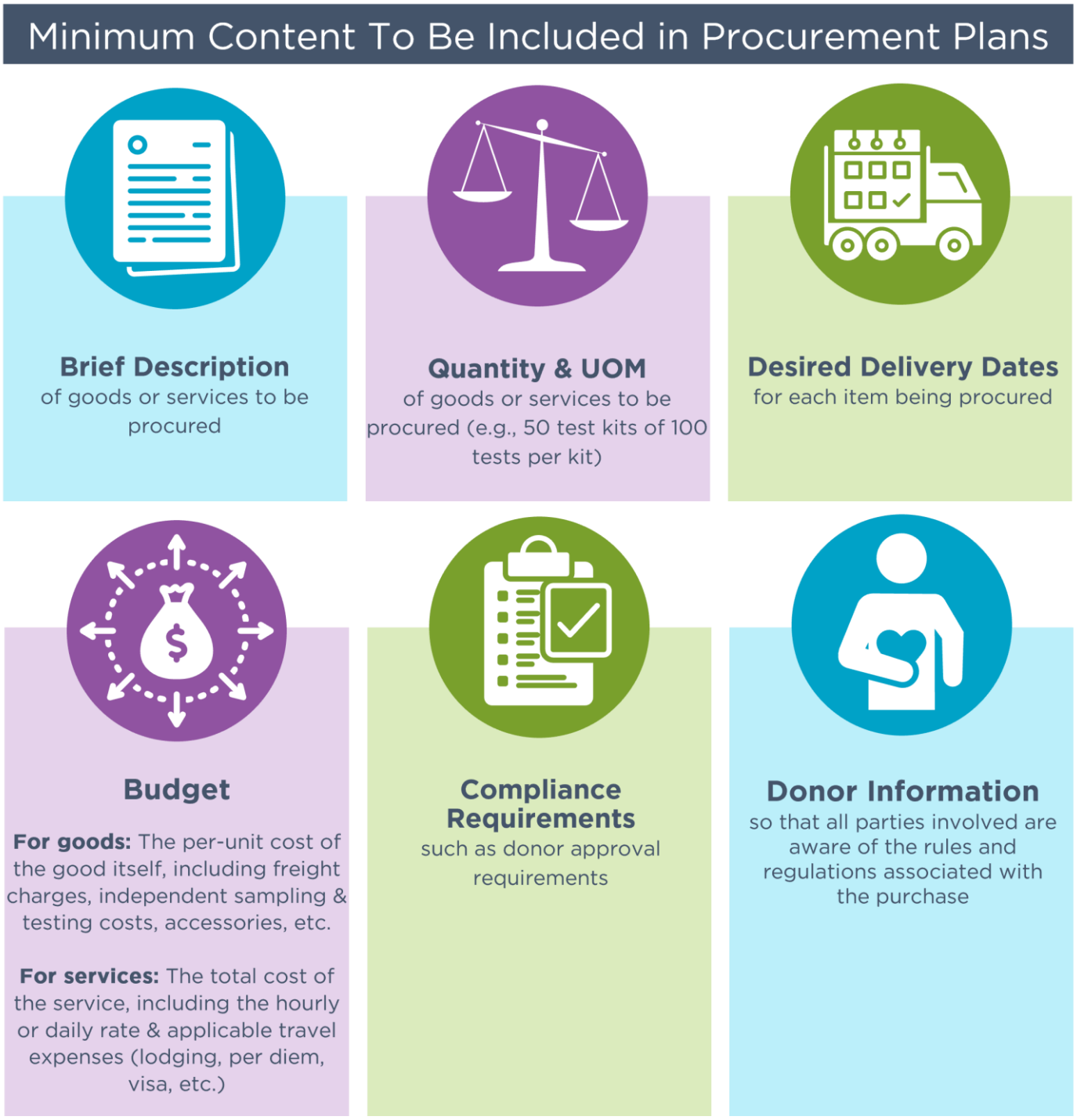
The procurement plan is based on an analysis of past consumption, anticipated future requirements, and the assessment and continuous monitoring of various risks, availability, prices, and lead times of goods and services.

A procurement plan enables the following benefits for a project.

- More efficient procurement processes.
- Quicker procurement and delivery of goods and services.
- Better pipeline and lead time forecasting.
- Better financial forecasting.
- Better cross-departmental collaboration.
- More strategic procurement (e.g., creating framework agreements, making bulk purchase, obtaining better prices larger quantities or higher quality for goods/services).
- Better compliance with quality standards (WHO pre-qualified, ISO certified).

When procurement planning is done well, it allows procurement staff to aggregate a project's requirements to achieve the benefits listed above.

At a minimum, procurement plans should include the content listed in the figure below.



Procurement Planning Checklist

CHECKLIST *Procurement Planning*



Before the procurement plan is submitted, the **Program Manager**, working with programming staff:

- ☐ Prepares or revises the procurement plan biannually (at a minimum) and each time changes are made to the Detailed Implementation Plan (DIP) or to assumptions that affect goods or services that are needed for the project.
- ☐ Submits updated procurement plans to the procurement team.

After the procurement plan is submitted, the **Procurement Manager and Program Manager:**

- ☐ Meet to review the procurement plan and adjust details as needed.

Once the procurement plan is agreed upon, the **Procurement Manager:**

- ☐ Monitors availability and prices of required goods and services to be purchased locally or regionally (see the Market and Price Monitoring section in this chapter).
- ☐ Monitors the estimated lead times and communicates with the programming team as deadlines for delivery approach.

Once the procurement plan is agreed upon, **programming staff**:

- ☐ Submit requisitions based on the procurement plan.
- ☐ Track purchases against the procurement plan.

Please see below for context-specific callout boxes that also apply.

The Procurement Lifecycle Report can be downloaded from Insight and used to track purchases. The report provides information about procurements from requisition through receipt and payment and includes POET information for each line item in a PO.

WAREHOUSE PLANNING

This section provides a high-level overview of warehouse planning and storage facility mapping related to supply chain planning. For in-depth guidance on these activities, see the Start-Up chapter.

The storage facility map contains the physical layout and storage plan of the facility. It is a living document that is a useful reference for both warehouse staff and visitors.

The warehouse and storage plan should be revisited periodically as project activities change during the project lifecycle, particularly when there is a rapid onset emergency, when new items are purchased or donated, or when there are changes in product volumes to be delivered.

Storage Facility Mapping Checklist

CHECKLIST *Storage Facility Mapping*



As project activities change during a project's lifecycle, the **Warehouse Manager:**

- ☐ Updates the storage facility map accordingly to reflect changes to the type of goods in the pipeline (purchased or donated), the mix of items being stored, the volume of goods being delivered, the size of dispatches, etc.
- ☐ Posts the storage facility map in a visible location and alerts warehouse staff of the new map and facility layout.

Please see below for context-specific callout boxes that also apply.

Updating the Storage Facility Layout in Insight

When the physical layout of the storage facility changes, the virtual layout in Insight should be updated by the following individuals or teams.

To create a new IO, the **Supply Chain Manager**:

- ☐ Completes the Inventory Org Request Form and submits it (with the physical warehouse map attached) to the Head of Operations.

Once the IO request is approved by the Head of Operations, the **Master Data team**:

- ☐ Can create new subinventories and IOs as needed.

After new IOs and subinventories have been created, the **Warehouse Manager**:

- ☐ Can create and deactivate locators.

REPLENISHMENT PLANNING

The information in this section is adapted from the Fritz Institute/CILT *Certification in Humanitarian Logistics* Unit 2: Warehousing & Inventory.

Replenishment planning is essential to maintain the right balance of goods in storage or the pipeline to meet CRS needs. Monitoring the level of working stock is important to determine storage space, labor needs, and transportation requirements. Without regular inventory monitoring and accurate replenishment planning, storage locations can begin to have surplus inventory ("overstock" or "excess stock") or insufficient inventory (anywhere from "undersupply" to "stockout") to meet project needs.

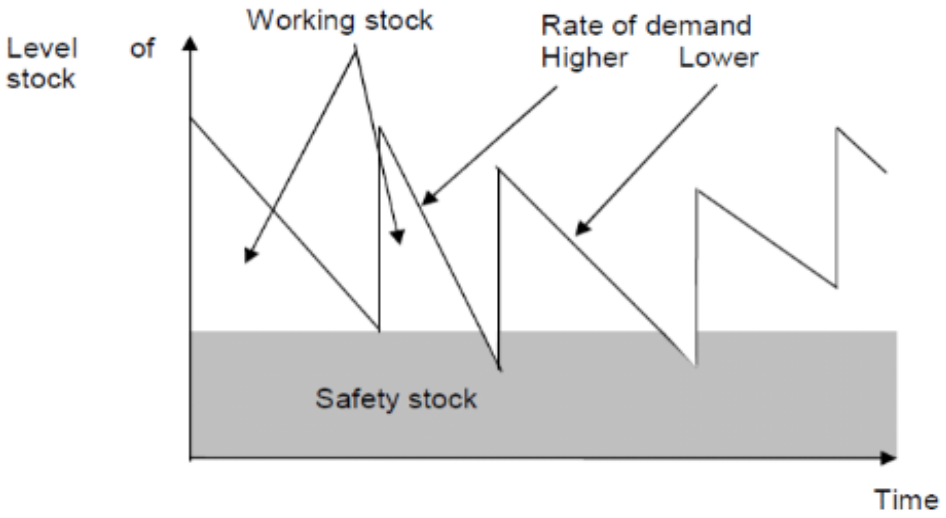
Avoid oversupplying perishable goods such as food and health products. When perishable goods deteriorate or expire, the additional costs for loss handling and disposal can be significant.

Due to security and misappropriation risks such as theft and looting, avoid storing large volumes of goods over a long-term period.

In this section, the term "working stock" is used when referring to inventory on hand, and the term "safety stock" is used when referring to buffer stock (five to ten percent extra of goods).

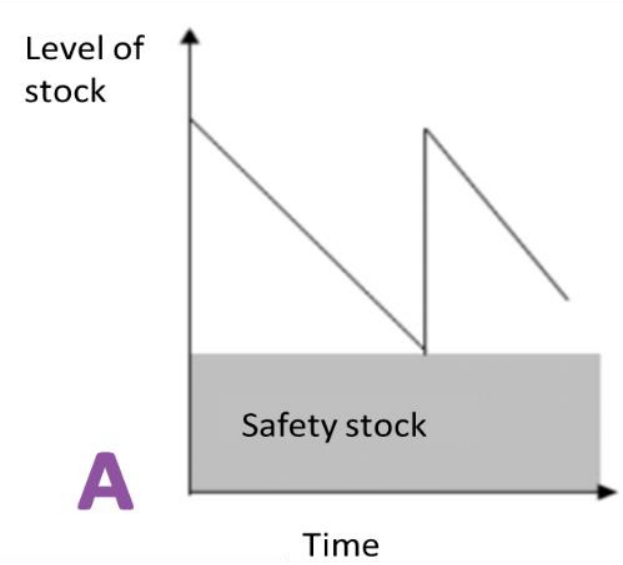
Stock Time Curve

The figures below, sourced from the Fritz Institute/CILT *Certification in Humanitarian Logistics* Unit 2: Warehousing & Inventory, illustrates the "stock time curve": how the levels of working stock and safety stock rise and fall over time based on higher or lower rates of demand.



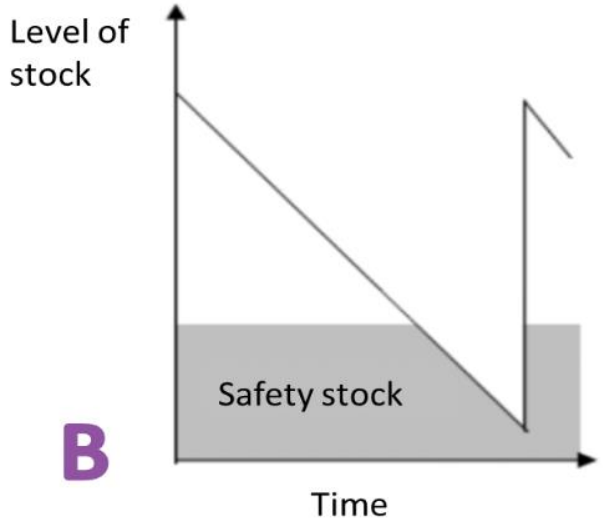
Source: Fritz Institute/CILT. 2.8.2 Stock Time Curve. "Unit 2: Warehousing & Inventory" ***Certification in Humanitarian Logistics.*** **v3, 2017, pp. 86.**

Figure A shows that when demand is **as expected**, most of the working stock is used, and none of the safety stock is used.



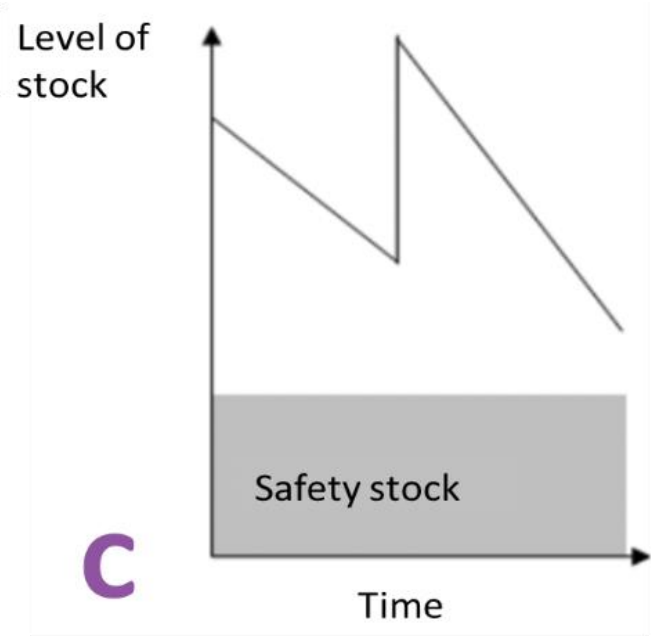
Source: Fritz Institute/CILT. 2.8.2 Stock Time Curve. "Unit 2: Warehousing & Inventory" ***Certification in Humanitarian Logistics.*** **v3, 2017, pp. 87.**

Figure B shows that when demand is higher than expected, all the working stock and some of the safety stock are used.



Source: Fritz Institute/CILT. 2.8.2 Stock Time Curve. "Unit 2: Warehousing & Inventory" ***Certification in Humanitarian Logistics.*** **v3, 2017, pp. 87.**

Figure C shows that when demand is **lower than expected**, some of the working stock is used (plenty remains in inventory), and none of the safety stock is used.



Source: Fritz Institute/CILT. 2.8.2 Stock Time Curve. "Unit 2: Warehousing & Inventory" ***Certification in Humanitarian Logistics.*** **v3, 2017, pp. 88.**

Monitoring Inventory Levels in Insight

The Global Item On-Hand by Location and Grant Report can be downloaded from Insight and used to monitor inventory levels. Additional inventory data (e.g., best-used-by-dates (BUBDs)/expiration dates, lot numbers, etc.) can also be exported from Insight for replenishment planning and analysis.

Cost Savings Considerations When Determining Reorder Quantity

When determining the quantity of a replenishment order, it is important to consider potential procurement and transport savings along with storage and demand factors.

Quantity discounts for purchasing more goods at one time **may reduce the per-unit cost**. **Ordering a higher quantity of goods** at one time may result in **more cost-effective transport costs** (e.g., to fully utilize and maximize capacity of containers and trucks needed to transport goods).

Supply chain and procurement staff should work together closely to understand cost savings opportunities and their related supply chain constraints.

Replenishment Models

The three replenishment models listed below are commonly used for deciding when to place an order (considering supplier and transport lead times) and how much to order.

- Two-bin system
- Periodic replenishment
- Continuous replenishment

All three models depend on knowing the level of stock that is on hand, in transit to the storage facility, or on order from suppliers. Collectively, this is known as "free stock." Free stock includes physical stock in the storage facility, but the terms are not interchangeable.

The free stock level can be calculated as shown below.



Two-Bin System

The two-bin system is useful when replenishing low-value items and ND-goods such as stationery, printer toner, cleaning products, etc.

In this system, working stock and safety stock are kept in two separate bins (e.g., a storage cupboard or shelving unit). When the stock in the first bin is used up, a replenishment order is placed. Stock from the second bin is used during the replenishment lead time (the period from procurement to delivery of needed goods). Once the new stock arrives, both bins are restocked.

Periodic Replenishment

Periodic replenishment is useful for project activities that are planned in advance. This model makes it easier for supply chain staff to plan for labor and equipment needs, coordinate the transportation of goods to utilize maximum transport capacity, and reduce congestion at storage facilities.

In this model:

1. Free stock levels are checked at regular intervals (e.g., weekly or monthly), with higher value items such as "A class goods" checked at more frequent intervals.
2. Orders are placed or skipped each review period depending on **whether the free stock level falls below a predetermined minimum threshold**.
3. The maximum stock level is determined by a combination of factors shown in the table below: the amount of safety stock, demand (e.g., the amount of stock used during the review period), and replenishment lead time.

Calculating the Maximum Stock Level for Periodic Replenishment

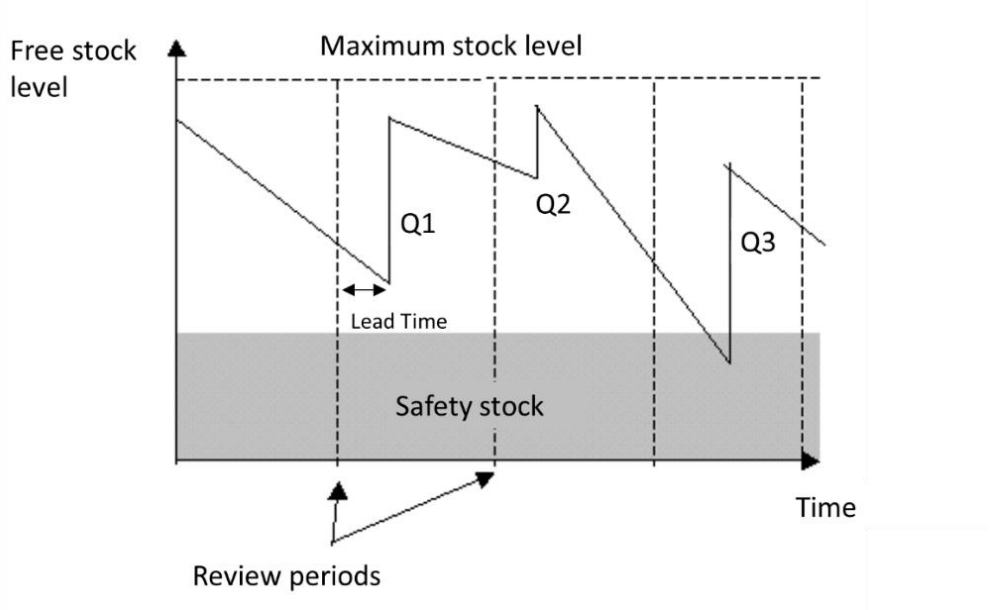
Safety Stock + [Average Demand * (Review Period + Lead Time)] = Maximum Stock Level

Safety Stock	Average Demand	Review period	Lead time	Maximum Stock Level
400 units [200 units per week * 2 weeks lead time = 400 units]	200 units per week	4 weeks	2 weeks	1600 units
400 + [200 * (4 + 2)] = 1600 units				

The figure below, sourced from the Fritz Institute/CILT *Certification in Humanitarian Logistics* Unit 2: Warehousing & Inventory, illustrates the periodic replenishment model with a quarterly review period. Note that the order quantity can vary each time an order is placed.

Periodic Replenishment Model

The figure below illustrates the periodic replenishment model.



Source: Fritz Institute/CILT. Periodic Review Top-Up System. "Unit 2: Warehousing & Inventory" *Certification in Humanitarian Logistics.* v3, 2017, pp. 92.

Top-Off Replenishment

The top-off replenishment model is useful when there are frequent dispatches of items from the storage facility.

In this model, orders are placed every review period based on the levels of maximum stock and free stock. The quantity to be replenishment is calculated by subtracting the free stock level from the maximum stock level.

Routine Replenishment ("Min/Max")

The min/max model is useful when dispatches occur less frequently, but reorder quantities might be higher.

In this model:

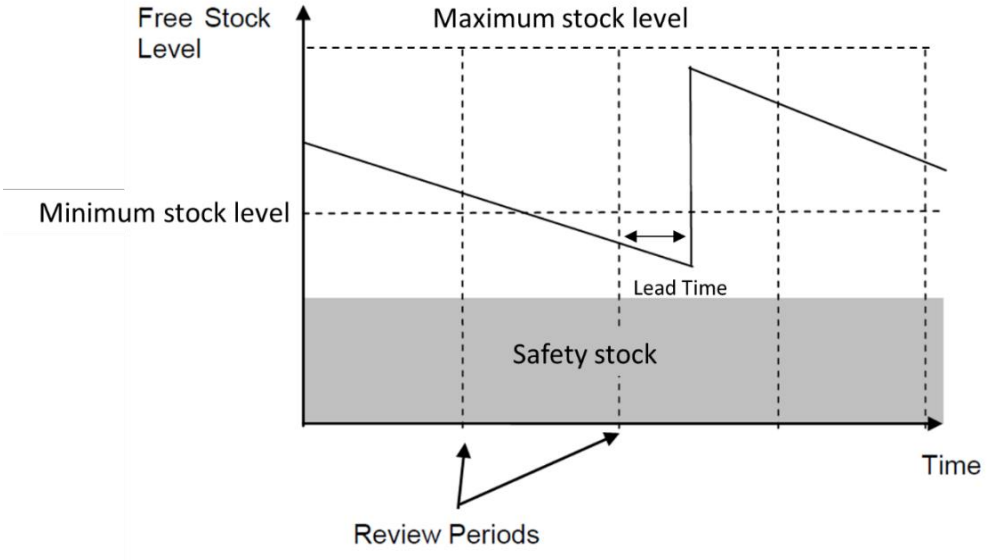
1. Free stock levels are checked at regular intervals (e.g., weekly or monthly), with higher value items such as "A class goods" checked at more frequent intervals.
2. Orders are placed or skipped each review period depending on **whether the free stock level is above or below the minimum stock level**.

3. The minimum stock level is determined by a combination of factors shown in the figure below: the amount of safety stock, demand (e.g., the amount of stock used during the review period), and replenishment lead time.

Calculating the Minimum Stock Level for Min/Max Replenishment				
Safety Stock + [Average Demand * (Review Period + Lead Time)] = Minimum Stock Level				
Safety Stock	Average Demand	Review period	Lead time	Minimum Stock Level
50 units [25 units per week * 2 weeks lead time = 50 units]	25 units per week	12 weeks	2 weeks	400 units
50 + [25 * (12 + 2)] = 400 units				

Min/Max Replenishment Model

The figure below, sourced from the Fritz Institute/CILT *Certification in Humanitarian Logistics* Unit 2: Warehousing & Inventory, illustrates the min/max replenishment model with a regular review period.



Source: Fritz Institute/CILT. Periodic Review Minimum Stock System. "Unit 2: Warehousing & Inventory" *Certification in Humanitarian Logistics.* v3, 2017, pp. 92.

Continuous Replenishment

The continuous replenishment model is useful for programmatically critical items and regularly fluctuating demand rates (e.g., pharmaceuticals at a clinic). This model has the following advantages.

- The free stock level matches the demand pattern more closely.
- The ordering process is simpler because the order quantity is fixed for each item.
- Working stock is checked more frequently compared to periodic replenishment, so the storage facility can store less stock.

In this model:

1. Free stock levels are checked every time stock is allocated to a consignment or reserved for a dispatch (stock levels may be reviewed as frequently as every day).
2. Orders are placed or skipped each review period depending on **whether the free stock level is above or below the reorder point (minimum stock level)**.
3. The reorder point is determined by a combination of factors shown in the figure below: the amount of safety stock, demand (e.g., the amount of stock used during the review period), and replenishment lead time.

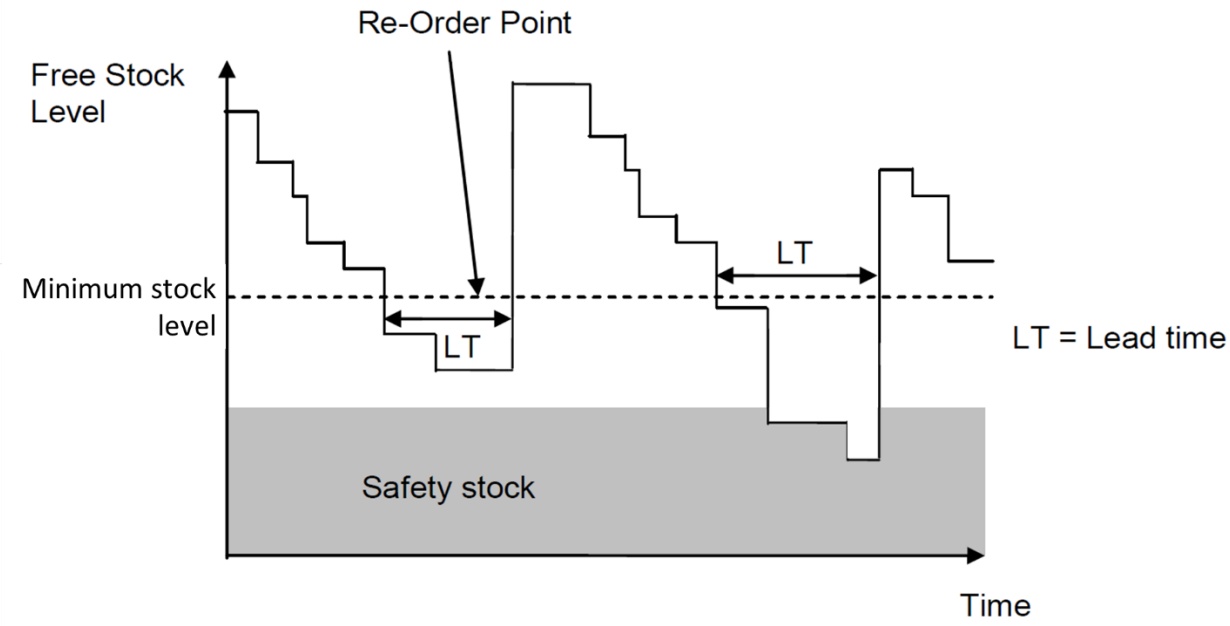
Calculating the Reorder Point Level for Continuous Replenishment

Safety Stock + [Average Demand * (Review Period + Lead Time)] = Minimum Stock Level

Safety Stock	Average Demand	Review period	Lead time	Minimum Stock Level
2000 units [2000 units per week * 1 week lead time = 2000 units]	2000 units per week	1 week	2 weeks	6000 units
2000 + [2000 * (1 + 2)] = 6000 units				

Continuous Replenishment Model

The figure below, sourced from the Fritz Institute/CILT *Certification in Humanitarian Logistics* Unit 2: Warehousing & Inventory, illustrates the continuous replenishment model.



Source: Fritz Institute/CILT. Continuous Review System. "Unit 2: Warehousing & Inventory" *Certification in Humanitarian Logistics.* v3, 2017, pp. 94.

Inventory Replenishment Checklist

CHECKLIST *Inventory Replenishment*



Before goods need to be ordered, the **Supply Chain Manager, Warehouse Manager, and Program Manager:**

- ☐ Select the most appropriate inventory replenishment system for the project (this decision should be made jointly and during the start-up phase).
- ☐ Reassess the system and decision periodically during the project, particularly when there are changes to the context, the Detailed Implementation Plan (DIP), or project risks or assumptions.

During each stock review period, the **Warehouse Manager:**

- ☐ Maintains and shares data on stock levels and goods in the pipeline with the Supply Chain Manager, Procurement Manager, and Program Manager.
- ☐ Advises on the quantity to be ordered, considering storage capacity and upcoming receipts of incoming goods.

When goods need to be ordered, the **Program Manager:**

- ☐ Works with the procurement team to begin the procurement process or order from suppliers that have existing agreements with CRS.

DISPATCH AND DISTRIBUTION PLANNING

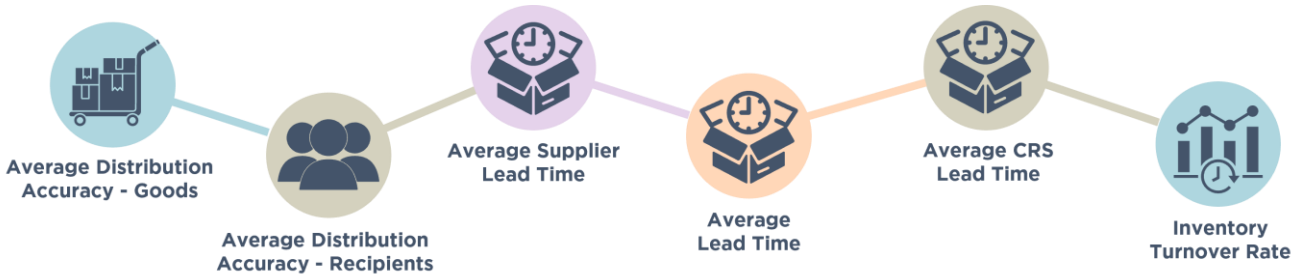
Dispatch and distribution planning ensures that goods for programming and project activities are positioned in the right place, at the right time, and in the right quality and quantity for movement to the service delivery point. The plans for dispatch and transportation are based on the Distribution Plans created by programming teams or approved transfer orders. The Logistics Manager is responsible for creating dispatch plans and for overseeing the creation and update of transport plans. For in-depth guidance on these supply chain processes, see the Dispatch and National Transport chapters.

Information that comes from the distribution process is useful for evaluating the effectiveness of current supply chain and programming plans, such as the Distribution Plan. The programming teams and supply chain teams should share information regularly to update these plans based on actual or potential changes (e.g., threats, contextual shifts, etc.).

Changes to the Detailed Implementation Plan (DIP) or local or regional context can influence the design of the logistics network strategy. The Logistics Manager can revisit the Country Logistics Rapid Assessment (LRA) and make updates as needed during the project lifecycle. For more information about logistics assessments, see the Design chapter.

PERFORMANCE MONITORING

Below are examples of metrics that can be used to monitor the performance of supply chain planning.



For more information about these metrics and how they can be used for performance monitoring, see the Monitoring chapter.



Photo by Jomari Guillermo

Chapter 6: Procurement

6. PROCUREMENT

Purpose

This chapter enables supply chain and programming staff to understand and follow important purchasing practices throughout the procurement process to support quality programming and facilitate good stewardship of funds and other resources.

This chapter covers a wide range of procurement topics, including supplier selection; requisition requirements and specifications for goods and services; tender methods and documents; stages, methods, and best practices for bid evaluation; contract types and instruments (such as POs and purchase agreements); contract, supplier, and performance monitoring; and contract management.

6.1 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

CRS POLICIES AND PROCEDURES

- CRS Fraud Allegation Management (FAM) Procedure
- CRS Policy POL-PUR-POL-001 - Procurement
- CRS Policy - Procurement Approvals
- CRS Policy - Consultants
- CRS Policy POL-PUR-POS-001 - Procurement Contracts
- CRS Policy - Offline Transactions and Approvals
- CRS Policy POL-OSD-PRM-002 - Purchase of Program Property
- CRS Policy POL-OSD-VEH-003 - Selection and Purchase of CRS Vehicles
- CRS Policy - Supply Chain Records Management
- CRS Policy and Procedure - Supplier Master
- CRS Procedure - Advertisement of Subcontract Opportunities Under DFID Subcontracts Above £25K
- CRS Code of Conduct and Ethics

CRS GUIDELINES

- CRS Resources for Procure to Pay Process
- CRS Process - Steps to Engage a Consultant at CRS
- CRS Process - Country Program P2P Business Process Flow (for Insight-enabled countries)
- CRS Process - Global Procurement P2P Business Process Flow
- CRS Process - Supplier Request for Proposal (RFP) and Contract Administration P2P Business Process Flow
- CRS Checklist - Fly America Act Compliance
- CRS Reference Guide - Acronyms Used in Incoterms
- CRS Supplier/Service Provider Code of Conduct
- Insight SCM Job Aid - Amending a Purchase Order
- Insight SCM Job Aid - Approve a Purchase Order
- Insight SCM Job Aid - Approving a Requisition for Goods and Services
- Insight SCM Job Aid - Create Purchase Order Without Purchase Requisition
- Insight SCM Job Aid - Converting a Purchase Requisition into a Purchase Order
- Insight SCM Job Aid – Submitting a Requisition for Goods
- Insight SCM Job Aid - Submitting a Requisition for Services
- Insight SCM Reference Guide - Procurement
- Insight Process Flow - Purchase Goods and Services

DONOR POLICIES AND REGULATIONS

- The Global Fund Policy – Guide to Global Fund Policies on Procurement & Supply Management of Health Products
- The Global Fund Policy – Procurement Policy
- The Global Fund Policy – Quality Assurance Policy for Pharmaceutical Products
- The Global Fund Policy – Quality Assurance Policy for Diagnostics Products
- U.N. Policy – Supplier Code of Conduct
- USAID Policy and Procedure – Automated Directive Services (ADS) Series 300: Acquisition & Assistance

DONOR AND OTHER GUIDELINES

- KfW Development Bank Guidelines- Guidelines for the Procurement of Consulting Services, Works, Plant, Goods and Non-Consulting Services in Financial Cooperation with Partners
- U.N. Procedures and Processes – Procurement Manual
- WHO Guidelines - Model Quality Assurance System for Procurement Agencies

6.2 OVERVIEW

This chapter describes CRS' minimum standards for procurement. Procurement staff should follow the regulatory framework of their country program. When donors or local contexts have more rigorous requirements, procurement staff should follow those instead.

Global Fund Requirements for Procurement of Health Commodities

When procuring health commodities with Global Fund financing or resources, CRS must comply with **all** standards in the policies listed below for the selection of suppliers, goods, and services.

- Guide to Global Fund Policies on Procurement and Supply Management of Health Products
- Procurement Policy
- Quality Assurance Policy for Pharmaceutical Products
- Quality Assurance Policy for Diagnostics Products

For a summary of Global Fund quality assurance requirements, see CRS Procurement of Health Commodities with Global Fund Resources.



For assistance or guidance on general procurement and specific dilemmas, procurement staff should contact their Supply Chain Regional Technical Advisor or Global Procurement at globalprocurement@crs.org.

The standards covered in this chapter apply to the people and activities listed below.

- **All** procurements (unless a written waiver is obtained from the Director of Global Procurement).
- **All** financial transactions to purchase goods (D-goods and ND-goods) or services.
- **All** CRS global, regional, and country program staff who are involved in the procurement process and interact **directly or indirectly** with vendors, manufacturers, and/or consultants.

Breaches of procedure must be reported to the Director of Global Procurement. Non-compliance will be handled per the CRS Code of Conduct and Ethics and the CRS Fraud Allegation Management (FAM) Procedure.

This chapter **does not apply to Gifts-In-Kind** (donations for goods and services) or **subrecipient agreements.**

- For information about receiving in-kind goods and services, see the Receiving chapter.

Processing Subrecipient Agreements in Insight

Subrecipient agreements follow a different process than traditional procurement sourcing but are entered into Insight as requisitions, which are converted into POs and sometimes have affiliated Contract Purchase Agreements (CPAs).

For more information on how subrecipients agreements are processed in Insight, see the Insight Procurement Reference Guide or the Subrecipient Agreements One-Pager.

Procurement policies and procedures at CRS are managed by the Global Procurement department for standardization and efficiency. Procurement activities must conform to all GSCM procurement policies and procedures and local country program procurement policies.

TERMINOLOGY

Bid/Proposal/Quotation

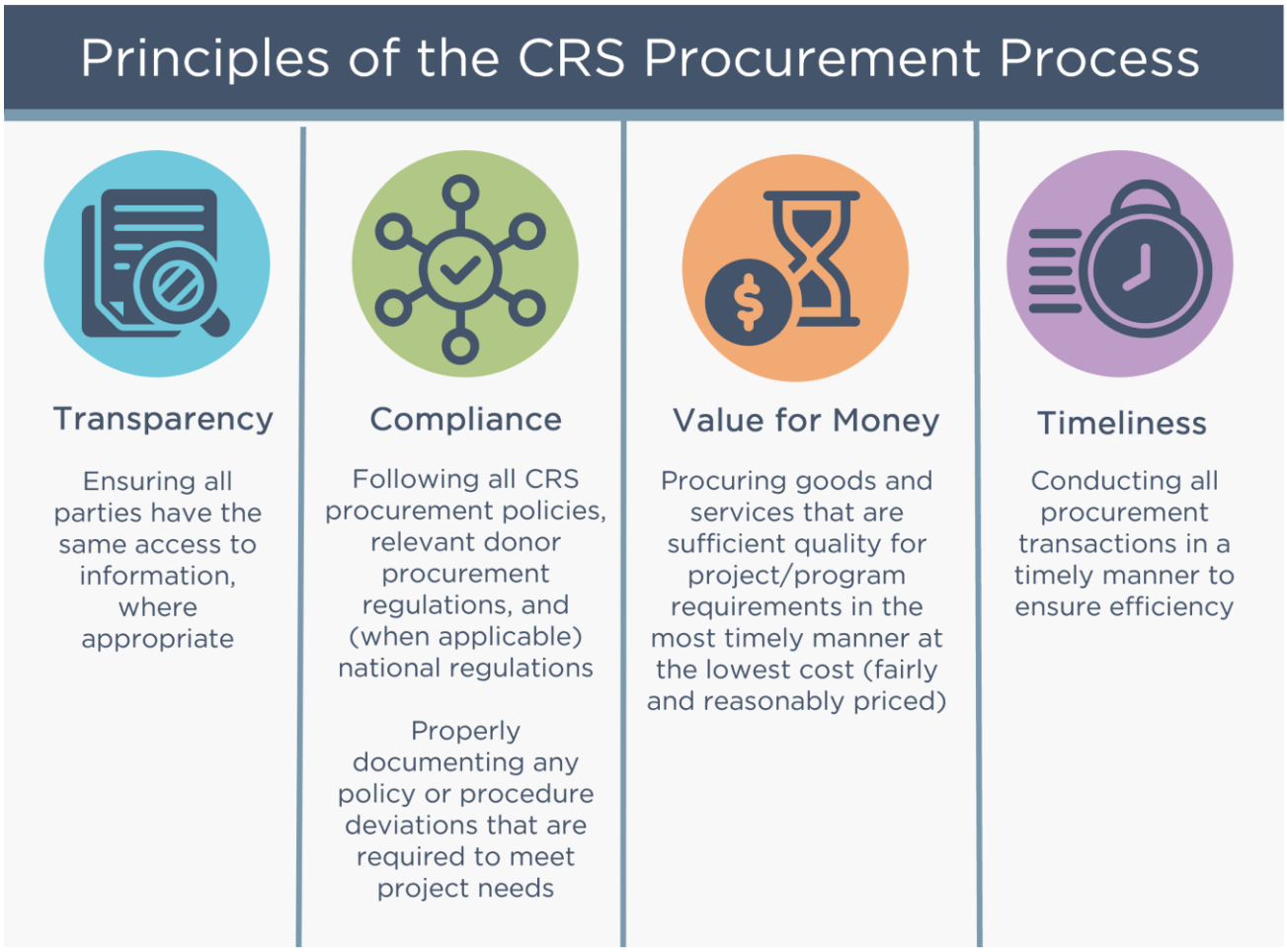
Documents submitted by potential bidders and consultants in response to an RFP or RFQ solicitation. Throughout the chapter, we refer to bid/proposal/quotation as "bids."

Tender/Solicitation

The process in which requirements for procurement of goods or services are communicated to interested parties. Synonymous with Solicitation. Throughout the chapter, we refer to tender/solicitation as "tender."

PROCUREMENT PRINCIPLES

CRS is committed to procuring goods and services that best meet project needs based on specifications, availability, and cost and according to the principles described in the figure below.



These principles align with CRS' mission and strategic objectives to ensure that CRS:

- Delivers high-quality programs within required timelines through procurement processes that are fair, open, and competitive.
- Mitigates risks related to fraud and corruption during the procurement process.
- Strengthens local markets and systems for more sustainable outcomes (where appropriate).

ETHICAL STANDARDS

All CRS procurement activities should be carried out with integrity and the highest standard of ethics by CRS staff to a) maximize the value of resources worldwide for donors and program participants and b) maintain CRS' good reputation while fulfilling CRS' mission and strategic objectives.

Prevent and Mitigate Conflict of Interest (COI)

CRS staff involved in procurement must disclose any perceived or actual conflict of interest (COI) (financial or personal) and recuse themselves from the procurement process.

"Conflict of interest (COI)" means any situation in which a bidder is given or is perceived to have been given an unfair advantage over other bidders, because of a relationship or other connection to a CRS employee involved in a procurement process. For more information, see the CRS Conflict of Interest Policy.

Protect Confidentiality

All procurement-related information provided by bidders to CRS staff involved in the procurement process is considered confidential and cannot be disclosed to anyone unless that individual or entity has a specific business reason for the disclosure of such confidential information.

Prevent Fraud and Corruption

CRS staff involved in procurement activities cannot engage in fraud or corruption during the procurement process. The CRS Code of Conduct and Ethics describes fraud as follows.

- **Definition of Fraud**: "…an act or course of dishonesty, an intentional concealment, omission, or perversion of truth, to gain unlawful or unfair advantage, induce another to part with some valuable item or surrender a legal right, or inflict injury in some manner. "
- **Examples of Fraud**: "bribery (including non-monetary things of value), kickbacks and gratuities, collusive behavior between vendors and employees, false claims, embezzlement, and the types of theft that are the direct or indirect result of fraudulent actions."

To avoid corruption or the appearance of corruption, employees cannot solicit, request, accept, or agree to accept any gift (including entertainment, meals, special favors, etc.) from an active bidder or a significant potential bidder.

The figure below highlights four common indicators of potential fraud or corruption in the procurement process.

Common Indicators of Potential Fraud or Corruption During the Procurement Process

1 Well-Connected Vendors

If a vendor is known or found to be politically connected or otherwise influential in the local context, conducting a transaction with the vendor may appear improper or carry an elevated risk of corruption.

2 Due Diligence Delays or Refusals

If a vendor does not fully cooperate in the due diligence process by delaying or refusing to complete forms, the vendor must be considered suspect and disqualified as a potential supplier.

3 Unusual Payment or Delivery Requests

If a vendor requests special arrangements for payment or delivery, the vendor should be evaluated for potential risk of fraud or corruption.

4 Corrupt Environments

When procurement occurs in a country where corruption is endemic, CRS staff **must**:

- ❑ be alert to anomalies or other potential indicators of fraud and corruption; and
- ❑ adhere **strictly** to the CRS Whistleblower (Anti-Corruption) Policy.

Report Improper Conduct

Any financial or accounting misconduct and/or fraudulent activity (suspected or known) should be reported right away and can be reported in any of the ways listed below.

- Anonymously (online or by phone) through Ethicspoint, an independent third-party reporting system.
- To a supervisor.
- To a designated CRS employee, such as the General Counsel, the Director of Internal Audit, the Director of Human Resources, or a Country Representative.
- To a U.S. federal employee.

SUPPLIER PRE-QUALIFICATION

Pre-qualification of suppliers is one of the many critical procurement activities that occur before a requisition is ever created. Actions taken during the design and planning phases help inform the need for goods or services and identify which suppliers are available to meet the need.

- For information about market assessments, forecasting and quantification, and analyzing sourcing options, see the Design chapter.
- For information about pipeline assessments, forecasting and quantification, and procurement planning, see the Planning chapter.

Pre-qualification is the process of creating a "short list" of suppliers **for non-health goods and services**. Pre-qualification leads to more efficient procurement and is recommended under the following conditions.

- Procurement of goods or services **on a regular basis** (e.g., travel services, office supplies, conference and workshop locations, and IT consumables).
- Procurement of **complex, specialized, or high-risk goods or services** (e.g., construction services and security and safety equipment).
- **Targeted or prioritized procurement from underutilized suppliers in a local market** who do not typically respond to or are not typically selected by traditional tender processes (e.g., producer groups, informal traders, smaller decentralized firms, and voucher vendors).

The figure below illustrates the many factors assessed during Pre-qualification.



Global Supplier Master

Once Pre-qualification is finalized, the qualified suppliers should be added to the Global Supplier Master.

For requirements on adding and maintaining suppliers in the Supplier Master, see the Supplier Master Policy & Procedure.

Adding New Suppliers of Health Commodities

Before adding a supplier of health commodities (e.g., pharmaceuticals, medicines, diagnostic health products, laboratory equipment, etc.) to the Supplier Master, the **person vetting the supplier** should:

- Verify that the supplier or supplier's health commodity is pre-qualified by the WHO, donor, or other internationally recognized authority.
- Verify that the supplier meets all quality assurance requirements by the WHO, donors, and governments.

Country programs must add all new suppliers to the Global Supplier Master by filling out the webform for "Create Request to Add New Supplier" in the Supplier Master Request System.

Adding Suppliers to the Supplier Master in Insight

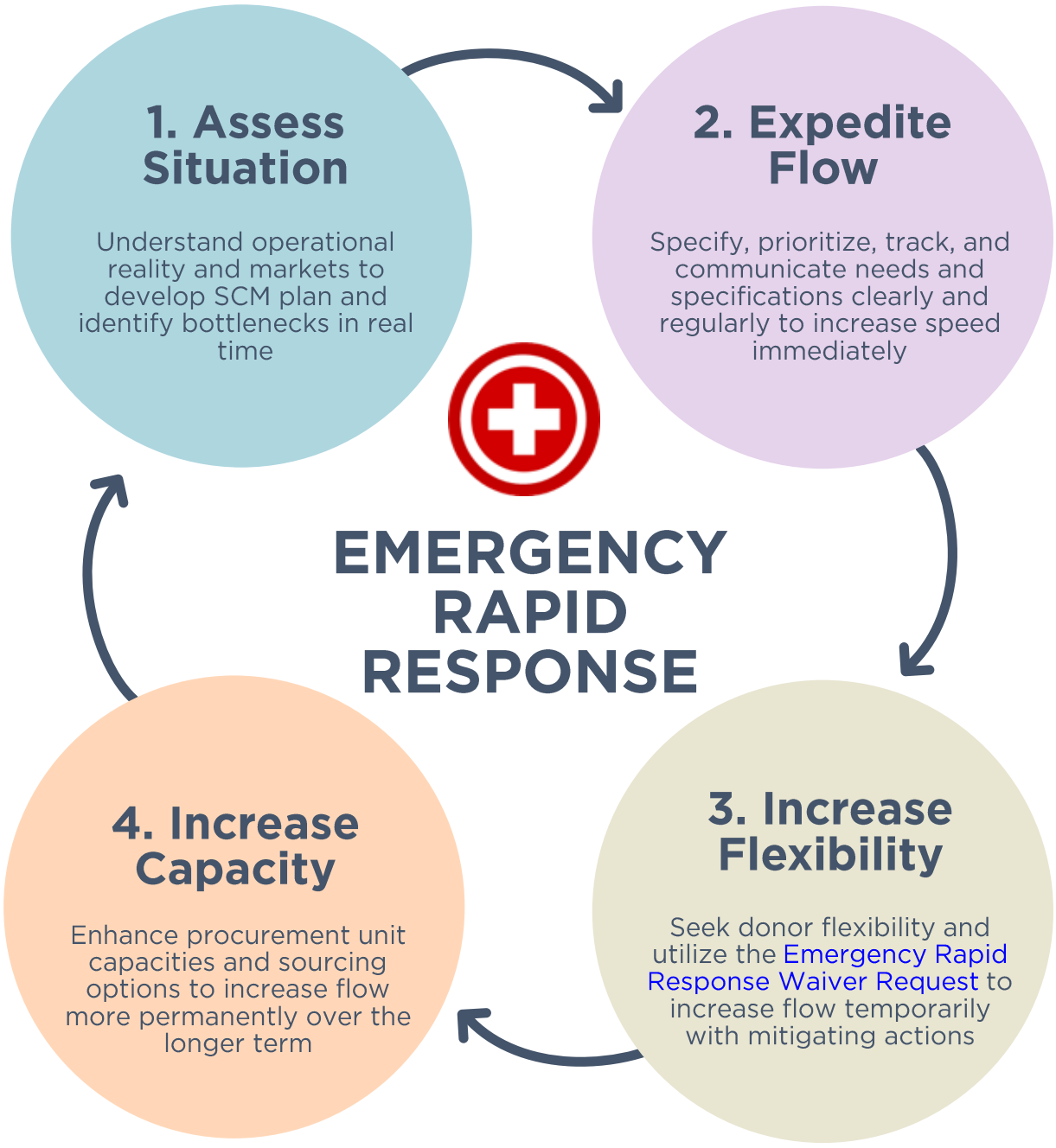
For detailed guidance on adding a supplier to the Supplier Master in Insight, see the How to Complete the Supplier Webform Job Aid.

EMERGENCY PREPAREDNESS AND RESPONSE

The documents listed below were created by the CRS Humanitarian Response Department (HRD) to guide procurement decisions, activities, and processes during an emergency.

- Emergency Field Operations Manual (EFOM) | Emergency Operations - Office Setup
- Emergency Field Operations Manual (EFOM) | Project Management - Procurement
- Emergency Procurement Recommendations and Best Practices

As shown in the figure below, CRS procurement during emergency rapid response follows a continuous improvement cycle.



Source: Adapted from Emergency Procurement Recommendations and Best Practices

Country programs and regions should do the following to prepare for emergencies during non-emergency down time.

- Become familiar with the CRS best practices described or referenced in this section.
- Make an emergency response plan **before an emergency develops**.
- Conduct studies of local and regional markets to improve emergency preparedness.

Develop Emergency Plan

Every emergency response plan should include basic internal controls to avoid misuse, loss, and fraud. At the same time, emergency response plans should be easily adjustable with new information to maintain or increase processing capacity (flow) and delivery speed, despite potential obstacles or operational constraints.

Identify Emergency Supplies in Inventory

- Identify supplies that are commonly needed in emergencies, and, where possible, designate equivalent goods in inventory that do not have best-used-by dates (BUBDs)/expiration dates as emergency stock.

The CRS Humanitarian Response Department (HRD) maintains specifications of all standard emergency relief supplies such as tarps, jerry cans, and blankets.

Monitor Prices of Emergency Goods and Services

- Conduct regular research on the prices of goods or services that are commonly procured by CRS during emergencies.

Identify and Evaluate Suppliers for Emergency Procurement

- Collect and retain contact information on the goods or services that are usually procured by CRS during emergencies.
- Fully vet new vendors for eligibility in line with Supplier Master Policy requirements **before** contracting with them for goods or services.
- **In emergencies arising from conflict in the area**: Avoid contracting with any supplier (current or new) known to have links with one of the parties in the conflict (e.g., a supplier or transporter of arms or other supplies to a military actor or another combatant) and seek alternative options (if available).

Prioritize Needs and Delivery Sequence During Emergency Response

- Prioritize emergency needs over developmental needs.
- Seek input from the programming team to categorize emergency needs further (e.g., immediate operational needs, next intervention needs, more sustainable setup/more complex programming needs) and determine the proper sequence of addressing these needs.

Use the Most Appropriate Procurement Option That Is Available and Acceptable

- **When delivery time is determined to be a higher priority than price, or when only one vendor is capable of supplying the needed good or service**: Negotiate with a vendor to obtain the lowest price possible.
    - ✓ Document efforts to negotiate for the lowest price possible and the rationale behind decisions to a sole source (see Sole Sourcing section in this chapter) or to prioritize other factors over price on any required forms (e.g., the Sole Source Authorization Form, etc.)
- **When the costs are comparable and the response duration is limited**: Outsource **non-strategic** activities such as kitting from suppliers, fleet transport from car rental companies, sourcing functions from external procurement agents, etc.
- **When written bids are not an option**: Initiate procurements above the direct procurement threshold through oral RFQs (must be made to a minimum of three bidders, where possible).
    - ✓ Document verbal bids after the conversation by sending a memo or an email to the supplier or a supervisor.
- **When more flexibility with donor requirements is needed**: Communicate directly with donors to agree upon and incorporate new standard options (e.g., waiving a requirement to conduct public tenders).
    - ✓ Obtain donor permission **in writing before** making any changes or taking any corresponding actions.
- **When a one-time procurement or a blanket waiver for a limited time period is needed**: Submit the Emergency Rapid Response Waiver Request to seek adjustment or waiver of Standard Operating Procedures (SOPs).
- **When risks are a high concern**: Request high-level TDY support from a seasoned subject matter expert (SME) (e.g., a senior Global Finance or Global Procurement staff member, an internal auditor, etc.) whose sole task is to focus on reducing risks and ensuring compliance.

6.3 ROLES AND RESPONSIBILITIES

The figure below lists the functions and activities of seven roles involved in procurement.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Function/Activity	Procurement Manager	Procurement Officer/Buyer	Programming Staff/Subject Matter Experts	Supply Chain Manager	Project Manager	Preparer	Requestor	Head of Operations
Submits requisition to begin the procurement process			C			R	R	
Communicates with supplier(s) during the tendering process	C	R	C					
Participates in bid committee (if applicable)		R	R					
Negotiates with supplier	A	R						
Creates PO/contract	A/ R	R			I	I	I	
Approves PO/contract	C	C			I	I	I	R*
Monitors PO/contract requirements and supplier performance (e.g., status of activities, expenditures, pending expirations, etc.)	A/I	R	I	I	C **	I	I	
Confirms that goods or services are received before payment is made to the supplier(s)					A	R	C	
Closes out PO/contract	A	R	C		C	I	I	

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

**Heads of Operations are responsible for approving all POs/contracts. For additional required approvers, depending on the value of the PO/contract, refer to the Procurement Approvals Policy.*

*** For contracts for certain services, the requesting department may be responsible, as their technical knowledge makes them best placed to manage the PO/contract and assess whether the deliverables are being submitted on time and of sufficient quality.*

The table below lists six general procurement roles and their respective responsibilities.

Department	Duties & Responsibilities
Country Representative	• Works with the Global Procurement department to ensure that procurement in country offices is carried out following CRS and donor procurement policies and regulations, including award-specific requirements, as applicable.
Procurement Staff	• Purchase products and services as efficiently as possible and in compliance with the policies of CRS and its donors. • Facilitate the identification of qualified suppliers and update the Supplier Master accordingly. • Lead annual procurement planning process with periodic follow-ups to ensure that the plan is on track throughout the year. • Conduct market surveys and check local prices for goods and services. • Receive, register, and process requisitions. • Facilitate the evaluation of bids received from a tender process and bid committees during the evaluation process of bids. • Write sole source justifications, when applicable. • Ensure that no commitment is made to any vendor or supplier who has not been entered into the Supplier Master. • Issue POs and amend them as needed. • Draft supplier contracts in coordination with the requesting department and legal counsel. • Coordinate with the warehouse and the vendor to ensure proper delivery and receipt of goods. • Inform the vendor, in writing, of any discrepancies between PO/contract and goods/services received. • Ensure timely and complete archiving of documents. • Provide timely feedback to requesting departments on problems with requisitions, updates on orders, etc. • Manage communication with bidders and vendors. • Provide staff with guidance on the procurement policies and procedures of CRS and its donors.
Administration/ Reception	• Keeps a list of bidders that have taken a copy of a tender. • Keeps the register signed by all bidders at the time of bid submission, receives bids, and safeguards sealed bids in a tender box until the bid opening.

Department	Duties & Responsibilities
Requesting Department	• Requests information from the procurement department as needed about market availability, vendor lead-times, and costs for goods and services. • Participates in the procurement planning exercise. • Initiates a procurement by submitting a complete requestor form per approved plans and budgets, applying correct project and account codes, and ensuring the inclusion of sufficient specifications. • Amends or replaces any requestor forms based on changing needs or feedback provided by the procurement department. • Participates in bid committees to evaluate bids. • Approves selected bids before a commitment is made to the vendor, verifying specifications of a good or qualifications of a service provider, the final cost, and the proposed delivery date(s). • Writes sole source justifications, when applicable.
Bid Committee	• Signs a conflict of interest (COI) form individually and specifically related to the procurement at hand. • Opens bids for procurements that require the bid committee. • Evaluates bids against the bid criteria in the tender. • Reviews and signs off on the bid evaluation sheet.
Office of General Counsel	• Reviews agreements above the threshold specified in Procurement Contracts Policy.

The callout box below lists roles and responsibilities for sourcing vendors for CVA programs.

Roles and Responsibilities for CVA Programs

Department	Duties & Responsibilities
Procurement Department	• Manages the process of soliciting and identifying qualified vendors for CVA programs. • Follows all procedures created specifically for sourcing vendors for these programs (these procedures are similar to the pre-selection process but are specific to the CVA programs).

SEGREGATION OF DUTIES

Procurement duties must be segregated during the procurement process for the reasons listed below.

- To uphold CRS ethical standards.
- To prevent staff from concealing inappropriate actions such as fraud and corruption during the procurement process.
- To ensure accountability and transparency throughout the procurement process.

For example, the person who initiates a procurement request **cannot** be the same person who manages the invitation for bid or approves the procurement and signs the PO/contract.

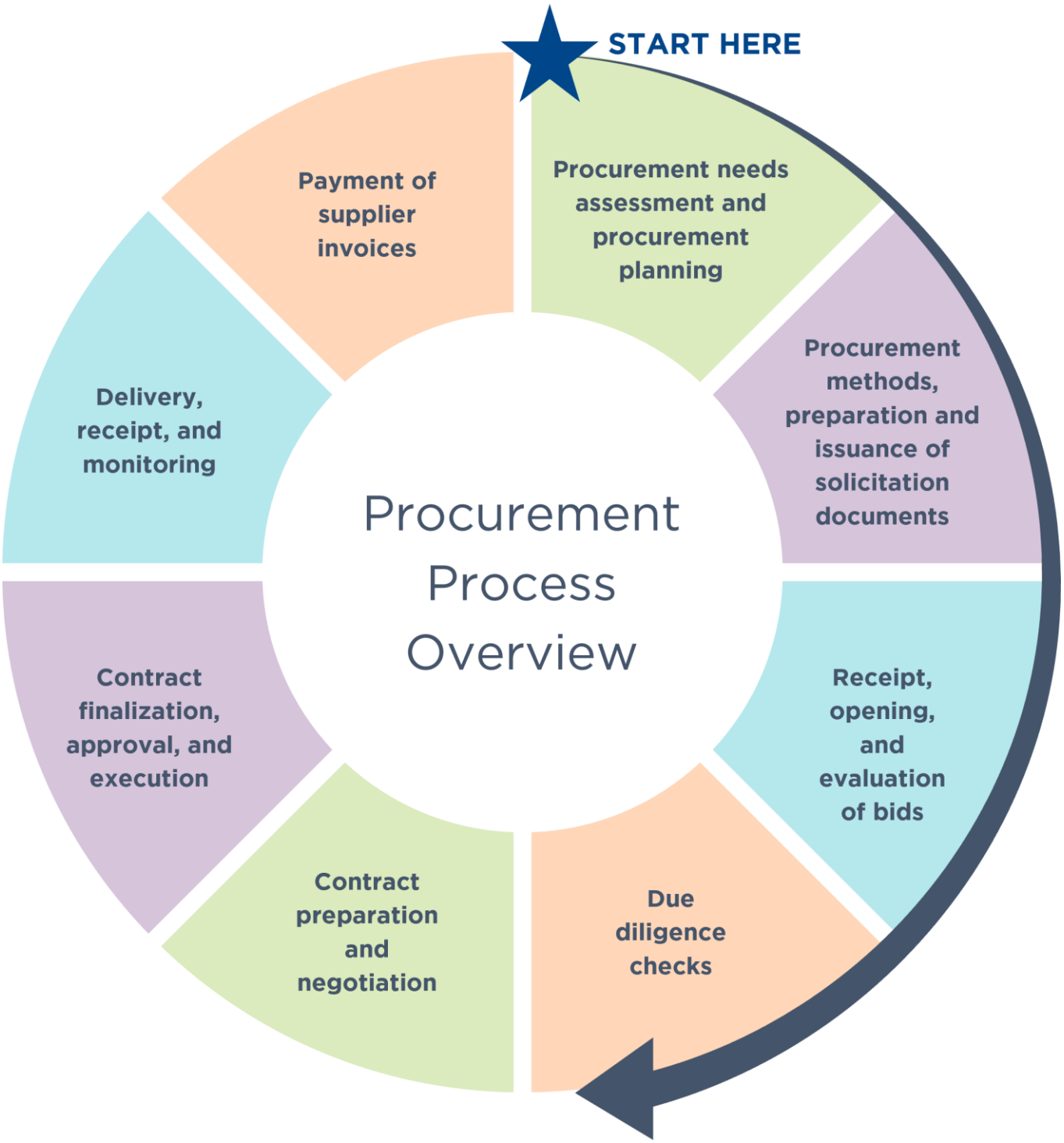
The table below lists the typical segregation of procurement duties.

The Person Who Performs This Function...	...Should **Not** Perform This Function
Initiates purchase requisitions	• Receive goods • Prepare receiving documentation
Procurement	• Requisition of goods or services for other departments or projects
Procurement	• Provide specifications or SOW
Procurement	• Approve POs or service contracts
Procurement	• Receive goods • Prepare receiving documentation
Procurement	• Perform quality control tests • Evaluate goods received
Procurement	• Process payments to vendors
Procurement	• Have custody over assets or goods purchased
Procurement	• Have custody of blank checks
Initiates purchase requisitions	• Request bids or bid clarifications from suppliers
Initiates purchase requisitions	• Commit CRS to any changes to the contract (PO or purchase agreement)
Drafts a tender	• Be a voting member of the bid committee

6.4 PROCESSES

This section provides guidance on how to plan and prepare for procurement, tender and evaluate bids, award and manage contracts, and manage suppliers effectively.

The figure below is an overview of the process from procurement to payment.



The process begins with a **requisition** (e.g., a Request for Goods and Services form is submitted for a programming or operational need).

Once the requisition is approved by the Budget Owner/Project Manager, the requisition is assigned by the Procurement Manager to procurement staff, the Procurement Manager of another country program, or Global Procurement for **sourcing, tendering**, and **bid evaluation**.

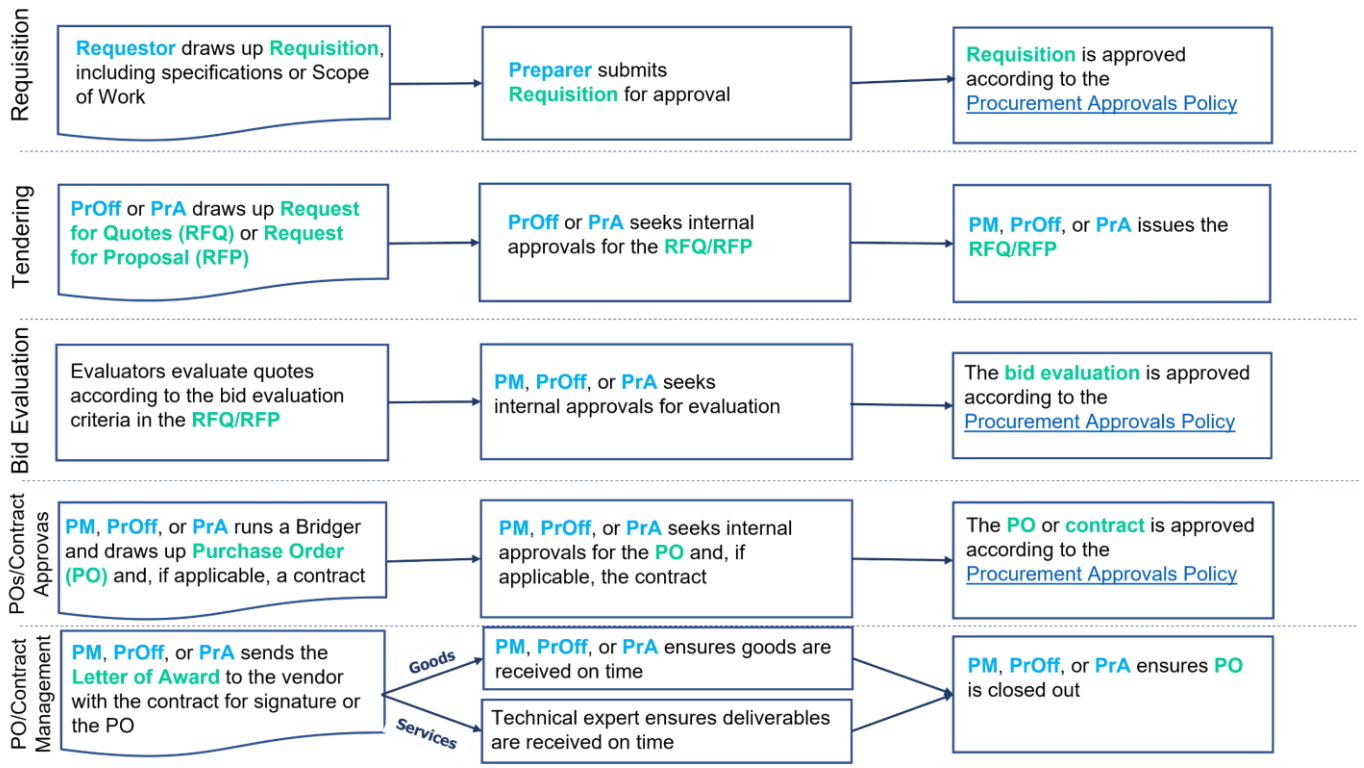
Once the supplier that offers the best value-for-money is identified and awarded an offer (following all applicable CRS, donor, and local/national government rules and regulations), a **PO** is created.

Once the PO is approved as per the Procurement Approvals Policy, it is sent to the supplier. If needed, a contract may also be signed and attached to the approved PO. **At this point, CRS can conduct business with the supplier and receive the agreed-upon good(s) or service(s).**

Once the goods or services are received by CRS according to the terms and conditions of the contract, PO, or purchase agreement, **payment** can be made to the supplier.

Once the supplier has fulfilled all contractual obligations, the final step is **PO/contract closeout**.

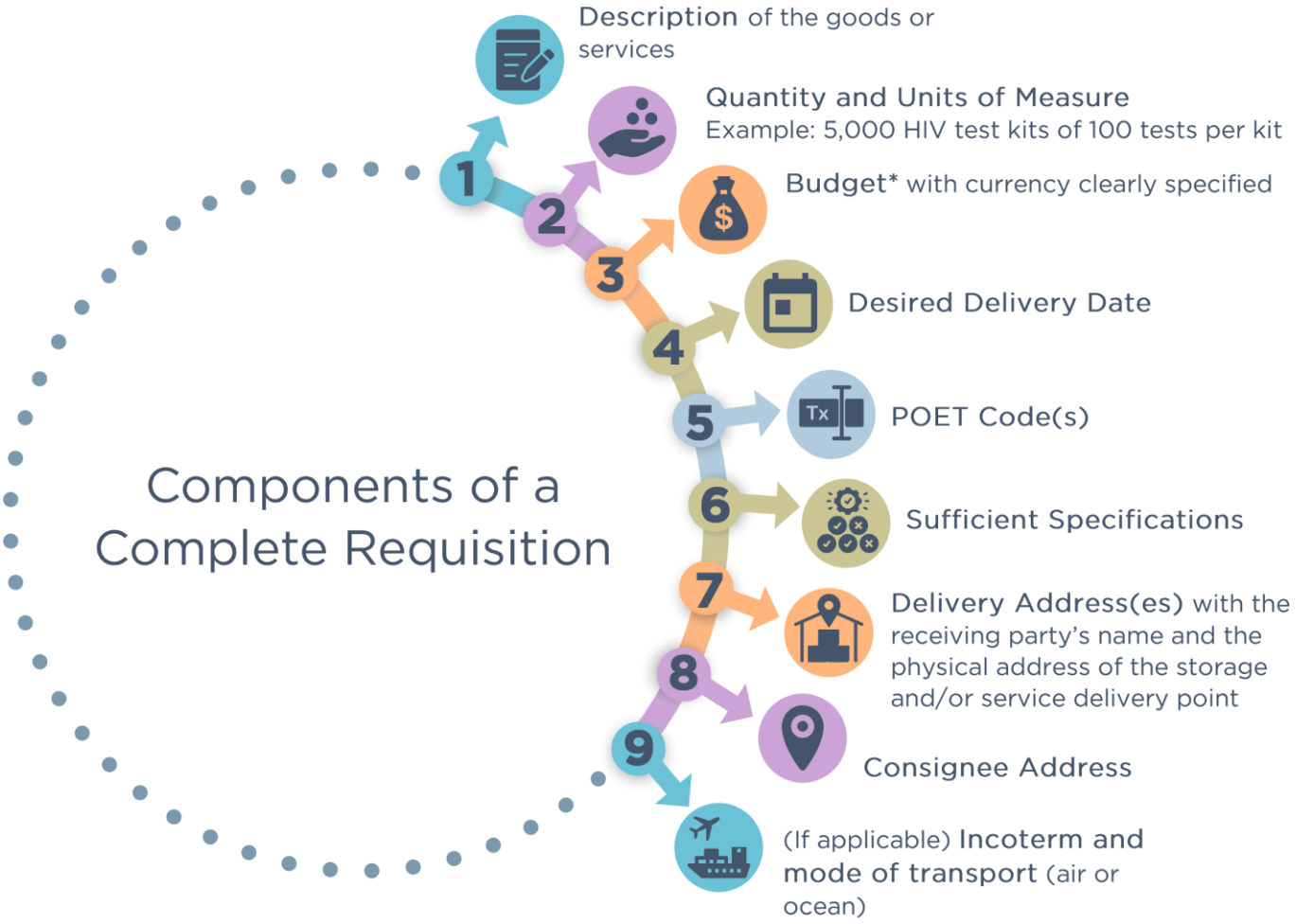
The figure below shows the sequence of activities that occur in these procurement processes. For the full titles and responsibilities of the roles abbreviated in the figure below, see the Roles and Responsibilities chapter.



REQUISITIONS

A requisition is a formal indication by CRS staff of a programming or operational need. Requisitions initiate the rest of the procurement process and can be submitted at any time.

The figure below shows components that constitute a complete requisition.



* The budget includes the cost of the good itself and all other applicable costs. For **goods**, other costs include international transportation, independent sampling and testing, etc. For **services**, other costs include travel, lodging, per diem, visa, etc.

Procurement of Laboratory Equipment

Before submitting a requisition for laboratory equipment, the **Requestor** must ensure that such procurement:

- ☐ Complies with national laboratory policies and strategic plans.
- ☐ Considers the physical infrastructure and biosafety level of the laboratory where the equipment will be used.
- ☐ Considers the knowledge and experience level of end users who will be using the laboratory equipment.



Requestor Form

Requestors are encouraged to submit requisitions to the procurement department as early as possible. To submit a request **for goods or services**, a Requestor must:

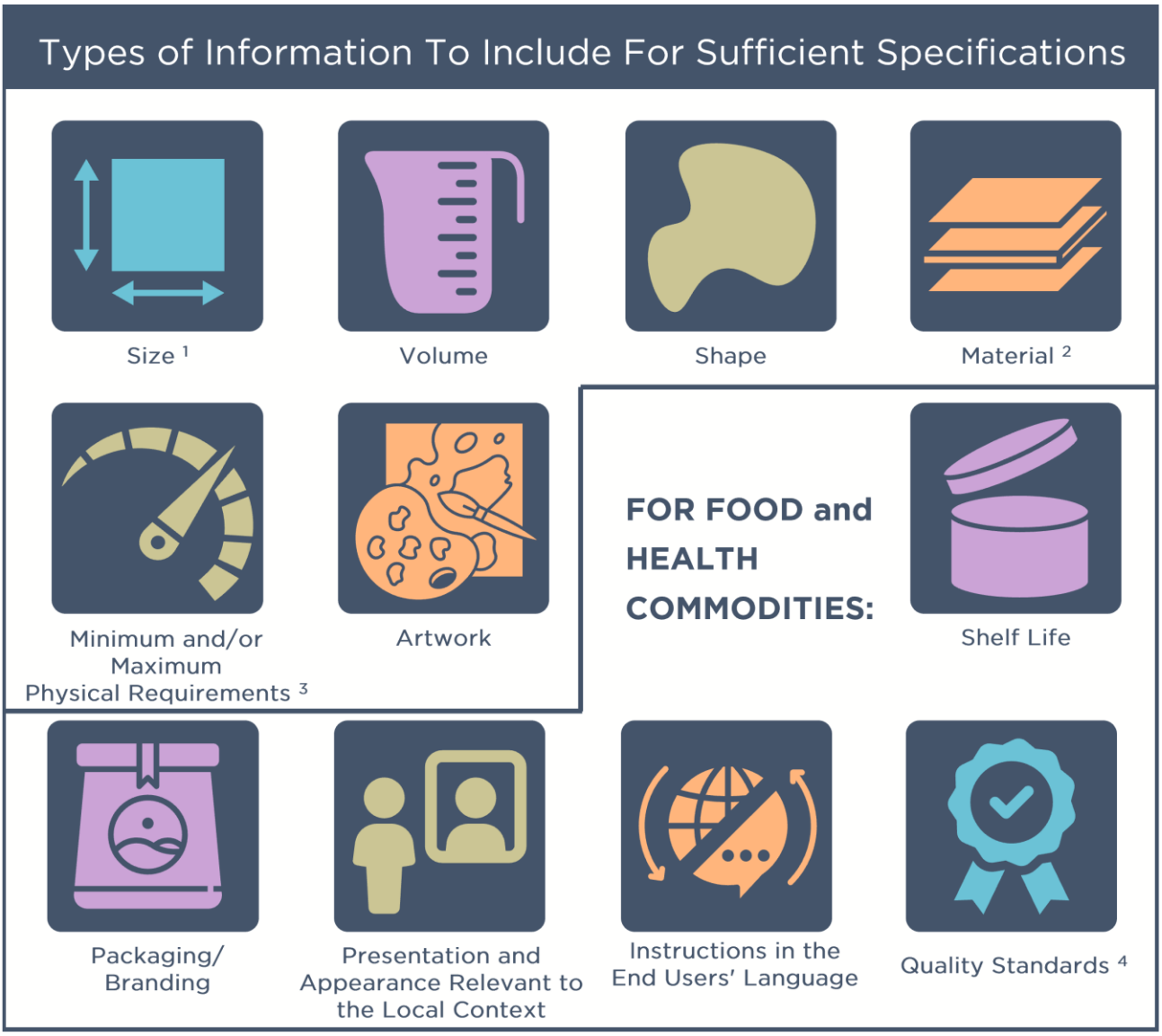
- ☐ fill out the Requestor Form for Goods and Services (for Insight-enabled countries) or the Interim State Request for Goods and Services (for Insight future-release countries); and
- ☐ submit sufficient specifications (for goods) or scope of work (for services) to ensure the good or service meets their requirements and project needs.

The requestor form must include all relevant functional, performance, and technical specifications of the good or service that is being requested. **Procurement staff send specifications to suppliers as they are written in the requestor form.**

The sections below discuss information that constitutes sufficient specifications and insufficient specifications.

Sufficient Specifications

The figure below shows different types of information to include in the requestor form for sufficient specifications of goods that are needed.



[1] Size includes minimum and/or maximum length, width, height, diameter
[2] Material type includes plastic, metal, cotton, etc.
[3] Minimum and/or maximum physical requirements include size, shape, material, etc.
[4] Quality standards include WHO-prequalified, Stringent Regulatory Authority-approved, USDA food commodity requirements, etc.

Insufficient Specifications

The table below gives examples of goods that could be rightfully procured when insufficient specifications are provided on the requestor form. In each of the examples in this table, the requesting department would need to decide whether to:

- use the inadequate good that was received (risking incomplete or non-compliant fulfillment of the need); or
- submit a revised requisition with sufficient specifications for the needed good and return the inadequate good (requiring additional expenditure of time and money).

Insufficient Specifications	Sufficient Specifications	Inadequate Goods That May Be Procured Due to Insufficient Specifications
Tent - four sides	Tent - at least 3 meters high with four sides - windows on three sides of the tent - windows on the top half of the tent wall - square or rectangular with at least 0.5 meters on each side - canvas, nylon, or other similar material	The requesting department could receive a tent that is too big, too small, or does not have windows.
Hospital bed - with wheels	Hospital bed - has four wheels - is at least 2 meters long by 0.6 meters wide - folds in half	The requesting department could receive a bed that does not fold in half, is too narrow, or is too short.
Bucket - with a handle and spout - a minimum volume of 15 liters	Bucket - with a handle and spout - at least 50 cm in diameter - at least 70 cm in height - Metal	The requesting department could receive a bucket made of a material that is not wide enough or not sturdy enough to do the needed job (e.g., a plastic bucket).
Registers - 325mm width by 420mm depth by 202mm height - with partner logo - with 44mm wide paper	Registers - 325mm width by 420mm depth by 202mm height - with partner logo - with 100% lint-free paper that is 45mm wide	The requesting department could receive low-quality register paper that tears easily.
Latex gloves - 100 pairs	Latex gloves - 25 pairs in size small - 50 pairs in size medium - 25 pairs in size large	The requesting department could receive all pairs in the same size or too many/too few pairs in specific sizes.

For more information about specifications for goods and services, see the Requests for Goods and the Requests for Services sections in this chapter.

For in-depth guidance on filling out the Insight Requestor Form, Requestors should refer to the Requestor Form Checklist.

Requests for Goods

All requests for goods must include sufficient specifications of the item(s) to be procured.

Specifications are written and finalized by the requesting department in the requestor form, with input (as needed) from other departments, subject-matter experts (SMEs), or technical experts.

The figure below lists examples of the experts who could be consulted for the specifications of different types of goods.

Type of Good…	…Corresponding Department / Subject Matter / Technical Expert
Computer equipment	GKIM (global) or Information Management staff (country)
Vehicles	Fleet staff
Food, WASH, shelter, etc.	CRS technical experts
Health products, medical consumables, and equipment	Ministry of Health
Agriculture products, seeds	Ministry of Agriculture
Furniture, chairs, etc.	Facilities staff
Information, education, and communications materials	Marketing and Communications staff

Goods Specifications

The figure below illustrates the types of information to be included in the requestor form for functional, performance, and technical specifications of goods to be procured.

This Type of Specification…	…Includes This Information*
Functional	Details **what the item must do** (e.g., the vehicle must be able to drive on rough terrain, the goods must stick to Velcro, or the sheets must fit a medical bed)
Performance	Details **what deliverable or outcome the item must achieve** (e.g., constructing a well with a minimum diameter of 1 meter and a minimum depth of 45 meters)
Technical	Details **what characteristics the item must have** such as design, size, shape, material, power input and output, or required manufacturing process (e.g., the medical bed must have four wheels, fold in half, etc.)

This Type of Specification…	…Includes This Information*
	✓ For office materials, specify the minimum thickness of the paper or the minimum ballpoint needed for pens ✓ For shelter materials, specify the thickness/corrugation of aluminum sheets ✓ For food commodities, consider varieties, grades, and standards (e.g., moisture levels, maximum aflatoxin level, grain size, etc.)

* A brand name, manufacturer name, or model number is only included in certain situations. For example, CRS sources standardized HP® hardware for global IT purposes, and CRS typically sources Toyota vehicles because they are the only vehicles available in the country with access to prompt repairs and spare parts.

Specifications should also include the details listed below, when applicable.

- Quality assurance requirements (e.g., Codex Alimentarius food standards).
- Internationally recognized standards (e.g., the generally accepted accounting principles).
- Internationally recognized certifications (e.g., International Organization for Standardization).
- Environmental considerations (e.g., the laptop is made for tropical conditions).

Each specification can add cost to the procurement, so every specification must be justifiable to a donor as sufficient to meet the minimum need rather than the ideal item desired.

For example, if a motorcycle with an 8ml oil tank that costs 2,700 USD is sufficient to meet the need, then CRS could not justify an additional 200 USD cost to the donor to procure a motorcycle with a 10ml oil tank that costs 2,900 USD.

Best Practices for the Procurement of CVA Assets

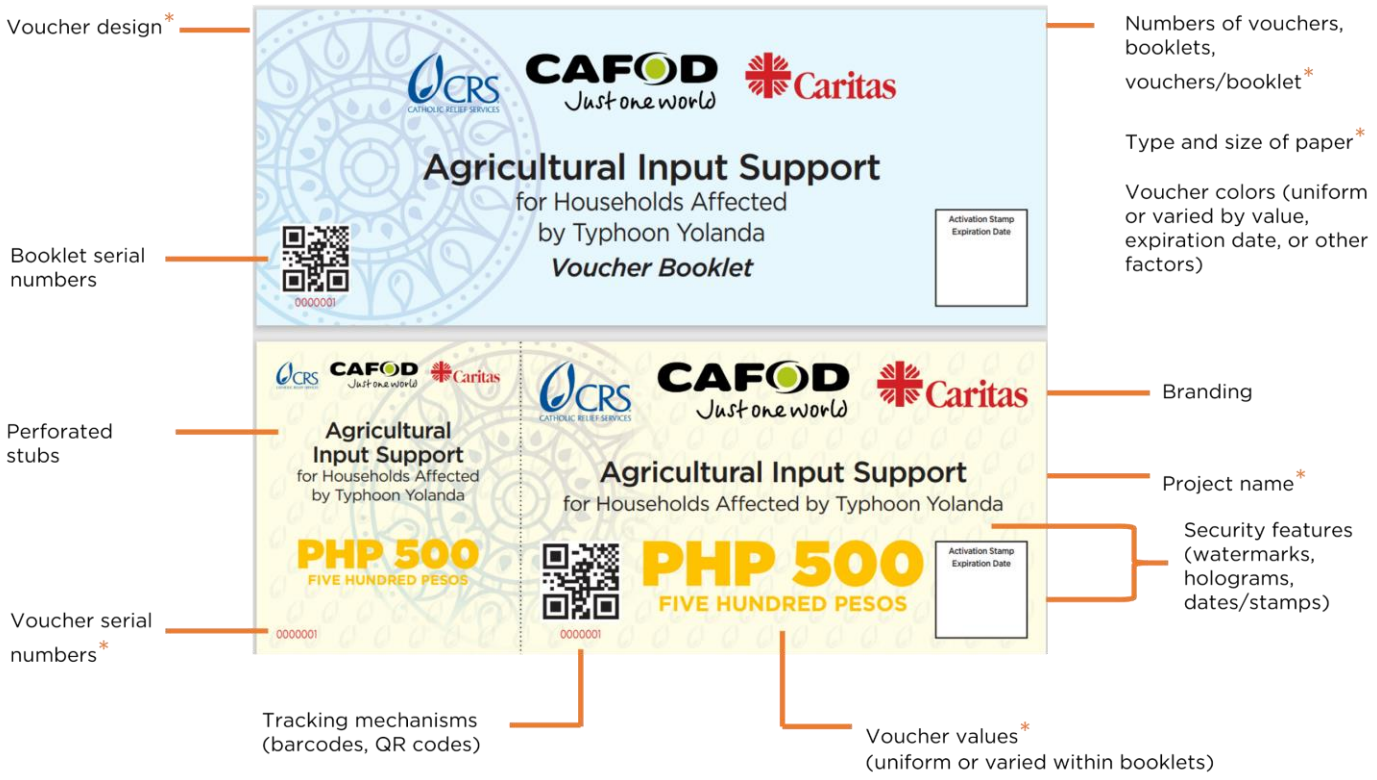
- Procure CVA assets outside of the distribution area (when possible) to reduce the risk that additional assets are printed and released into the local market(s).
- Weigh the cost of high-security voucher features against the risk of fraud in the local context.
- Allow sufficient or extra lead time for the receipt of CVA assets to avoid programming delays (plan for even longer lead times when CVA assets are procured internationally and must pass through customs).



Examples of Item Specifications

Paper Vouchers

Typically, paper vouchers are customized to specific projects and activities.



*These features should be minimum requirements.

E-Cards

Typically, e-cards are generic, but they can be customized to specific projects and activities.



*These features should be minimum requirements.

Health Commodities

Specifications for Pharmaceuticals, Rapid Diagnostic Tests (RDTs), and Laboratory Equipment

For detailed lists of the requirements for the health commodities reference above, see Specifications for CRS Procurement of Health Commodities.

Requests for Services

All requests for services must include sufficient specifications of the service(s) to be procured.

Services Specifications

An SOW describes the problem, goals/objectives, activities, deliverables, reporting, timing, payment, and any special terms, conditions, or requirements of the consultant or service provider. Eventually, the SOW becomes part of the contract between the supplier and CRS.

The table below shows what information to include for sufficient specifications of services to be procured.

Section	Content Guidelines	Purpose
Required		
Statement of Problem	Describe the problem to be addressed, the expected situation at the end of the consultancy, the target beneficiaries, and the reasons for the donor's assistance (regarding donor policies and involvement in the sector)	To explain the reasons for undertaking the assignment and why it is designed the way it is
Goals/ Objectives	State the goals and objectives of the consultancy	To specify expectations to be achieved by the consultancy
Activities	Describe activities typically starting with a verb (e.g., assess, identify, prepare, conduct, review, etc.).	To identify necessary tasks to be carried out to achieve the stated goals/objectives
Deliverables	Describe quantifiable end results that are: • Supported by at least one activity (e.g., a report that summarizes a series of interviews) • Stated in terms of time, location, quality, and quantity (when, where, what quality, how much)	To describe results that can be verified tangibly
Reporting	List all reports that are required (quarterly, final, etc.), including requirements such as: • contents • number of copies • language • recipients • submission method (electronic, hard copy, or both)	To inform bidders about reporting deliverables that are required with the assignment
Timing	State the timelines for services to be provided (e.g., the total number of days or hours to carry out the activities)	To inform the bidder about the time period and hours required by the assignment
Optional		
PO/contract Monitoring	Include the following information for highly complex services (e.g., construction): • an oral and written reporting system that highlights progress and problems and measures them against expected performance and results • performance and progress review meetings at specific intervals • formal testing • technical reviews and audits • requirements for communication of sensitive information	To ensure that work is proceeding as required in the PO/contract and problems that arise during the course of the PO/contract are promptly addressed and resolved

The SOW plays an important role in being able to evaluate bids against the required criteria and documenting why a certain vendor was selected.

For recurring needs involving the procurement of services, the requesting department can create a shortlist of qualified service providers or consultants on an ad-hoc basis or by tendering an Expression of Interest (EOI), which is used at CRS like a Request for Information (RFI).

Sample SOW Formats

Below are examples of different formats that may be used to write an SOW.

- Sample SOW for Case Management Package (Implementation Guide + Support Tools)
- Sample SOW for Training Workshop

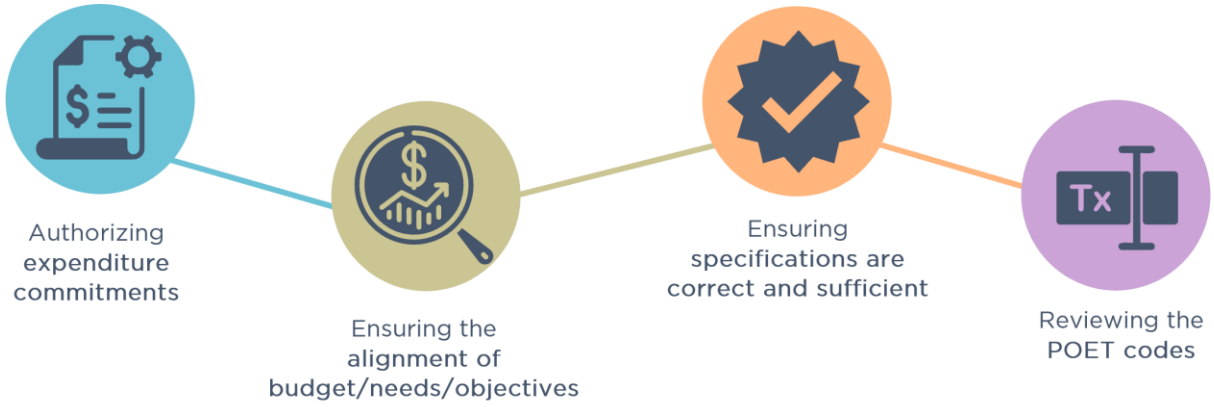
Requisition Submission and Approval

Requisitions that are complete (i.e., all fields are filled in, specifications are sufficient) should be submitted to procurement staff for review and approval according to the Procurement Approvals Policy.

Submitting Requisitions in Insight

For in-depth guidance on submitting requisitions in Insight, Preparers should refer to the Insight Procurement Reference Guide the Requisition for Goods Job Aid or the Requisition for Services Job Aid.

Requisition approvers are designated in the Procurement Approvals Policy and the local country program procurement policy. Requisition Approvers are responsible for the activities shown in the figure below.



Approving Requisitions in Insight

Requisition Approvers should pay special attention to verifying the project number, expenditure organization, expenditure type, and task (POET) used in the requisition. This POET number flows from the requisition to the PO and then to the inventory management module. Errors in the requisition lead to time consuming correction efforts.

For in-depth guidance on approving requisitions in Insight, Project Managers, Heads of Program, and Country Representatives should refer to the Insight Procurement Reference Guide, SCM Expenditure Type Guidance Document, and the Approving a Requisition Job Aid.

Verifying In-Country Registration and Approval of Requested Health Commodities

If the submitted requisition does not indicate confirmation by procurement staff that the requested health commodity is registered in country and approved for sale/distribution and use in the country of intended use, the designated requisition approver should verify this.

TENDERS

The tendering process should be carried out openly and fairly so CRS can obtain the best value for money.

Sourcing Options

Goods and services can be sourced locally, internationally, or both depending on the considerations listed in the figure below.

Procurement Managers always have the option of conducting a competitive process concurrently through Global Procurement and at the local level and examining bids received through both processes to decide whether a local offer or an international offer is the best value for money.

Competition

Are there enough qualified suppliers locally to receive several adequate offers?

Quality

Can quality be ensured in the local market?
Are there international quality standards that must be adhered to (and if so, can local suppliers provide goods that meet these standards)?
Are local products better adapted to the local climate or environment (e.g., seed varieties)?
Do target populations have strong preferences for local varieties or characteristics of food items?

Lead Time

Is there enough time for air or ocean transit and customs processing if the good or service is procured internationally?

Price

Does either option yield a less expensive total cost after including transit and customs clearance costs, after-sales service costs, or other factors?

Impacts on Local Market Systems

What impact on local prices and market activity is anticipated by procuring imported goods?
Will the distribution of imported goods displace local market activity or reduce demand and prices for local market actors?
Will local procurement disrupt local supply or cause price increases for local consumers?
Could local procurement incentivize, develop, or strengthen local market systems for more sustainable outcomes?

Consultant's Country of Residency

When a potential consultant does not have residency in the country where their services are being engaged, sourcing should be managed by Global Procurement to review and address potential labor law concerns.

Considerations for Sourcing Health Commodities Locally

When considering whether to purchase health commodities locally, country programs should consult with Global Procurement, so Global Procurement can review and address any concerns such as quality assurance.

Temporary Adjustment of CRS Procurement Protocols for Emergency Response

During an emergency response, an Emergency Rapid Response Waiver Request can be used to **temporarily** increase the flexibility of **internal** CRS procurement policies and procedures. Below are some ways this waiver could be used.

- Adjustment of authorization levels or requirements.
- Allowances for sole sourcing or higher thresholds and lighter time requirements for advertising.
- Use of existing Global Payment Solutions for emergency response operations depending on whether Financial Service Providers (FSPs) are operating in the target country.

If a waiver is granted, procurements during emergency response still must comply with donor requirements (unless the donor gives procurement staff written authorization to deviate the requirements).

Tender Methods

Tender methods can be competitive (public or restricted) or involve no competition (single source/sole source). Competition is the most effective method to ensure the best value for money, but there are circumstances in which competitive bidding does not provide an adequate response for CRS projects. In such cases, procurement can be carried out through single sourcing or sole sourcing, which is described in more detail later in this section.

International Competitive Bidding (ICB)

Description	A **public tender method** advertised internationally.
Use	• When the supplier is **not** required to have a presence in the country where the project is being implemented. • For large, complex projects where the equipment or service is not available locally or where there is not much local competition.
Advertising Requirements	Post tender advertisement on at least one international tendering website (typically on CRS.org, devex.com, dgmarket.com, and/or reliefweb.int). The advertisement includes a basic description of the good or service, the last bid receipt deadline, and CRS contact information to obtain a copy of the tender by email.
Bid Submission	Sealed bids are typically required.

National Competitive Bidding (NCB)

Description	A **public tender method** advertised nationally
Use	• When the supplier is required to have a presence in the country where the project is being implemented. • When the good or service is available locally. • For higher-value and/or complex procurements, with the goal of maximizing competition
Advertising Requirements	Advertise in at least one national newspaper or tendering website. The advertisement includes a basic description of the good or service, the last bid receipt deadline, the CRS address where a vendor can physically collect a copy of the tender document, and CRS contact information to obtain a copy of the tender by email.
Bid Submission	Sealed bids are typically required.

Limited Bidding

Description	A formal **restricted tender method** that directly invites specific suppliers to submit bids
Use	• When suppliers have already been pre-qualified by CRS and are in the Supplier Master. • When the equipment or service can only be sourced from a limited number of suppliers. • For frequently purchased procurements or complex projects where there is a short list of qualified suppliers. • For procurements of health commodities, where suppliers must be approved by the WHO, a Stringent Regulatory Authority, or another internationally recognized regulatory body. • When the project has primary or secondary objectives to strengthen market systems or particular types of market actors (e.g., restricting tenders for school feeding suppliers to local producer groups to strengthen local food systems).
Advertising Requirements	Request bids from as many potential bidders as possible to ensure maximum competition. Tender invitations that are e-mailed to potential suppliers should be sent by blind copy, so no bidder is aware of other potential bidders.
Bid Submission	Sealed or emailed bids are acceptable.

Direct Procurement/Oral RFQ Under 1000 USD

Description	An informal **restricted tender method** where bids are requested in writing (when possible) from one or more suppliers (these purchases should be conducted through pre-qualified suppliers when possible and must demonstrate that a reasonable price was obtained).
When to Use	• For readily available, off-the-shelf goods when the cost of the goods does not exceed 1,000 USD.
Advertising Requirements	None.
Bid Submission	Sealed, unsealed bids, or emailed bids are acceptable. Verbal quotations are acceptable and must be documented once the conversation is completed, either through a memo or an email to the supplier or a supervisor.

Single Sourcing and Sole Sourcing

Single sourcing and sole sourcing are two types of formal tendering methods in which a supplier is selected without competitive bidding.



Even when only one supplier is selected to bid, best practice is to issue a tender as though it is being sent to multiple suppliers. Procurement staff must review the proposed price from the vendor and verify that it is competitive with published price lists or market studies.

All single source and sole source requests for procurement must include a signed Sole-Source Authorization Form with clear and concise justification that is specific and relevant to the needed good or service and is defendable to external auditors.

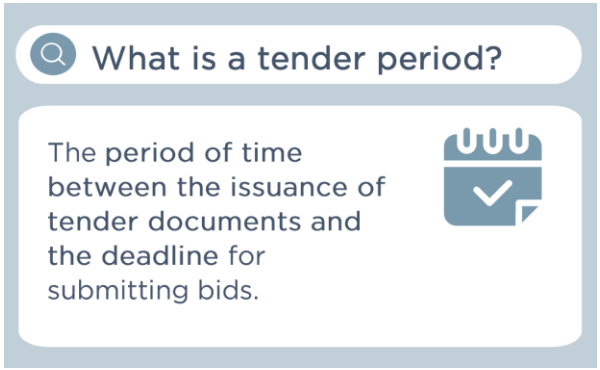
The table below lists acceptable reasons to justify the use of single sourcing or sole sourcing.

Reason	Rationale	Example(s)
An event outside the control of CRS	CRS must meet unforeseen project deliverables in a timeline that does not allow for any type of competitive process.	• An earthquake occurs • An unexpected request from a funder with a short timeline for deliverables
Only one qualified vendor	There is only one vendor qualified to do the work.	• Specific software that is only manufactured by one vendor • A consultant has a unique combination of skills and knowledge, such as Ministry of Health experience, malaria technical expertise, and marketing expertise • A security situation requires a specific hotel due to its safe location
A competitive process was already carried out, and CRS needs to use the same vendor to procure additional, identical goods or services	It is cost-prohibitive to use a new vendor instead of a vendor already familiar with the goods or work	• CRS contracted with a consultant to do a report. Then, the donor unexpectedly asked CRS to present the report, and that same consultant is needed to assist CRS with the presentation. • CRS contracted with a vendor to purchase 50 vests for an event. A second event was unexpectedly set up where we need 75 vests. CRS needs the 25 additional vests to be identical to the 50 already ordered, so the additional vests are procured from the same vendor
Standardization	For certain goods and services, the best value for money includes considering compatibility with CRS systems, streamlined maintenance of equipment, branding, consumer confidence, etc.	• Laptops for CRS employees
Private Sector Engagement (PSE) Partnership	In constrained markets where CRS is working to strengthen private sector capacity, the limited market linkages and purchasing power of local suppliers could hinder their success in a competitive process.	• Local seed company with whom CRS has a partnership

Tender Documents

A tender document gives potential suppliers specific **information and instructions** on preparing and submitting their bids, including:

- ✓ How to prepare and submit bids.
- ✓ What information to include in bids.
- ✓ What criteria CRS will use to evaluate bids (see Bid Receipt & Evaluation section in this chapter).
- ✓ When bids must be submitted.



Bid Submission Information & Instructions

Tenders must include the criteria that CRS will use to evaluate bidders' proposals. The requesting department—with support from a subject-matter expert (SME) or technical expert—provides evaluation criteria for procurement staff to include in the tender. The criteria can be labeled as either "required" (mandatory) or "preferred" (optional). Mandatory requirements will be treated as pass/fail during the evaluation.

Required Information

The information listed below is mandatory and **must be included** in all tender documents.

1. Product or service description.
2. Exact quantity or estimated quantity (if the exact quantity is not known when the tender is issued).
3. Clear specifications in the requestor form (for goods) or the SOW (for services).
4. **For goods**: Place of delivery, with the company name and physical address (e.g., CRS country office, CRS regional office, subrecipient office, donor office, regional warehouse, list of schools with school feeding programs).
5. A statement that CRS has the option to reject any or all bids when it is in the agency's best interests.
6. A copy of or link to the CRS Supplier/Service Provider Code of Conduct (available in multiple languages on the Global Supply Chain Management SharePoint site) or a link to this document on crs.org.
7. **For questions from bidders**: deadline and contact information (typically an email)

Legal/Administrative Criteria for Bid Evaluation

The information listed below related to Stage 1 – Legal/Administrative Evaluation of bids **must be included** in all tender documents.

1. Legal requirements for bid submission: Proof of registration and other country-specific documents that are required, if potential bidders have not already provided these documents to CRS.
2. Deadline for submission of bids.

3. Minimum bid validity period (typically 30, 60, or 90 days and is determined by the procurement team based on the market).
4. Instructions on bid submission, including:
   - Mode of submission (electronic, hand-delivered, mail, courier, fax),
   - Manner of submission (one- or two-sealed envelope system, naming convention/marking, number of copies of bids, etc.),[1]
   - Place of submission (email address, physical address, fax number, etc.), and
   - Format of submission (e.g., the bid is on the supplier's company letterhead and has the company stamp, etc.).
5. Scoring method to be used for evaluating legal/administrative criteria (usually Pass/Fail Scoring)
6. Special requirements for bid submission, including but not limited to the examples below:
   - The bid must be signed by the company's authorized representative.
   - The bid must include unit cost, quantity, and total cost.
   - The price(s) must be itemized by product cost, freight cost, insurance cost, and/or taxes (as required by CRS' Accounting for Purchased Inventoriable Goods (PRO-FIN-INV-025.01) policy).

Technical Criteria for Bid Evaluation

The information listed below related to Stage 2 - Technical Evaluation of bids **must be included** in all tender documents.

Goods

Pass/Fail Scoring is usually used for the technical evaluation **of goods**. The tender states that the goods must meet the specifications written in the tender to pass on to the next evaluation stage.

Services

Weighted Scoring is usually used for the technical evaluation **of services**.

Below is a list of frequently used criteria for the technical evaluation of bids **for services**.

- Demonstrated understanding of each requirement and goal in the SOW.
- Methodology/work plan that addresses each requirement and goal in the SOW.
- Ability to meet the timetable and schedule of deliverables.

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[1] At CRS, sealed bids are required primarily for public tenders and two-sealed envelopes are typically used for high-value procurements, complex procurements, a procurement for construction or other works, or when required by the donor. When the tender requires bids to be submitted in two separate envelopes, the tender should specify one sealed envelope for both the legal/administrative proposal and the technical proposal (for bid evaluation stages 1 and 2) and a second sealed envelope for the financial proposal (for bid evaluation stage 3), **with both envelopes placed in an outer sealed envelope**.

- Minimum of two proofs of past performance (i.e., an SOW completed of a similar size and scope).
- Minimum of two references (for information about conducting reference checks, see the Checking References section in this chapter).
- Ability to communicate and conduct business in a specific language.
- Personnel requirements (certifications and key qualifications), organizational chart, names, and resumes.
- Equipment requirements, with specifications for equipment (e.g., for a transportation procurement, the number of trucks available with a minimum volume of 60 cubic meters).
- Sample of work (e.g., for translation services).
- Interviews, demonstrations, or presentations.
- Other requirements specific to the service.

Financial Proposal for Bid Evaluation

A request for a financial proposal related to Stage 3 - Financial Evaluation of bids **must be included** in all tender documents.

Optional Information

The information listed below is **preferred but not mandatory** in tender documents, depending on the procurement context and type of tender.

May apply to goods or services

1. A quote submission form
2. Either a requirement that the bid state any deviations from the specifications or a checklist of specifications for the bidder, wherein the bidder checks off which specifications their bid meets).
3. Pre-bid or pre-proposal conferences or site visits, including the date, time, location, and any requirement for mandatory attendance.
    a. For complex procurements, CRS may want to invite any potential bidders to participate in a meeting well before the last bid receipt deadline. The objective of the meeting is to disseminate information that may be hard to convey in the tender documents and answer any questions the potential bidders may have.
4. **For public tenders (if required)**: The date, time, location, and list of permissible attendees for the public bid opening.
5. **If more than one lot is included**: A statement that "the RFQ will be awarded as one lot" or "the RFQ will be awarded in separate lots and suppliers may bid on any combination of lots". The terms and conditions for the contracted supplier or a contract template including payment terms (for more information, see the Purchase Orders & Agreements section in this chapter).
6. A requirement for bid security, payment bond, performance bond, and/or advance payment bond that is required by the donor.

7. **For IT**: Restrictions on covered telecommunications equipment or services (see CFR 2 § 200.216 and Procurement of Internet & Telecommunications Equipment and Services).

Only applies to goods

8. **For goods**: Mode of transportation (e.g., air freight, ocean freight, etc.).
9. **For any shipment of goods, particularly international shipments**: Packing and shipping instructions to protect goods from damage during transportation and to use industry-standard packaging so goods are not damaged during transportation.
10. **For international shipments of goods**:
    a. A requirement that the supplier obtains import or export licenses as required by local law.
    b. A statement of whether the country program has waivers for customs and import duties for imported goods.
    c. A list of any required Incoterms (for guidance on Incoterms, see the National Transport chapter).

Formal Bid Documents

Request for Quote (RFQ)

Description	A **tender document** used in competitive procurements to communicate CRS requirements to potential suppliers and seek price quotes.
Use	• For goods such as health commodities, vehicles, furniture, office supplies, etc. • For services such as leases.
Tender Period	Minimum of 2 weeks.
Evaluation Criteria and Scoring	Bids that pass the first set of criteria can proceed to the evaluation of the next set of criteria. Legal/Administrative criteria Typically, these criteria are pass/fail. Technical criteria Pass/fail criteria should be used whenever possible to ensure objective evaluation. For criteria that are not pass/fail, weighted scoring can be used. Delivery date and price Typically, these criteria use weighted scoring (e.g., 30%/70% or 20%/80%). Final Score: The scores for the delivery date and price (and technical criteria, if weighted) are added together, and the highest score indicates the most qualified supplier.
Templates	Public or Restricted Tendering RFQ Template RFQ for Goods Template RFQ for Services Template Simple RFQ Template

Request for Proposal (RFP)

Description	A **tender document** used in competitive procurements to communicate CRS requirements to potential suppliers and seek proposals with price quotes.
Use	• For services (e.g., consulting services, travel services, IT-related services, etc.) • When CRS does not have a specific approach in mind for the needed good or service and wants to consider different solutions and their respective costs
Tender Period	Two to four weeks
Evaluation Criteria and Scoring	**Bids that pass the first set of criteria can proceed to the evaluation of the next set of criteria.** Legal/Administrative criteria Typically, these criteria are pass/fail. Technical Criteria For criteria that are not pass/fail, weighted scoring can be used. Financial Criteria Typically, these criteria use weighted scoring. Final Score: The scores for technical and financial criteria are added together, and the highest score indicates the most qualified supplier.
Templates	RFP Template FSP-specific RFP Template

Expression of Interest (EOI)/Request for Information (RFI)

Description	A **tender document** is used to seek information from suppliers about a good or service that CRS wants to procure or identify potential suppliers for a good or service.
Use	When CRS wants to: • Identify available suppliers of a good or service if CRS is not already familiar with such suppliers. • Seek information about a good or service, such as data on specifications, innovations, and products available in the market.
Tender Period	Varies depending on procurement needs or goals.
Evaluation Criteria and Scoring	**Bids that pass the first set of criteria can proceed to the evaluation of the next set of criteria.** Legal/Administrative criteria Criteria can be pass/fail or weighted. Technical criteria Criteria can be pass/fail or weighted. Final Score: Passing scores identify qualified suppliers.
Templates	Expression of Interest (EOI) Template FSP-specific EOI Template

Special Tender Requirements

Before issuing a tender, procurement staff should review the checklists below for any special tendering requirements based on monetary thresholds, donor policies, or commodity-specific considerations.

For Financial Service Providers (FSPs)

CRS uses financial service providers (FSPs) to deliver cash for programming activities and general operations.

- **Programming:** Financial service providers (FSPs) are contracted to provide cash or vouchers to program participants, salaries to teachers, payments to vendors participating in CVA programs, and stipends or incentives for community volunteers.
- **Operations:** In some contexts, financial service providers (FSPs) are contracted to pay CRS staff salaries, office and guesthouse rent, and suppliers.

CHECKLIST

Determining Financial Service Provider (FSP) Procurement Method



To determine the most appropriate tendering process, the **Program Manager:**

- ☐ Drafts a **description of services** to be procured, specifying program needs, desired financial service provider (FSP) features, and the context in which the financial service provider (FSP) will be used.

After the description of services has been drafted, the **Program Manager,** in collaboration with the **Head of Programming, Head of Operations, Procurement Manager,** and **Finance Manager:**

- ☐ Estimates the **contract value** based on the service fees charged by the financial service provider (FSP) (not inclusive of the transfer value).
- ☐ Specifies whether the contract will be **single-use** or Contract Purchase Agreements (CPAs) for **multiple use** based on the project design, duration, expected frequency, number of transfers, and available funding.
- ☐ Determines if **emergency protocols** are needed for programming (e.g., an Emergency Rapid Response Waiver Request (ERRWR) to **temporarily** increase threshold levels, shorten tendering time, and reduce advertising requirements).

☐ **Please see below for context-specific callout boxes that also apply.**

Financial Service Provider (FSP) Tendering Guidance

The procurement of financial service providers (FSPs) involves unique aspects of supply chain, program, finance, and ICT4D. The FSP Tendering Guidance is a resource designed to **assist CRS staff in effectively procuring FSPs** for CVA programs, addressing complexities and considerations in this context **to meet desired programmatic outcomes.**

The FSP Tendering Guidance offers:

- **Specific financial service provider (FSP) procurement considerations,** such as the role of the Global Treasury Department and the determination of procurement value.
- **Procurement strategies** tailored to meet programming objectives, ensuring that CRS staff can identify the most appropriate financial service provider(s) (FSPs) for their specific needs.
- **A three-phase approach** to procuring financial service providers (FSPs) - Background and Resources (Phase I), Choosing the Best Procurement Option (Phase II), and Detailed Steps for Procurement Options (Phase III), aligning with CRS policies and best practices.

The guidance is accompanied by tools, templates, and Country Program examples to help facilitate an effective tendering process.

For questions or requests for support, contact FSPsupport@crs.org.



For Health Commodity Procurements

Procurement should verify that **potential suppliers of health commodities** (e.g., pharmaceuticals, medicines, diagnostic health products, laboratory equipment, etc.) meet both of the following conditions.

- Have a pre-qualification/approval by the WHO, donor, or other internationally recognized authority.
- Meet all quality assurance requirements by the WHO, donors, and governments.

For pharmaceuticals, procurement should verify whether the donor has a preferred list of prequalified pharmaceutical suppliers.

For Rapid Diagnostic Tests (RDTs), procurement can request donor approval of no competition or restricted competition for one of the reasons listed below.

- National validated testing algorithm.
- Closed equipment testing systems that require reagents and consumables that are specific to a diagnostic platform.
- National standardized and harmonized practices.



For KfW-Funded Procurements

KFW-Funded Procurements Checklist

CHECKLIST *KfW-Funded Procurements*



Before issuing a tender for KfW-funded procurements, the **Procurement Officer**:

- ☐ Checks the award and the Separate Convention to verify if KfW's non-objection is required for the tender.
- ☐ **When KfW non-objection is required:**
  - Fills out the KfW checklist.
  - Sends the KfW checklist, tender, and request for a non-objection to either the CRS project manager or the KfW point-of-contact (as identified by the programming team).

Issuing the Tender

The figure below describes important guidelines to follow when issuing a tender.



Tender Period Guidance

During the tender period, the guiding principle is that what is communicated to one potential bidder must be communicated to all potential bidders.

Questions From Potential Bidders

Bidders can submit questions during the tender period. Questions from bidders must be in writing. If a tender is posted publicly, responses must be published publicly to the extent possible and sent to all potential bidders. If a tender is restricted, responses must be sent to all potential bidders.

Discussions with Potential Bidders

CRS staff cannot discuss open tenders with potential bidders during the tender period unless it is in the context of a pre-bid conference.

Pre-Bid Conference with Potential Bidders

For technical, complex acquisitions, CRS may hold a pre-bid conference after a tender is issued and well before the deadline to receive bids, and in addition to (or instead of) issuing written clarifications. This conference can take the form of a meeting, a site survey, or an inspection.

Pre-Bid Conference with Potential Bidders Checklist

CHECKLIST *Pre-Bid Conference with Potential Bidders*



When conducting a pre-bid conference, **procurement** should:

- ☐ Keep meeting minutes to record all queries from potential bidders and all formal replies from procurement staff, stakeholders, and/or subject matter experts (SMEs).
- ☐ Allow oral responses to written queries during the conference (note: the minutes should prevail over such oral responses).
- ☐ Publish or send meeting minutes to all potential bidders within a reasonable time after the conference.

Amendments to Tender Documents

CRS can modify the RFQ or RFP by issuing an amendment and following the requirements below to ensure a fair and transparent procurement process.

- Amendments to tender documents must be approved by the same designated CRS authorities as the original tender document.
- Amendments must be made available simultaneously in writing to all invited and potential bidders.
- When tender documents are posted publicly, amendments must be added to the post.
- Amendments must be made in good time before the deadline for submission of bids for bidders to address changes in their bids. If an amendment is made close to the tender deadline, the deadline should be extended to give bidders enough time to develop a bid that responds to the change.

When amendments represent substantial changes to the requirements, it may require re-tendering, especially if the change means that the short list of suppliers could change as well.

Amendments to Bids

Bidders can amend their bids in writing before the tender closing date. The latest bid is considered the final, binding bid. After the closing date, CRS cannot accept new or modified bids.

Cancellation of Tender

If an RFQ or RFP is canceled, bids should be returned promptly to the bidders.

BID RECEIPT & EVALUATION

Bid Receipt Guidance

Unsealed Bids

The figure below shows three different ways that **unsealed** bids can be received.



Sealed Bids

The figure below shows the way **sealed bids** can be received.

Ways of Receiving Sealed Bids



Physical Delivery to Reception Staff Member

Typically, sealed bids are physically dropped off with reception staff, who places them in a locked tender box and keeps a registry of the date and time each sealed bid is received.

When the tender period closes, a reception staff member delivers the bids to procurement staff.

Sealed bids must be treated confidentially and opened only at the bid opening.

Any staff member who, in error, opens a sealed bid before or after the bid opening must follow the procedure in the checklist below.

Opening of Sealed Bids Outside of Bid Opening Checklist

CHECKLIST *Opening of Sealed Bids Outside of Bid Opening*



If a sealed bid is opened for any reason before or after the bid opening, **the person who opened the sealed bid** should:

- ☐ Write an explanation of the opening.
- ☐ Record the date and time opened.
- ☐ Record the invitation for bids number.
- ☐ Sign the envelope.
- ☐ Immediately reseal the envelope.
- ☐ Deliver the bid to the tender box (if bids have not been opened yet) or to the head of the procurement department (if bids have already been opened).

Late Submissions

Bids that are submitted after the tender period closes should be kept in a secure place and left unopened until letters of award and non-award are issued, at which time late bids should be returned to their bidders (see Letters of Award and Non-Award section in this chapter).

Withdrawn Bids

Bidders can withdraw their bids at any time by written notification to the procurement staff who issued the tender. The procurement department should keep this documentation in the file for that tender.

Public Bid Opening

Tenders may include a requirement for a public bid opening, wherein vendors are invited to attend the bid opening, as written in the tender.

Below are best practices **when preparing for a public bid opening**.

- ✓ The meeting for a public bid opening must occur at the date, time, and location published in the tender document.
- ✓ Only the people listed below can participate in a public bid opening.
  - Relevant CRS staff members (typically procurement staff and bid committee members).
  - The authorized representative of any bidder who submitted a bid.
  - Vendors who submitted bids or proposals
- ✓ CRS procurement staff (or a designated member of the bid committee) must serve as the meeting official.
- ✓ The meeting official must open and close the public bid opening in the presence of all participants.
- ✓ All information about the opening of bids, meeting attendees, and bid records (including returned bids) must be documented in a record or report and must be read aloud to the attendees. The record/report should include the following.
  - Date and time of the public bid opening.
  - Name and number of the tender document.
  - Brief description of the procurement (e.g., 500,000 Malaria Rapid Diagnostic Treatment Tests for CRS Zimbabwe).
  - Bid submission deadline (date, time, and any submission extensions).
  - Names of meeting participants and their respective companies.
  - Names of the bidders.
  - Bid securities (if requested).
  - Bid validity period (and extensions, if any).
  - Lead times of each bid.
  - Unit price and total cost of each bid.
  - List of bids rejected for various reasons (e.g., late submissions, incompleteness, etc.).
- ✓ The meeting official, bid committee members, and appropriate witnesses should certify the bid opening process by signing the record/report.

Bid Opening

Bids should be opened as soon as possible after the tender period closes at a meeting with all bid committee members present.

Below are best practices **during the meeting for a bid opening**.

- ✓ Each bid is opened by CRS procurement staff in the presence of all participants.
- ✓ Each bid must undergo a preliminary review by the bid committee for compliance with the legal/ administrative criteria published in the tender document (e.g., the right number of copies was submitted, each bid was signed by the bidder, and the bid security was submitted where required).
- ✓ **For sealed bids submitted using a two-envelope system** (i.e., one envelope for both the legal/administrative proposal and the technical proposal and a second envelope for the financial proposal): When the bid committee first meets, the bid committee members can only open the envelope with both the legal/administrative proposal and the technical proposal. The envelope with the financial proposal can only be opened after the legal/administrative evaluation **and** the technical evaluation are both finalized (which can occur at the same meeting or can be scheduled as a second opening at a later date).

Bid Committees

A bid committee is a group of designated staff who evaluate bids and recommend the most appropriate supplier.

Bid committees are required as per the threshold in CRS Procurement Policy. Country programs may have established a lower threshold in the country program's local procurement appendix.

Bid committees **must include** the following members.

- ✓ The head of procurement (or his/her representative), as a non-voting member who serves as secretary of the committee.
- ✓ At least three voting members who are CRS employees.
- ✓ A project representative, budget holder, or end user who is a CRS employee.
- ✓ A technical expert with the skills and knowledge required to provide guidance on compliance with the specifications in the tender.

Bid committees **can also include** the following members.

- An internal CRS representative from the finance department.
- An external CRS partner or stakeholder, such as a government official in the country of implementation (only in exceptional circumstances).

When a bid committee is required as part of a tender, procurement staff organizes the convening of a bid committee. For particularly complex procurements, procurement staff can decide to call a kick-off meeting before the bid committee convenes to discuss the bid evaluation guidelines, procedures, and the scoring criteria in the tender document.

A **kick-off meeting** is an opportunity to discuss technical aspects of the evaluation so each member of the bid committee understands the criteria and how the bids will be scored.

For information about the bid committee's duties and responsibilities, see the subsequent sections in this chapter: Public Bid Opening, Bid Committees, Bid Evaluation Guidance, Supplier Evaluation, and Process Checklist.

Bid Evaluation Guidance

Bid evaluations are used to demonstrate that the selected supplier is a suitable business partner, can provide goods or services that meet the requested specifications and are of good quality, and offered a fair and reasonable price. Only one bid evaluation is prepared for each tender.

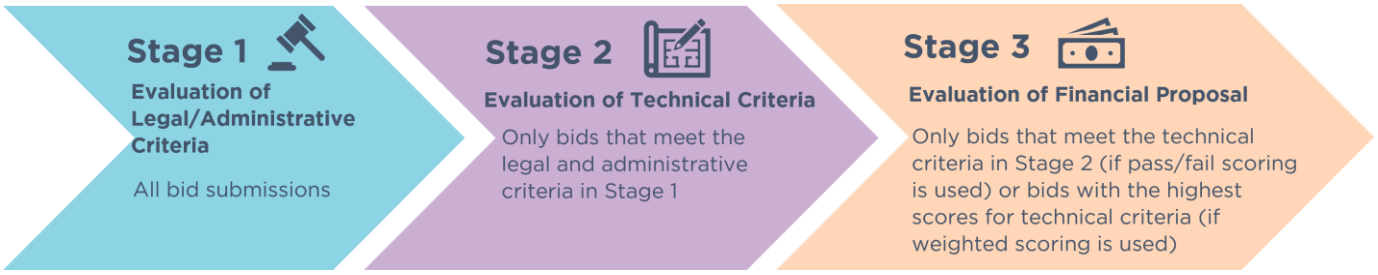
The process of evaluating bids should be fair, impartial, consistent, documented, and confidential. To evaluate bids received in response to the tender, the procurement team gathers the following information and shares it with the bid committee.

- Requestor form with specifications (for goods) or SOW (for services).
- Tender document(s).
- Email sent to potential suppliers (if applicable).
- Bids received.

Below are best practices for evaluators and bid committees.

- ✓ Evaluate each bid using only the evaluation criteria in the tender (i.e., do not introduce or modify bid criteria during the evaluation process).
- ✓ Evaluate each bid only on information provided by the bidder in the quote or proposal. (i.e., do not evaluate bids based on outside knowledge or prior experience with a bidder).
- ✓ Support bid evaluation with facts contained in the bid or facts missing from the bid (e.g., what was not included in the bid).
- ✓ Interpret ambiguities in the evaluation criteria in favor of the bidders (for critical matters, verify with the bidder by direct communication).

Bids for goods and services are evaluated in three stages, as shown in the figure below.



When a two-envelope system is used for sealed bid submissions, the envelope with both the legal/administrative proposal and the technical proposal must be opened first, to ensure that information contained in the financial proposal does not influence the scoring of the technical proposal.

The envelope with the financial proposal can only be opened once the legal/administrative evaluation (Stage 1) and the technical evaluation (Stage 2) are finalized.

Bid Evaluation Sheet

Procurement prepares a bid evaluation sheet in accordance with the bid evaluation criteria in the tender.

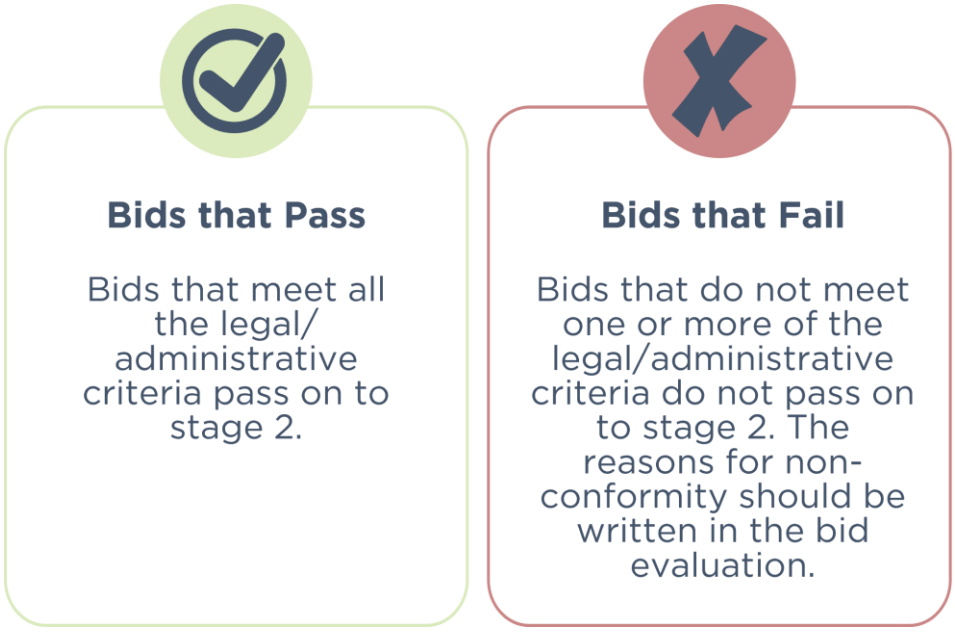
The bid committee convenes to evaluate the bids. Best practice is for each bid committee member to sign a declaration affirming that they do not have a conflict of interest (actual or potential) with any suppliers of the good or service being procured. Bid committee members that may have a conflict of interest must recuse themselves from the bid committee, and a replacement member is appointed.

See the Final Bid Scoring section for more information on how bid evaluation sheets are used to document procurement decisions.

Stage 1 – Legal/Administrative Evaluation

Bids are evaluated for compliance with legal/administrative criteria using the **same process** for **goods and services**.

In this stage, bids are evaluated against the legal/administrative criteria published in the tender document. Typically, these criteria are evaluated using the pass/fail scoring method, as shown in the figure below and discussed in the section that follows.



Pass/Fail Scoring

When using the pass/fail scoring method, a bid either meets each requirement or does not. Bids that meet all requirements can proceed to the next stage of the bid evaluation.

Sample Pass/Fail Scoring Criteria

Below is an example of administrative requirements that might be included in an RFQ, RFP, or RFI (also called an EOI at CRS) to be scored using the pass/fail method.

- Offer is received by the deadline.
- Offer is signed.
- Offer meets the bid validity period.
- Offer meets other requirements (e.g., sealed bids, bid security, etc.).

Stage 2 – Technical Evaluation

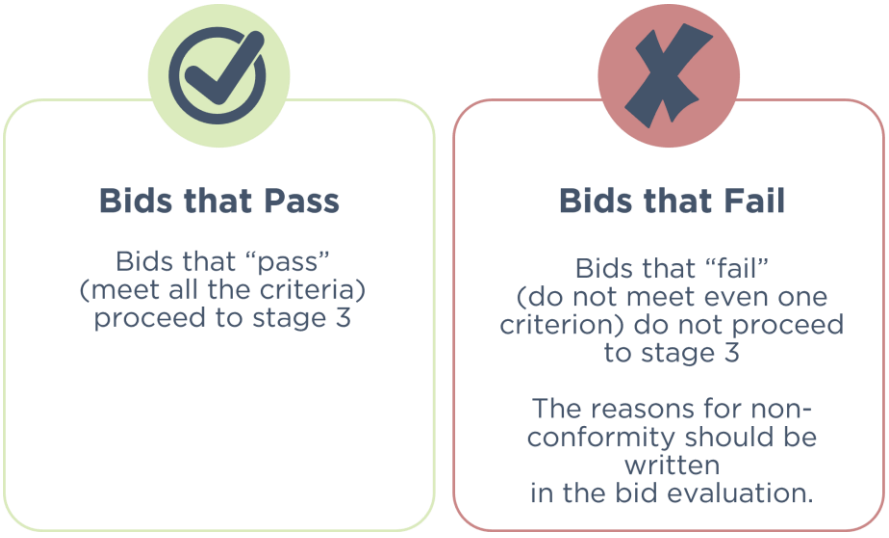
In this stage, bids are evaluated against the technical criteria published in the tender document to identify the suppliers who can meet the project's needs.

If the RFQ or RFP states that the procurement will be awarded in separate lots, the evaluator(s) or bid committee (whichever is applicable) evaluates each lot separately.

Criteria for **goods** are typically evaluated using pass/fail scoring.

Specifications that are labeled "required" in a tender document are typically scored using the pass/fail method.

If a bid has slight deviations from the specifications in the tender, procurement staff can ask the requesting department if the bidder's deviations are acceptable, to widen competition as much as possible without significantly changing the original specifications.



Criteria for **services** can be evaluated using weighted scoring.

If not done at the tender stage, the technical expert (with input from procurement staff) assigns a maximum possible score (based on importance) to each technical criterion listed in the tender.



Weighted Scoring

Weighted scoring is a method of assigning a proportionate weight to different criteria based on importance.

The technical expert(s) give each technical criterion receives a score based on its importance relative to the other criteria, and the scores are added up to determine which bidder has the highest score. The tender includes a minimum score to pass the technical evaluation stage (typically 75 percent of the total possible technical score), and all bids that meet that minimum score can proceed to the next evaluation stage (Stage 3 – Financial Evaluation).

The below table shows an example of a weighted technical evaluation.

Technical Criteria	Total Possible Points
Comprehension of Objectives	5
Methodology/Work Plan	10
Three References	15
Methodology	15
Two Proofs of Past Performance	15
Weighted Score	**60**
Minimum Passing Score (75% of total possible points)	**45**

Weighted scoring is commonly used to evaluate criteria including—but not limited to—the examples below.

- In RFQs or RFPs: any criteria for services, including technical criteria for services that include the ability to meet CRS' timeline (i.e., delivery date)
- In RFPs: Technical criteria and financial proposal (if applicable, see also Interviews or Presentations).

When bid committees use weighted scoring to evaluate technical criteria, there are two scoring approaches:

1. One bid evaluation sheet for each bid committee member, or
2. one bid evaluation sheet filled out together by the bid committee as a group.

Bid Evaluation Sheets from Bid Committee Members

This is the most common and preferable approach for weighted scoring. In this approach, each member of the bid committee:

- fills out a bid evaluation sheet for the criteria provided in the Technical Evaluation section of the tender,
- assigns a score to each technical criteria in the RFP for services (can add comments about why s/he assigned that particular score),
- signs his/her own bid evaluation sheet, and
- submits the signed bid evaluation sheet to the Procurement Officer managing the procurement.

The Procurement Officer then compiles a summary report of the bid evaluation sheet ("bid evaluation report") and averages the scores to calculate the final score for each bid.

Bid Evaluation Sheet from Bid Committee

This is an acceptable but less common approach for weighted scoring. In this approach, the bid committee chooses to fill out one bid evaluation sheet together as a group, with all bid committee members present and with each bid committee member signing the final bid evaluation sheet.

Interviews or Presentations

As the second phase of the technical evaluation, the requesting department can also require interviews or presentations (including demonstrations) of potential suppliers. Typically, the evaluation committee completes an evaluation of the technical proposals, then interviews the top candidates from the technical proposal evaluation. Evaluations for interviews or presentations are evaluated just as technical proposals, with pre-determined technical evaluation criteria and points assigned to each criterion based on importance. When interviews or demonstrations are conducted as a part of the evaluation:

- The entire bid committee must participate in the interview or presentation.
- Criteria for interviews or presentations should be evaluated by weighted scoring.
- Once all interviews or presentations have been conducted, members of the bid committee share their evaluations with the designated procurement staff.

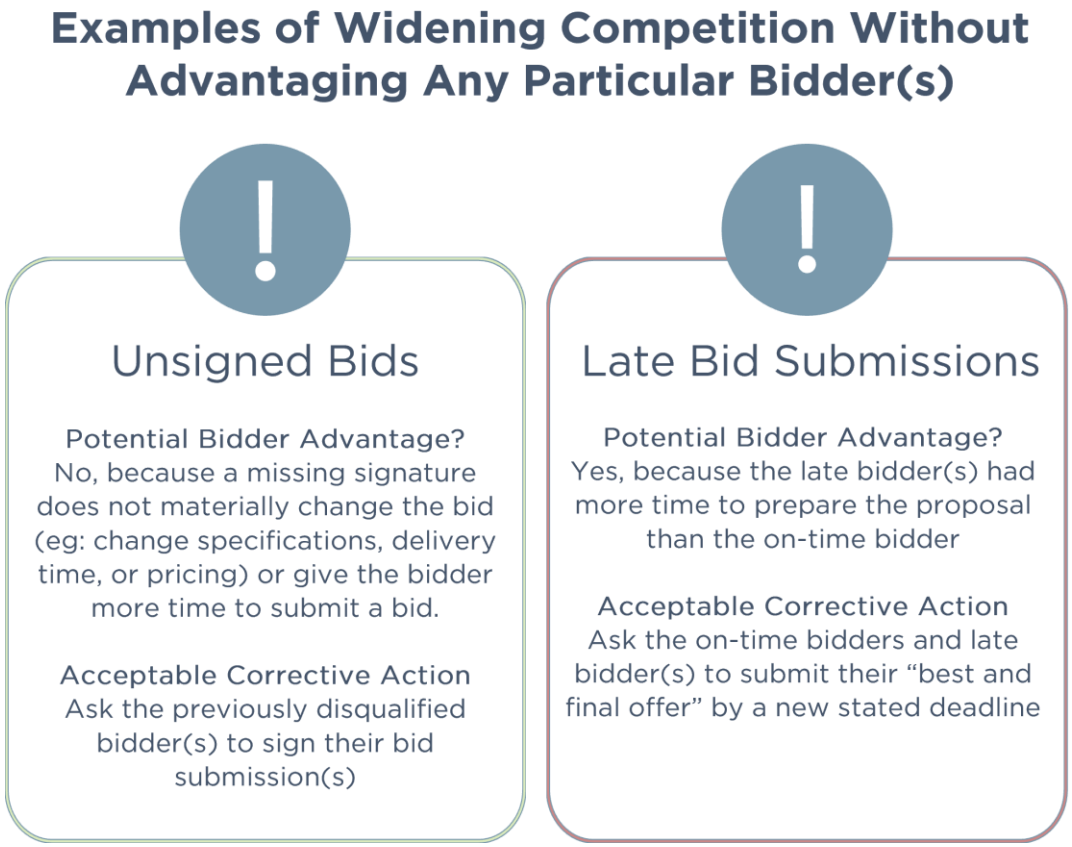
The below table shows an example of weighted scoring for a technical evaluation **for an interview**.

	Total Possible Points
Interview Criteria	
Comprehension of Scope of Services	10
Comprehension of Delivery Expectations	10
Quality of Presentation	5

One or Two Qualifying Bids

If only one or two bids qualify under the minimum passing score for the technical evaluation, and several bidders were disqualified at Stage 1, the evaluator(s) can attempt to widen competition by reviewing bid submissions that were rejected in Stage 1 – Legal/Administrative Criteria for non-compliance with legal or administrative criteria, as long as allowing bidders to "correct" such errors does not create any new advantage for some bidders over other bidders.

The figure below provides examples of two common disqualifying criteria and corresponding actions that the evaluator(s) could take to widen competition without giving any bidders advantage over other bidders.



If taking the above steps does not result in multiple qualifying bids, the evaluator(s) should verify that the price is fair and reasonable by comparing the cost of the technically qualified bid to one or more of the following:

- Less technically qualified bids (the higher the quality, the higher the cost),
- A public catalog of pricing (if available), or
- Previous pricing received for the competitive procurement of the same/similar services.

In the bid evaluation sheet, the evaluator(s) must document any attempt to widen competition or verify that the sole qualifying bid's price is fair and reasonable, along with the reason(s) for this decision (i.e., submissions were accepted by a new stated deadline to wide competition).

The evaluator(s) or bid committee (whichever is applicable) may require clarifications from bidders at any time during the bid evaluation process, following the guidelines listed below.

- The request for clarifications must be in writing and must be sent by the procurement staff managing the evaluation to the authorized representative of the bidder.
- Bidders must be given a reasonable deadline to submit clarifications.

Stage 3 – Financial Evaluation and, If Applicable, Delivery Date Evaluation

For goods, the tender may assign a weighted score for the delivery date. When using weighted scoring to evaluate the **delivery date**, the evaluator(s) can use one of the scoring approaches below:

- Use this formula: Number of points-(evaluated date-lowest date)/100*number of points
- Assign points based on a range of days (e.g.: 30 points for 1-5 days, 25 points for 6-10 days, 20 points for 11-15 days)

In most cases when using weighted scoring to evaluate the **delivery date**, the evaluator(s) should evaluate based on weeks as opposed to days. Evaluating based on days can result in a significant difference of points per bid for a difference of just one day. If the procurement is so urgent that each day could have a significant impact on project deliverables, evaluators have justification to evaluate based on days instead of weeks.

The financial proposal should be evaluated against the financial evaluation criteria published in the tender document using weighted scoring.

Below are examples of formulas that can be used to calculate the weighted score.

- Number of points - [(evaluated price - lowest price) / lowest price] * number of points
- Lowest price / highest price * the number of points

When bidders cannot offer the full quantity required in the tender document, the financial evaluation can be scored based on unit price.

Final Bid Scoring

The scores for the technical proposal, delivery date (if applicable), interview or presentation (if applicable), and financial proposal are then added together for the final score. The highest total score indicates the supplier who offered the best value-for-money.

The bid evaluation sheet explains any decisions made throughout the procurement process and the reason(s) for such decisions (e.g., why a tender deadline was extended; which bids needed clarification, why, and the results of the clarification requests; why a price negotiation was initiated and the results of the price negotiation, etc.).

The bid evaluation sheet is approved according to the CRS Procurement Approvals policy and/or the Country Program's local procurement appendix.

Procurement awards the bid to the supplier with the highest final score.

Supplier Evaluation

Before making a final decision on the supplier of goods or services who has the highest total score, the evaluator(s) or the bid committee (whichever is applicable) may want to conduct quality checks of the vendor and/or the vendor's good, must conduct due diligence as per CRS policy, and may need to seek a waiver or non-objection from the donor, as described in the sections below.

Quality Checks on the Vendor or the Good

The figure below shows examples of quality checks that can be conducted to ensure the vendor and/or the vendor's good is of sufficient quality for CRS's needs.

For more information on supplier requirements and codes of conduct, see the Supplier Performance section in this chapter.



Checking References

The checklist below summarizes key steps to follow when conducting reference checks.

Conducting Reference Checks Checklist

CHECKLIST *Conducting Reference Checks*



The **evaluator** (or—if a bid committee is required—at least two bid committee members, including one committee member who is either the budget holder or a subject matter expert, SME) should:

- ☐ Contact the reference.
  - **By email (preferred method):** Ask the reference to submit a written response to the reference check questions.
  - **By phone:** Call the reference and ask them the reference check questions.
- ☐ Ask the reference the following questions.
  - What kind of work did XX carry out on behalf of your organization?
  - Was the work performed or goods delivered by XX determined to be of the required quality?
  - Did XX perform the work within the approved budget?
  - Did XX perform the work on time?
  - Did XX deliver the goods on time?
- ☐ Ask any other questions to determine whether the bidder is able to perform the work or supply the goods.
- ☐ Document and attach the reference check to the bid evaluation sheet.
  - **For reference checks conducted by email**: Attach the reference's written responses to the evaluator's questions.
  - **For reference checks conducted by phone**: Document the date and time of the call, the person with whom the evaluator spoke, and the content of the reference's responses and/or the evaluator's notes from phone call.

Due Diligence

Due diligence is the process of investigating, reviewing, and verifying **information that an entity has provided about itself or its work**.

Due diligence must be done by following the policies below to ensure that the selected supplier is reputable, legitimate (has the capacity to supply the goods or undertake the service), and ethical. Suppliers who do not fully cooperate in the due diligence process are considered suspect and can be disqualified from the competition.

- The Anti-Money Laundering, Anti-Terrorist Financing, Export Controls, Economic Sanctions, and Excluded Parties Policy requires verification of vendor eligibility by using the Bridger Insight XG software (commonly called Bridger; the verification process may be called "running a Bridger"), verifying any export controls, and verifying any economic sanctions by the U.S. government's Office of Foreign Assets Control.
- The Supplier Master Policy & Procedure requires several verifications to confirm that the vendor is reputable and legitimate, including a copy of government-issued identification (for individuals) or government-issued company registration (for companies), a Bridger verification, and a physical site visit for suppliers of goods over a certain threshold.

Donor Check

A donor check is the process of reviewing **a donor's regulation(s) for funds used to procure certain kinds of goods or services**, to ensure compliance with the regulation(s). In some cases, donors require a waiver or non-objection to proceed with the procurement.

The most common waivers/non-objections required at this stage by donors are listed in the table below.

Donor and Type of Waiver/Non-Objection	Applicability (Citation)	Required Documents
USG Restricted Goods Waiver	For agricultural commodities, motor vehicles, pharmaceuticals, pesticides, used equipment, and fertilizers (see ADS 312)	- Tender - Bid - Bid evaluation - Waiver request (example of Motor Vehicle Waiver Request Template)
USG Source and Nationality Waiver	For goods or services purchased outside of the award's "authorized **source** [place where the goods are currently physically located] and **nationality** [country of legal organization or registration] of Procurement" (see ADS 310 and 2 CFR § 228.01)	- Tender - Bid - Bid evaluation - Waiver request
KfW Non-Objection	For the specified goods and services at the specified thresholds described in the KfW Development Bank Guidelines for the Procurement of Consulting Services,	- Tender - Bid

Donor and Type of Waiver/Non-Objection	Applicability (Citation)	Required Documents
	Works, Plant, Goods and Non-Consulting Services in Financial Cooperation With Partners, and the award-specific KfW Separate Agreement.	- Bid evaluation - KfW checklist (see the KfW-Funded Procurements section in this chapter)
Global Fund Non-Objection	For certain awards, as specified in the award (see the award to verify specific requirements)	- Tender - Bid - Bid evaluation

Supplier Selection & Bid Award

Once the evaluation process has been completed, procurement staff can proceed to award the PO/contract. Procurement staff can negotiate with the selected bidder (i.e., the bidder that provides the best value for money) in certain cases, including but not limited to the examples below.

- The available budget is not sufficient to purchase the requested item(s).
- The bid contains additional equipment or services that were not required in the tender document (these negotiations should seek a lower price through the removal of the additional items from the bid).
- There is a potential quantity discount because the quantity required is marginally higher (up to 10 percent) than the quantity specified in the tender document.
- There is an emergency situation.
- CRS or the supplier requests that specific terms and conditions in the agreement be negotiated.
- The procurement is particularly complex, such as a financial service provider, and negotiating may be advantageous to CRS.

Letters of Award and Non-Award

Procurement staff sends letters to all bidders notifying them whether they were awarded the PO/contract.



If a supplier responds to the letter of non-award requesting more information about the bid evaluation, procurement staff can give feedback on specific aspects of the supplier's bid that were and were not competitive. For example, "The bid was very competitive in terms of the lead time, but it was not very competitive in terms of pricing." However, **CRS cannot share any details about the awarded supplier's bid with unsuccessful bidders**.

After issuing all letters of award and non-award, procurement staff must return any unopened bids to their respective bidders (see the Late Submissions section in this chapter).

Process Checklist

CHECKLIST *Bid Process*



Procurement staff:

- ☐ Receives bids in the mode, manner, place, and format specified in the tender document (see Bid Submission Information & Instructions).
- ☐ Prepares the bid evaluation sheet based on the tender's published evaluation criteria and distributes it to all evaluator(s) or bid committee members (whichever is applicable).

The **evaluator(s) or bid committee** (whichever is applicable):

- ☐ Opens bids at the same time (typically at a designated meeting or upon receipt from the designated procurement representative in preparation for a meeting).
- ☐ Evaluates the bid based on the tender's published evaluation criteria.
- ☐ Determines which bids proceed from stage 1 to stage 2 (technical proposal), and from stage 2 to stage 3 (financial proposal).
- ☐ Signs the bid evaluation sheet and submits it to the designated procurement representative.

If a bid committee is required, **all bid committee members** must:

- ☐ Be present for the evaluation of each bid.
- ☐ Sign the evaluation sheet.

Once signed bid evaluation sheet(s) are received –

The **designated procurement representative:**

- ☐ Compiles a summary report of the bid evaluation sheets ("bid evaluation report")

The **designated approver(s):**

- ☐ Signs the bid evaluation as required by CRS Procurement Approvals Policy and (if applicable) by the local country program's policy.

Before awarding a bid, **procurement staff** must:

- ☐ Ensure compliance with requirements in the Anti-Money Laundering, Anti-Terrorist Financing, Export Controls, Economic Sanctions, and Excluded Parties Policy and the Supplier Master Policy & Procedure.
- ☐ Verify donor regulations and obtain any required waivers, non-objections, or approvals from the donor.

PURCHASE ORDERS & AGREEMENTS

Once a bid has been awarded to a supplier, procurement staff creates a PO and/or a contract based on the requestor form (submitted during the requisitions process) and the negotiated price and payment terms (determined during the supplier selection and bid award process).

> Contracts are legally binding agreements between buyers and sellers of procured goods or services.
>
> Purchase orders (POs) and purchase agreements are specific types of contracts.

All CRS contracts must include the following information.



Procurement staff should have the supplier(s) confirm by mail or email that they have received an approved PO or purchase agreement.

For detailed guidance on when contracts must or should be used—including monetary thresholds—and when POs may be used, see the CRS Procurement Contracts Policy.

Contracting Instruments

CRS uses various contracting instruments to purchase goods and services from suppliers, primarily purchase orders (POs) and purchase agreements (BPAs and CPAs).

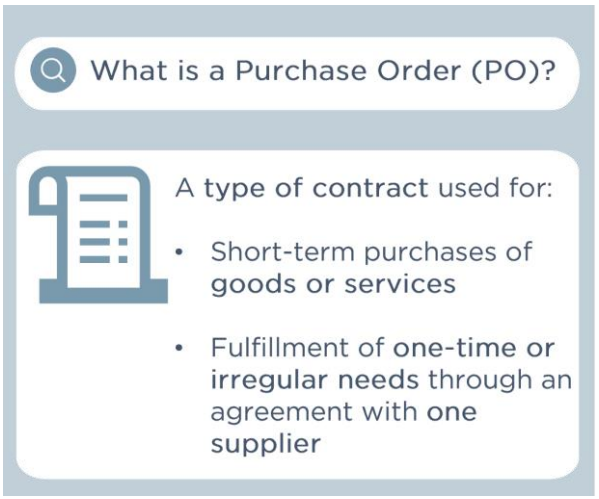
> Sometimes procurement staff also use the word "contract" to describe the agreement attached to a PO.

For assistance determining the most appropriate type of contract, PO, or purchase agreement to use, contact the Global Procurement department.

Purchase Orders (POs)

A PO is required for purchases of goods or services that are valued at or above the petty cash threshold defined in the CRS Policy on Cash Management but can be used for purchases regardless of their value.

A PO **begins as a bid** issued by CRS to a selected supplier to purchase goods from that supplier. A PO **only becomes a legal contract when the supplier** either: a) signs the PO or b) delivers the requested goods or performs the requested services.



POs must specify the following information about the goods or services being purchased by CRS.

- ✓ The type and quantity of goods or the scope of services ordered.
- ✓ The date by which delivery of the goods or performance of the services is required.
- ✓ Shipping terms.
- ✓ Any requirements for the inspection and acceptance of goods that are delivered or services that are performed.
- ✓ The agreed-upon price and payment method for the goods or services ordered.

Purchase Agreements

CRS uses different types of purchase agreements for goods (Blanket Purchase Agreements, or BPA) versus services (Contract Purchase Agreements, or CPA).

All purchase agreements **must**:

- Be awarded based on necessary quantities projected in the initial year the contract is signed.
- Be issued for up to five years with regular monitoring of the market to ensure the agency continues to receive value for money through the agreement
- Specify that the prices in the contract are fixed to the term of the contract.

Both types of purchase agreements should specify the maximum and minimum quantity or cost of the goods or services being purchased by CRS.

Creating Purchase Agreements in Insight

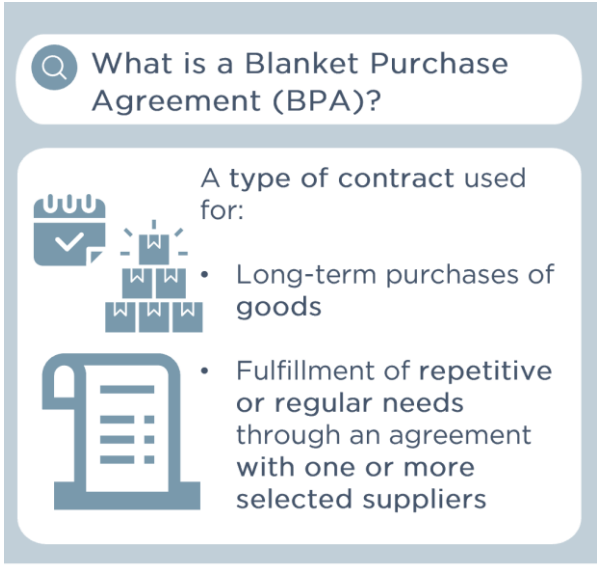
Purchase agreements are known by different names at CRS and in different industries or fields (e.g., Framework Agreements, Long-Term Agreements, Master Contracts, etc.).

But in Insight, these types of contracts are always called Blanket Purchase Agreements (BPAs) for goods and Contract Purchase Agreements (CPAs) for services.

- For detailed information about Blanket Purchase Agreements (BPAs) and Contract Purchase Agreements (CPAs), see Section 3.9 of the Insight Procurement Reference Guide.
- For detailed guidance on creating **purchase agreements for goods** in Insight, see the Create Agreement for Goods Job Aid.
- For detailed guidance on creating **purchase agreements for services** in Insight, see the Create Agreement for Services Job Aid.

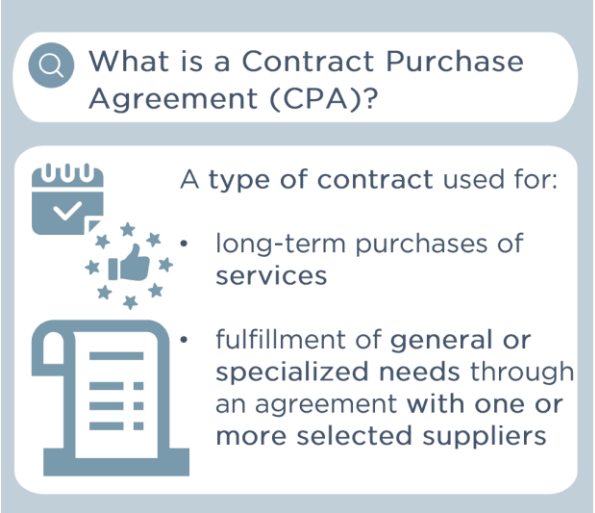
Blanket Purchase Agreements (BPAs)

Blanket Purchase Agreements (BPAs) can be structured for limited or unlimited purchases of individual items or commodities to ensure appropriate stock and replenishment levels. For goods of the same type, BPAs can be used with more than one supplier to ensure maximum supplier competition.



Contract Purchase Agreements (CPAs)

A Contract Purchase Agreement (CPA) can be used for general service agreements (e.g., hotels, taxis, etc.) and specialized service agreements (e.g., Consulting Agreements, Subrecipient Agreements, and Indefinite Quantity Contracts).



Contract Purchase Agreements (CPAs) are used to contract with Financial Service Providers (FSPs) and vendors participating in voucher assistance programs. For detailed guidance on selecting the right type of agreement for CVA programs in different contexts, see the Agreements for Financial Service Providers section in this chapter and FSP Tendering Procedure.

Consultant Agreements

Consultant agreements can be made with individual consultants or with companies. All consulting agreements should have a detailed scope of work for the services being procured, the deliverables expected by CRS, and the timelines of the deliverables.

For detailed guidance and considerations on engaging the consultants and their services, see the Consultants Policy and CRS' Working with Consultants SharePoint site.

With Public Officials

In rare circumstances, CRS can hire public officials to provide consulting services.

Before doing so—to avoid the perception that CRS is making unauthorized payments or salary supplements to a public official—CRS **must obtain written confirmation** of the following.

- **From the public official's direct supervisor or ethics officer**: That the official is allowed to carry out consulting assignments.
- **From the public official**: That the consultancy assignment will not be performed during the official's regular working hours **and** that the official will not exercise influence on any projects being implemented in the country which may create a conflict of interest (COI).

Subrecipient Agreements

Subrecipient Agreements are governed by the Global Overseas Operations department (see Agreements Policy & Procedure POL-OOD-001).

A Contract Purchase Agreement (CPA) **must be created in Insight** when a Subrecipient Agreement that meets one or more of the following criteria.

- Subrecipient Agreement is for more than one year.
- Multiple project numbers in POs linked to the Subrecipient Agreement.
- Multiple POs are being created against the Subrecipient Agreement.

For information on the Subrecipient Agreements throughout the procurement cycle and in Insight, see the Subrecipient Agreements One-Pager.

Refer to the Procurements Requiring System Representation Policy for more information on when POs and purchase agreements are required to be entered in Insight.

Contract Types

Different types of contracts provide varying levels of financial risk and administrative burden to CRS and the supplier, as shown in the figure below.

Financial Risk & Administrative Burden of CRS & Suppliers Under Different Types of Contracts



	CRS Financial Risk	CRS Administrative Burden	Supplier Financial Risk	Supplier Administrative Burden
Firm Fixed-Price Contract	↓	—	↑	↓
Cost-Reimbursement Contract	—	—	—	—
Time-and-Materials Contract	↑	—	↓	↑

Firm Fixed Price

A fixed-price contract provides a fixed payment amount to the supplier for delivery of the procured goods or services, regardless of the actual costs incurred by the supplier in fulfilling the terms and conditions of the contract.

Firm fixed price contracts are most appropriate when CRS is acquiring commercial items or other goods/services with well-defined, detailed functional specifications and:

- There is adequate price competition for the goods or services.
- There are valid and reasonable price comparisons for the goods or services.

Fixed-price contracts incentivize the buyer (CRS) and the seller (the potential supplier) as follows.

- **CRS**: To determine fair and reasonable prices during the requisition, tendering, and bid evaluation processes, based on either:
    - the previous pricing received for the competitive procurement of the same/similar goods or services; or
    - estimated pricing supported by cost or pricing data.
- **Supplier**: To estimate costs accurately during bidding on the contract and control costs effectively during the execution of the contract.

Cost-Reimbursement

A cost-reimbursement contract provides payment to the supplier that is capped based on terms and conditions specified in the contract for costs incurred in the supplier's delivery of the goods or services. Any overage costs are incurred by the supplier at its own risk. The supplier cannot be reimbursed for any costs above the capped payment amount without the approval of the procurement staff who was involved in writing the contract.

Cost-reimbursement contracts are most appropriate in lieu of fixed-price contracts when procurement staff cannot estimate costs with a reasonable degree of confidence and accuracy due to uncertainties involved in contract performance.

Time-and-Materials

A time-and-materials contract provides payment to the supplier for all direct labor and actual materials costs the supplier incurred for the delivery of the goods or services, as described below.

A. **Direct Labor**: The buyer (CRS) pays fixed hourly rates that include compensation to the supplier for expenses for wages; overhead, general, and administrative expenses; travel expenses (if required); and profit.

B. **Actual Materials**: The buyer (CRS) pays the actual costs of raw materials and manufacturing supplies (e.g., parts, subassemblies, components, etc.), collateral expenses (e.g., inbound transportation, in-transit insurance, etc.), and any other materials that are required to deliver the goods or services.

    a. To calculate the cost of materials, the supplier can be instructed to consider reasonable cost overruns, spoilage, or defective work (unless otherwise provided in any contract provision related to inspecting and correcting defective work).

Because of the high financial risk for CRS under time-and-materials contracts, they can only be used if—at the time the contract is to be awarded—procurement staff cannot estimate with a reasonable degree of confidence and accuracy the level of effort and/or duration of work in providing the agreed-upon goods or services.

Payment Methods

The figure below shows five different types of payment methods that can be used in a CRS PO/contract.



Below are descriptions of each payment method shown in the figure above and the respective triggers of these payment methods.

With each payment method, the PO/contract specifies an amount or percentage of the total PO/contract value to be paid at a certain time (e.g., upfront, during, or after PO/contract performance, etc.) and identifies the specific action that triggers the payment process.



Advance Payment

Advance payment can be made to the supplier in anticipation of identified early expenses upon triggers such as PO/contract signature or receipt of an invoice. Suppliers receiving advance payments above certain thresholds must provide bank guarantees.

Advance payments to suppliers should be avoided because CRS loses negotiating power when a portion of the PO/contract value is paid upfront.



Installment Payment

Installment payment can be made to the supplier upon acceptance of one shipment in a multi-shipment PO/contract or a part of one shipment in a single-shipment PO/contract. Payment triggers can include receipt of an invoice or a Goods Received Note (GRN) signed by a CRS receiving officer.



Progress Payment

A progress payment can be made to the supplier before final work or deliverables are accepted for long-term services work that involves an end product such as a report. Payment triggers can include a specified date, receipt of an invoice, CRS acceptance of a report, etc.



Final Payment

Final payment is made to the supplier to accept, approve, and acknowledge of completion of PO/contract performance. Payment triggers can include receipt of an invoice, CRS acceptance of a final set of named deliverables, etc.



Holdback Payment

A holdback payment is retained by the buyer until the supplier provides proof that the agreed-upon goods/services have been delivered and that all terms and conditions in the PO/contract have been fulfilled. Payment triggers can include the following.

- The schedule of deliverables, activities, and delivery date(s).
- The name of the supplier, authorized signatory, and contact person.
- The requirements in CRS' Supplier Code of Conduct.
- For international procurements:
  - The Incoterms.
  - The method of transport.
  - The method of packing goods for shipment.
  - The requirements for export and import clearance.
  - The requirements for inspection and acceptance.

Holdback payments are most appropriate to ensure:

- completion of the PO/contract (in works and complex consulting assignments); or
- payment by the general supplier to lower-tier vendors (in some construction contracts).

Typically, under the terms of the holdback payment method, about 10 to 15 percent of each invoice sent by the supplier is held back by the buyer until a payment trigger occurs.

PO/Contract Management

PO/Contract Creation

For guidance on creating contracts, see the Procurement Assessment section in the Design chapter.

Supplier Employee Classification

Individuals contracted by CRS to provide services must be classified properly as one of the following.

- Full-time employee.
- Part-time employee.
- Temporary employee.
- Independent contractor (consultant).

To determine whether a service provider should be classified as an employee or a contractor, requesting departments should review Guidelines: Consultants Vs. Employees and the Consultant Policy (see pages 1 and 2).

For support in determining how to classify a service provider correctly, submit the following to GPR at HRresponse@crs.org.

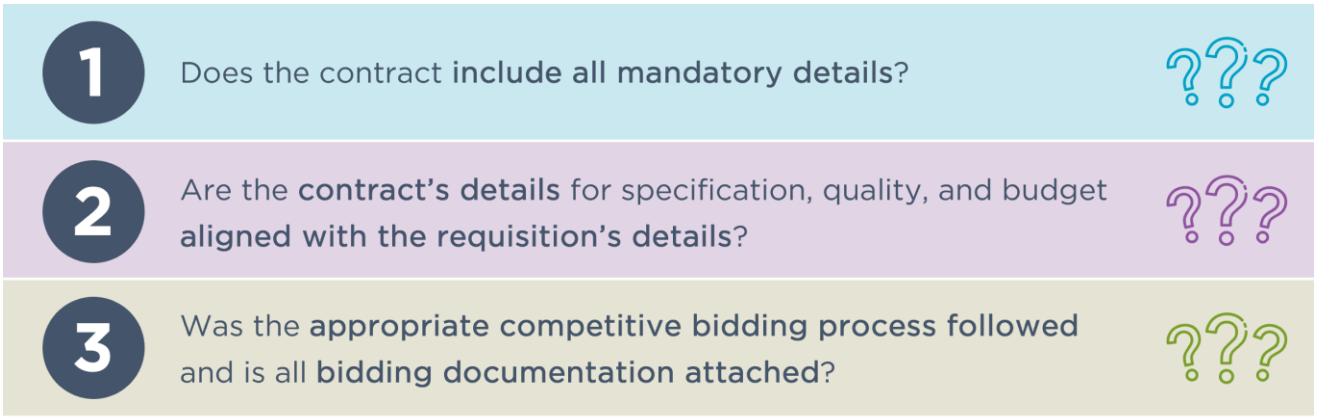
- An SOW.
- The expected period of performance (e.g., the duration of time in days, weeks, months, or years).
- The expected number of hours per week.

PO Creation, Review & Approval in Insight

After a contract is created, a PO must be created in Insight.

Once a PO is created in Insight—with all required documentation attached in Insight—the PO is submitted for approval in Insight.

Approvers are determined by the PO's monetary value and project-owning country. Country programs have a different approval workflow than the United States. The designated approver(s) should review the contract, PO, and attachments with the following questions in mind.



Once the PO has been approved by the designated approver(s) in Insight, the supplier (or the supplier's authorized representative) signs the contract (and/or PO or purchase agreement), then CRS countersigns the contract (and/or PO or purchase agreement) according to the CRS Procurement Approvals Policy and local country program procurement policy.

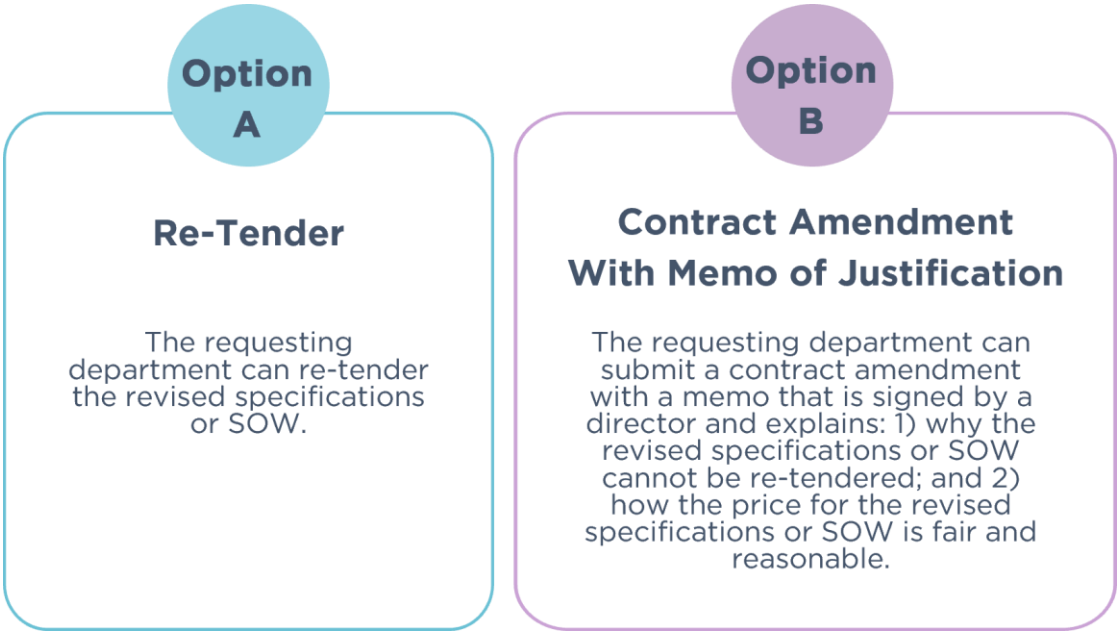
Individuals who sign procurement contracts with external parties must have the appropriate signing authority (see Sub-Delegation of Signing Authority).

Once a PO is approved in Insight, the system automatically creates a commitment against the POET's budget.

For more information on approving POs, refer to the Insight Procurement Reference Guide and the Approve a Purchase Order Job Aid.

PO/Contract Modification

Changes to a PO/contract—including its terms, conditions, and annexes—may require either a re-tender or a contract amendment with a memo of justification, as shown in the figure below.



Contract Amendments

A contract amendment **may be appropriate**—and must be accompanied by a memo of justification described in the figure above—if the answer to any of the questions below is "yes."

- Is the proposed change to the specifications or scope of work relatively minor?
- Are the reasons for making the proposed change by contract amendment defendable to external auditors?

- Is there a reason that CRS must use the current vendor for the proposed change to the agreement?

Below are important guidelines for contract amendments.

- Procurement staff should document and keep all communication about contract amendments and reasons for a contract amendment.
- Approval and signature of contract amendments must follow all requirements in the CRS Procurement Approvals Policy and the country program's local procurement policy (the approval threshold for the amendment is based on the total value of the contract as amended, not the value of the amendment itself).
- Contract amendments must be signed by CRS and the supplier (or the supplier's authorized representative).

Re-Tenders

A contract amendment is **not appropriate**—and should not be done unless there is no other option—if the answer to any of the questions below is "yes."

- Is the proposed change to the specifications or scope of work significant?
- Does the proposed change significantly impact the project (e.g., schedule, price, quantity, quality, etc.)?
- Is the proposed change significant enough that re-tendering the modified specifications or scope of work could yield a different result than the competitive process for the original contract?

Supplier Payment

Payment must be made according to the payment terms in the PO/contract.

Unless the PO/contract payment terms allow for advance payment, CRS only pays for goods and services that have been physically received in acceptable condition (for detailed guidance on returning goods to suppliers, see the Reverse Logistics section in the Warehouse and Inventory Management chapter). CRS may withhold payment from a service provider or consultant until corrective measures are taken to ensure that the services and deliverables meet the required standards.

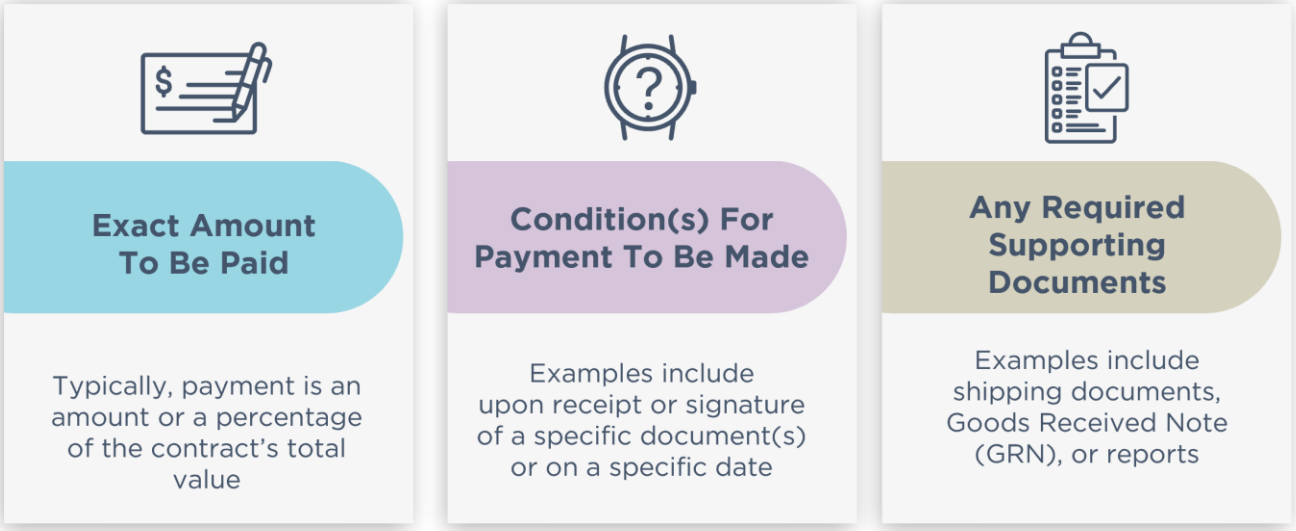
Once suppliers have adequately delivered the goods or services procured by CRS, they must be paid promptly according to the terms of the PO/contract.

Unless the PO includes advance payment terms, the supplier **cannot be paid until**:

- ☐ the **Warehouse Officer** or **Administrative Assistant** receives the goods in Insight; or
- ☐ the **Preparer** or **Administrative Assistant** receives the services in Insight.



The person facilitating the payment should always check the PO/contract to verify the information in the figure below.



Any applicable credit given to CRS by a supplier must be applied to the donor that is funding the activity. In these situations, the procurement department must instruct the finance department on the correct POET code(s) to apply the credit before processing the payment.

The finance department processes and approves payments per finance policies and procedures. For questions or assistance related to the payment of suppliers, contact the local country program's finance team or the Global Finance department.

PO/Contract Close-Out

Once the supplier has fulfilled all contractual obligations, the PO/contract must be closed out.

For detailed information on closing out contracts, refer to the Contract Closure section in the Close-out chapter.

PERFORMANCE MONITORING

After contracts are awarded, CRS staff (i.e., procurement staff, the budget holder/stakeholder, or the requestor) monitors supplier performance of contractual requirements, monitors the quality and status of deliverables, and manages communication with and payment of suppliers.

PO/Contract Requirements

Procurement staff are responsible for monitoring orders throughout the procurement process—from receipt of the completed requisition to delivery—to ensure that there are no unnecessary delays and that deliverables meet PO/contract requirements in terms of timing and quality.

Procurement staff or the person(s) administering the PO/contract should communicate promptly to the requesting department any delivery date changes or other issues.

Monitoring Procurement Status in Insight

The Procurement Lifecycle Report can be used to track the status of all procurements from requisition to payment. For guidance on running and using this report, see Procurement Lifecycle Report Guidance.

Different departments and teams are responsible for monitoring general contract performance for the delivery of goods and services, as shown in the figure below.



A technical expert should review physical goods upon receipt instead, to ensure that they meet the specifications and quality requirements. Receiving a good without the technical expert's sign-off can and does lead to confusion, a loss of time, a loss of money, etc.

Procurement staff are also responsible for monitoring contract performance and specific requirements for the procurements, contracts, and shipments listed below.

For Procurements of Food and Health Products

- Facilitates quality assurance with the independent sampling and testing agencies, ensures receipt of satisfactory sampling and testing reports, and promptly issues the Authorization to Ship.

Monitoring the Quality of Procured Health Commodities

Quality control laboratories perform quality control testing on independent samples of **pharmaceuticals, Rapid Diagnostic tests (RDTs), and other health commodities** to ensure the quality of these products throughout the supply chain.

For **pharmaceuticals**:

- CRS only contracts with WHO-prequalified quality control laboratories or ISO 17025 accredited laboratories.
- CRS verifies that contracted quality control laboratories comply with Good Manufacturing Practices (GMP) and good practices for control laboratories.

For **Rapid Diagnostic tests (RDTs):**

- CRS only contracts with WHO-prequalified quality control laboratories or ISO 15189 accredited laboratories.
- Procurement Officers should arrange for independent sampling and testing right after contract signature.



For Contracts Involving an Advance Payment and/or Installation Payment

- Facilitates payments for goods (the requesting department facilitates payment for services).

For International Shipments

- Ensures that any pre-shipment inspections required by the government for importation are complete and proper paperwork has been obtained, then promptly issues the Authorization to Ship.
- Ensures that the country program receives electronic copies of shipping documents and the tracking number of original shipping documents so waivers for customs and import duties can be applied for and in place before the arrival of the goods.

For Complex Service or Construction Procurements

- Follows any contract monitoring plan written into the SOW.

For CVA Vendors

- Ensures the implementation of feedback mechanisms for program participants about vendor interactions with program participants.

Supplier Performance

The procurement department is responsible for managing vendors to ensure that CRS is working with legitimate, ethical partners who abide by the terms and conditions of the PO/contract.

Procurement is the only department that communicates with suppliers, except when a requesting department must communicate directly with a vendor of a service about the management of deliverables, clarifications, updates, etc.

Procurement staff must only communicate with the supplier's authorized point of contact in the agreement (or the authorized point of contact's designee).

Code of Conduct

The CRS Supplier/Service Provider Code of Conduct establishes the minimum standards of ethical conduct required of all suppliers and service providers who are contracted by CRS. The social, governance, and environmental standards laid out in this code of conduct reflect CRS' commitment to honor and protect the rights and dignity of all people to live free from abuse and harm, to act with integrity, and to be responsible stewards of resources.

Blacklisting

In certain circumstances and with strong justification following the CRS Supplier Master Policy, CRS can decide to no longer seek bids from or contract with a supplier. A decision to blacklist a supplier must be documented with the reason(s) for the blacklist, the date, and the signature of the Procurement Manager **and** their supervisor.

Blacklisting is typically done for one of the following reasons.

- Record of poor performance.
- Proven cases of corruption, collusion, or conflict of interest (COI).
- Documented failure to meet the CRS Supplier/Service Provider Code of Conduct.
- Documented or misaligned business practices (especially in terms of values or ethics).
- Association with the supplier exposes CRS to reputational damage.

  Due diligence results conclude that CRS cannot establish a commitment, make a payment, or perform any other transaction with the supplier (i.e. if the supplier receives a "true positive" match during the eligibility re-verification). For more information, see the Due Diligence section in this chapter.



Photo by Karen Kasmauski

Chapter 7: International Transport

7. INTERNATIONAL TRANSPORT

Purpose

This chapter enables supply chain staff to effectively organize and manage the international transportation process and understand the different terms, requirements, suppliers, and stakeholders involved. The international transportation process includes shipping and all pre-arrival shipment activities (planning, contracting with external service providers, completing customs, and import requirements) as well as cargo arrival and post-arrival activities such as carrier payment.

For information specific to USG food assistance commodities in the international transport process, see the CRS Supply Chain Management Handbook appendices listed below.

Appendix A: USG Food Assistance Call Forward

Appendix B: USG Food Assistance International Transport



References to "goods" or "cargo" within this chapter represent all items that move through the CRS supply chain including D-goods (goods that will be delivered to program participants), ND-goods (goods that will be given to CRS or partner staff), Gifts-In-Kind goods, and CVA assets.



7.1 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

CRS POLICIES AND PROCEDURES

- CRS Records Retention Policy
- CRS Supply Chain Records Management Policy

DONOR POLICIES AND REGULATIONS

- 7 CFR 1499 – USDA – Commodity Credit Corporation – Food for Progress Program
- 7 CFR 1599 – USDA – Foreign Agriculture Services – McGovern Dole International Food for Education and Child Nutrition Program

- 22 CFR 211 – USAID – Transfer of Food Commodities for Food Use in Disaster Relief, Economic Development, and Other Assistance
- 22 CFR 216 – USAID – Environmental Procedures
- 2 CFR 700 Uniform Administrative Requirements, Principles, and Audit Requirements for Federal Awards
- 46 USC 55305 – Cargo Preference Act (administered by the US Maritime Administration)
- 49 CFR 171-177 – US Department of Transportation – Hazardous Material Regulations
- Guide to Global Fund Policies on Procurement and Supply Management of Health Products
- International Air Transport Association (IATA) Dangerous Goods Regulations
- International Air Transport Association (IATA) Lithium Battery Shipping Guidelines
- International Maritime Dangerous Goods Code
- The Safety of Life at Sea Convention
- USAID ADS Chapter 312 – Eligibility of Commodities
- USA Patriot Act of 2001

DONOR OR OTHER GUIDELINES

- Certification in Humanitarian Logistics Learning Materials: Unit 4 - Transport
- Logistics Cluster – Logistics Operational Guide
- Technical and Operational Performance Support Commodity Management Handbook
- WHO – A Model Quality Assurance System for Procurement Agencies
- WHO – WHO Certification Scheme on the Quality of Pharmaceutical Products Moving in International Commerce

7.2 OVERVIEW

MODES OF TRANSPORT

The process for selecting the mode of transportation is discussed at design and formalized during the start-up and planning phases of the project lifecycle. If the local or international context changes during the project lifecycle, the mode of transportation should be reassessed and analyzed for the best way to transport goods. Depending on the Incoterm and the type of project, CRS may not have direct control in selecting the mode of transportation used for international transportation. Even in those cases, the guidance in this chapter applies under most circumstances.

For more information about modes of transportation, see the Start-Up chapter and Certification in Humanitarian Logistics Learning Materials: Unit 4 - Transport.

INCOTERMS

CRS supply chain staff must understand to safeguard CRS operations and reduce liability risks. Understanding these terms enables staff to select the right trade terms for international transport.

What are Incoterms?

Uniform trade rules that define where responsibility, cost, and risk is divided between buyer and seller in international transactions.

Incoterms Are

- ✓ Trade terms
- ✓ Universally recognized rules
- ✓ Inclusive only of the most common trade or commercial practices for physical goods
- ✓ Meant to simplify some terms of an international sales agreement
- ✓ For the interpretation of the terms of delivery only

Incoterms Are Not

- X Shipping terms
- X Laws
- X Inclusive of all the required terms and conditions for international sales of goods
- X Meant to substitute for a sales agreement or represent a contract
- X For any other terms or conditions of the contract of sale, other than terms of delivery

For USG food assistance, there are delivery/discharge shipping terms that are unique to this type of programming. These terms **should not** be confused with Incoterms, even though there can be similarities between them. The delivery/discharge terms describe the ocean carrier's responsibility following carrier's receipt of goods from supplier. For more information on these terms and the shipping process for USG food assistance cargo, see Appendix B: USG Food Assistance International Transport.

Below are important considerations for the use and understanding of Incoterms.

- There is no default Incoterm. For all international purchases of goods, Incoterms must be selected and should be specified in the sales quotations, contract, PO, and shipping documents.
- Under Incoterms rules, “delivery” is defined as the point, place, or port at which risk transfers from seller to buyer (which is not necessarily when the goods physically arrive at the buyer's final delivery point).
- Be careful when adding qualifiers that deviate from the standard application or interpretation of any particular Incoterm (e.g., delivered at place, or DAP, – customs clearance included).

- Incoterms do not:
  - apply to contracts for service;
  - determine transfer of title;
  - define solutions for any contract breaches; or
  - define payment terms.

CRS staff must know when and where the transfer of cost, risk, and responsibility occurs during international transport of goods, based on the Incoterm that was agreed on between CRS and the supplier of goods.

The figure below, sourced from the International Chamber of Commerce's Incoterms® 2020 practical free wallchart, shows how the cost, risk, and insurance are distributed between CRS and its suppliers, under Incoterms 2020. The seller is the supplier, and the buyer is CRS. Even if CRS is not buying the goods directly, CRS still has the same risks as the buyer (e.g., for USG Food Assistance or Global Fund projects).

Incoterms® 2020 by the International Chamber of Commerce (ICC)

TRANSPORT OBLIGATIONS, COSTS AND RISKS

Blue indicates seller's **Gold** indicates buyer's **Green** indicates mixed or shared

RULES FOR ANY MODE OR MODES OF TRANSPORT

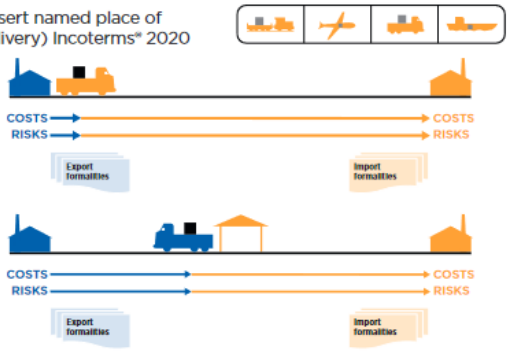
EXW Ex Works
(Insert named place of delivery) Incoterms® 2020



CIP Carriage and Insurance Paid To
(Insert named place of destination) Incoterms® 2020



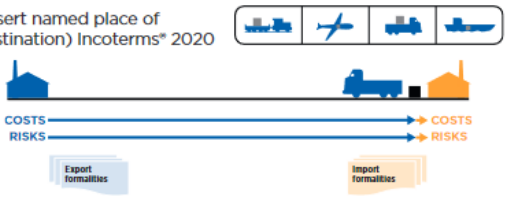
FCA Free Carrier
(Insert named place of delivery) Incoterms® 2020



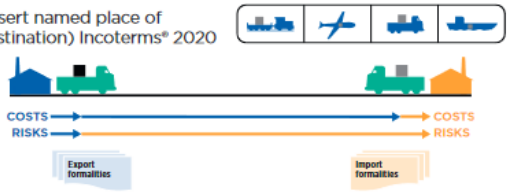
DAP Delivered at Place
(Insert named place of destination) Incoterms® 2020



DPU Delivered at Place Unloaded
(Insert named place of destination) Incoterms® 2020



CPT Carriage Paid To
(Insert named place of destination) Incoterms® 2020

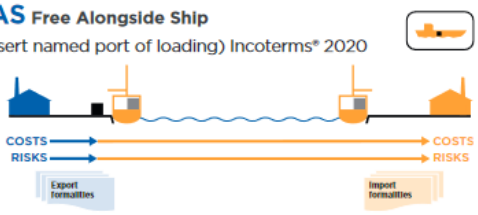


DDP Delivered Duty Paid
(Insert named place of destination) Incoterms® 2020



RULES FOR SEA AND INLAND WATERWAY TRANSPORT

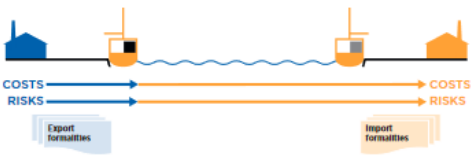
FAS Free Alongside Ship
(Insert named port of loading) Incoterms® 2020



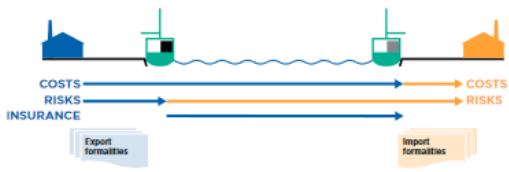
CFR Cost and Freight
(Insert named port of destination) Incoterms® 2020



FOB Free on Board
(Insert named port of loading) Incoterms® 2020



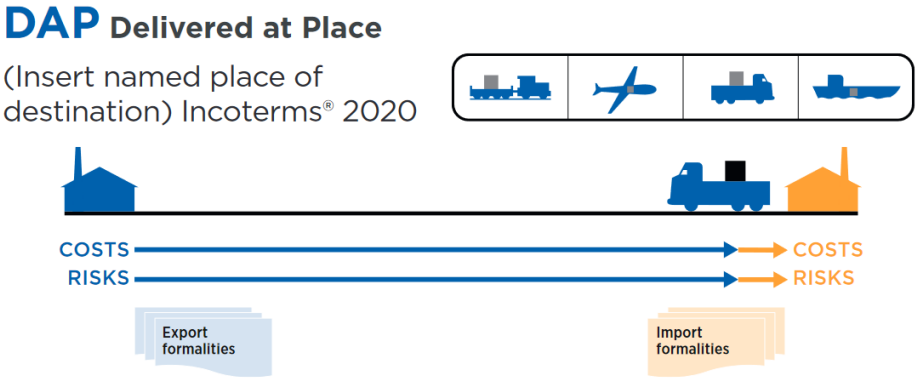
CIF Cost, Insurance and Freight
(Insert named port of destination) Incoterms® 2020



Source: **Incoterms® 2020 practical free wallchart**, International Chamber of Commerce.

Delivered at Place (DAP)

CRS encourages the use of delivered at place (DAP), as illustrated below, as the preferred Incoterm because this Incoterm places most of the risk and cost for transportation on the seller. Under this Incoterm, CRS is responsible for import taxes and customs clearance as well as unloading at the ship-to location.

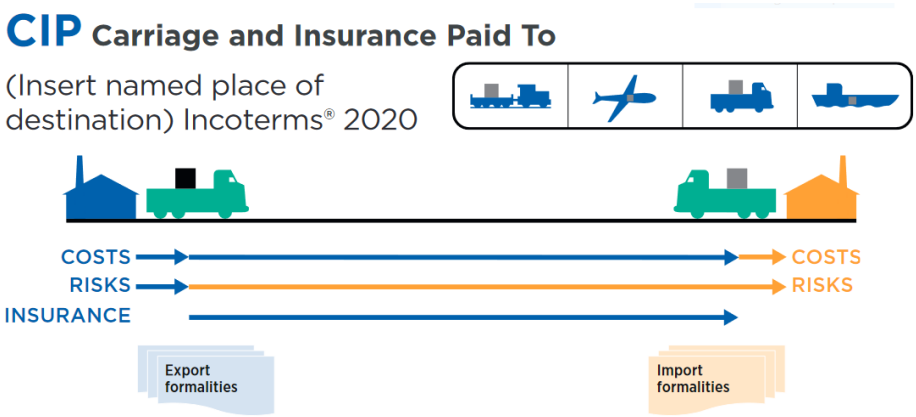


Source: Incoterms® 2020 practical free wallchart, International Chamber of Commerce.

Carriage and Insurance Paid To (CIP) and delivered at place unloaded (DAPU) may also be used.

Carriage and Insurance Paid To (CIP)

Carriage and Insurance Paid To (CIP) means that the seller arranges the transportation to the agreed-upon destination at an agreed-upon place, as illustrated below.



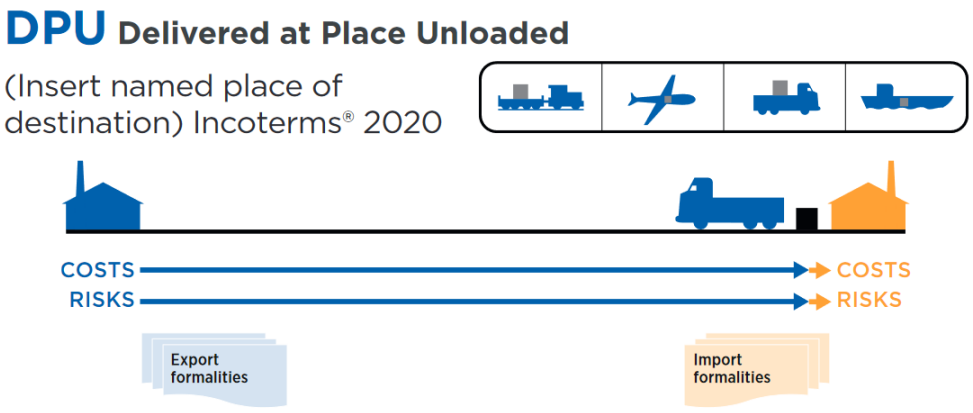
Source: Incoterms® 2020 practical free wallchart, International Chamber of Commerce.

Under this Incoterm, the seller is responsible for the costs of the transport of the goods to the named place of destination and for contracting insurance that will protect CRS from the risk of loss or damage during the transport. Meanwhile, CRS is responsible for import taxes, customs clearance, and unloading at the agreed-upon place of destination (in the buyer's country).

As with all "C" terms, the buyer assumes risk at the place of delivery. Because “delivery” is defined as the point at which risk passes from the seller to buyer (not necessarily when the goods physically arrive at the buyer's final delivery point), risk transfer happens much earlier when the appointed carrier takes control.

Delivered at Place Unloaded (DAPU)

Delivered at place unloaded (DAPU) means that the seller is responsible for all risks and costs of transport, including the unloading of the goods at the agreed-upon place of destination (in the buyer's country), as illustrated below. Under this Incoterm, CRS is responsible for import taxes and customs clearance.



Source: Incoterms® 2020 practical free wallchart, International Chamber of Commerce.

The use of this Incoterm might be more expensive than other Incoterms, and it can carry a risk (e.g., allowing non-CRS staff to enter the storage location); but it might be needed in cases where the delivery point cannot find laborers to accommodate offload.

Selecting the Right Incoterms Checklist

CHECKLIST *Selecting the Right Incoterms*

During the procurement process, **procurement and logistics staff** should:

- ☐ Choose the most appropriate Incoterms in the contract to balance cost, risk, and liability.
- ☐ Name the right location with a precise point or place with the Incoterm.

When preparing the contract with the supplier, **procurement and logistics staff** should specify:

- ☐ The Incoterm selected (should also be included in the RFQ and the PO).
- ☐ the Incoterm's year/version (e.g., "Incoterms 2020 rules").

Please see below for context-specific callout boxes that also apply.

When creating a PO for goods in Insight, procurement staff should select the chosen Incoterm from a field called "FOB" (FOB is one of the Incoterms called "free on board").

OCEAN LINER TERMS

Ocean Liner Terms are used to identify the conditions of ocean carriage and to assign the responsibility of costs between carrier and consignee (e.g., CRS) by identifying the party responsible for loading and unloading or discharging costs (as included in the freight price). Liner Terms are different than Incoterms. Below are the most important ocean Liner Terms to understand.

Full Liner Terms: Carrier bears the costs of loading/unloading

Free In, Out/Stowed: Consignee bears the costs of loading/unloading

Free In, Free Out: Same as FIOS

Liner In, Liner Out: Carrier bears the costs of loading and discharging

Liner In, Free Out: Carrier bears the cost of loading; consignee bears the cost of unloading

Free In, Liner Out: Consignee bears the cost of loading; carrier bears the cost of unloading

Note that port practices vary, and a port might not allow for all cargo handling costs to be included in the negotiated freight price.

For ocean cargo, shipments may be arranged under a Through (or "to-door") bill of lading. Under a Through bill of lading, an ocean carrier is responsible for delivering cargo to a consignee's location using more than one mode of transport to a delivery point that is outside of the port/terminal.

DOCUMENTATION

Many different documents are required for the export, transport, and import of goods. The most common documents are listed and described below, sourced from the Fritz Institute/CILT *Certification in Humanitarian Logistics* Unit 4: Transport.

Pro-Forma Invoice

The Pro-Forma Invoice is a preliminary document prepared before the contract is signed or before the goods are shipped. This document is often used to arrange for the import license or the letter of credit with the bank.

Bank Instructions (Letter of Credit)

The Letter of Credit is a document that the bank needs to ensure that there are sufficient funds available to cover the payments and costs associated with the purchase and transport of goods.

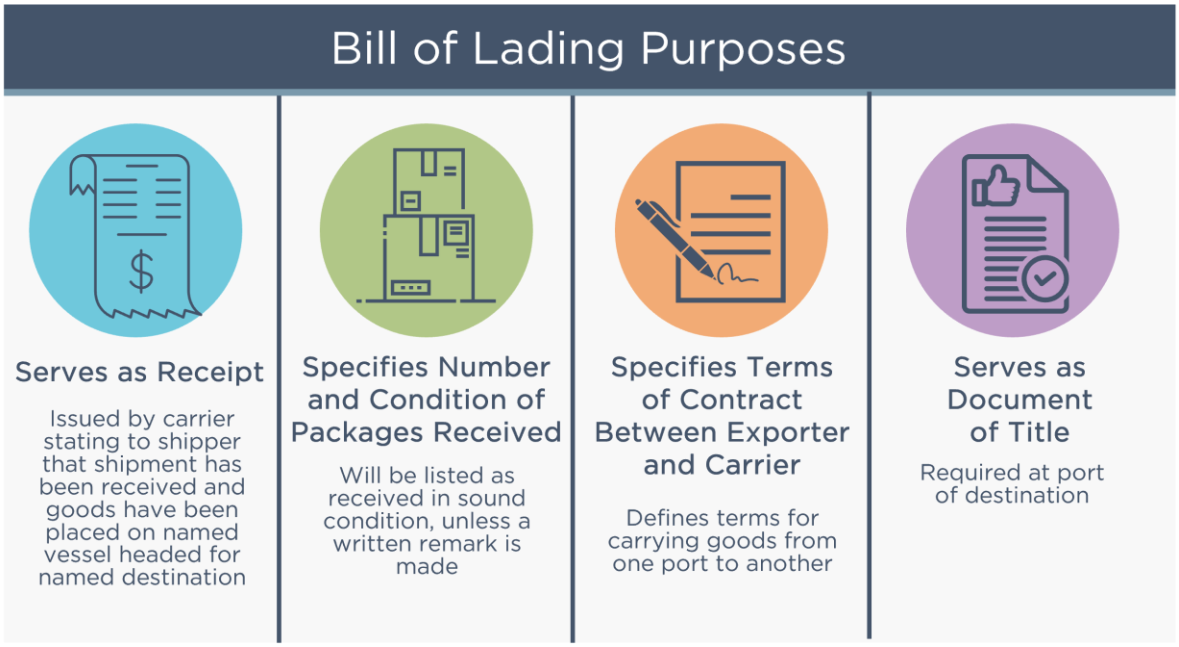
Cargo Shipping Instructions

This document(s) gives specific instructions to the carrier or Freight Forwarder for handling the cargo during shipping, including the most common instructions listed below.

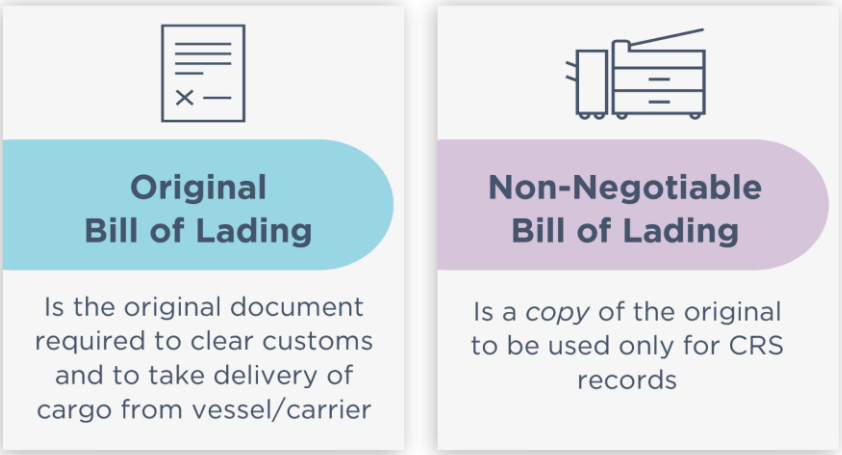


Bill of Lading

The bill of lading serves multiple purposes (listed below) and is one of the most important documents for marine transport. It is the official contract between the shipper or owner of goods and the freight carrier.



Below is the difference between the original and the non-negotiable bills of ladings.



Because a non-negotiable bill of lading is a copy instead of an original, it cannot be used to clear customs or to take delivery of the cargo from the vessel/carrier.

Waybill

The waybill is a Delivery Note (DN) that serves as a form of contract between the carrier and the shipper and as proof of receipt of goods. Waybills differ from the bills of lading and do not state the title of ownership. The air waybill is often completed by the airline carrier or the Freight Forwarder and can be a complex document like the bill of lading.

Insurance Documents

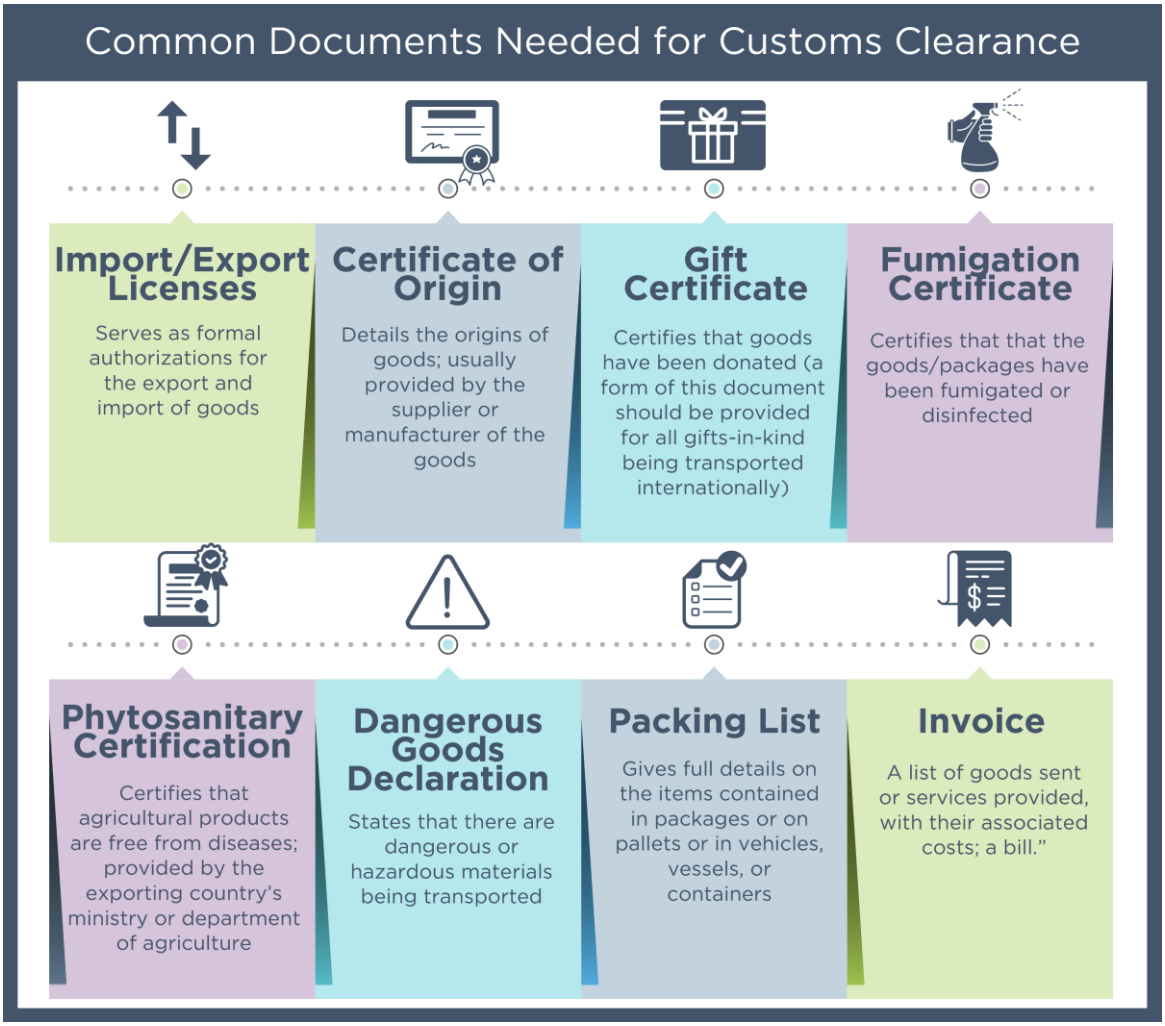
Insurance documents provide evidence that insurance has been obtained, the level of coverage or coverage limitations, and the insured value. Cargo insurance may be purchased to mitigate the risk of loss or damage to goods while in transit.

Commercial Invoice

The commercial invoice is the official proof of sale between the seller and the buyer. This document includes the complete details of the sales transaction, including the shipping terms.

Customs Documents

Several documents are needed for customs clearance, including the most common ones listed below. Many countries require additional documentation to clear goods so the Logistics Manager should be aware of what is required for their country program.



7.3 ROLES AND RESPONSIBILITIES

CRS STAFF

The figure below lists the functions and activities of nine roles involved in organizing and managing the international transportation process.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Function/Activity	Global International Transportation	Country Representative	Head of Operations	Supply Chain Manager	Logistics Manager	Logistics Systems Information System Officer	Procurement Team	Requestor	CRS-designated Port Agent
Makes sure the proper Incoterm is reflected in PO					A		R	I	
Determines if pre-inspection is required before export and communicate information to procurement and the requestor (if needed)	I	I		A	R		I	I	
Determines if cargo insurance is required, and if so, arrange for the procurement of insurance		I		A	R		I	I	
Identifies and contracts Third-Party Logistics (3PL) providers				A	R		I	I	
Confirms receipt of document packages containing bills of lading, import requirements, etc., and review for completeness				A	R				
Provides documents to Clearing and Forwarding Agent for customs clearance				A	R				I
Tracks cargo movement, estimated time of arrival, and arrival				A	R				R
Checks on the availability of berth and port warehouse space, and inspect quay and				C	A				R

Function/Activity	Global International Transportation	Country Representative	Head of Operations	Supply Chain Manager	Logistics Manager	Logistics Systems Information System Officer	Procurement Team	Requestor	CRS-designated Port Agent
ocean/airport terminal storage facilities									
Attends and monitors cargo operations following the arrival				C	A				R
Completes survey/inspection of arrived cargos		I		I	A				C
Notifies donors of any major problems immediately after the arrival of goods	I	A	R	C	C				C
Receives and reviews survey reports for accuracy and completeness; fills out the Loss and Claim Report Form if there are losses	I	I	I	A	R	I			C
Moves goods from external IO where goods originated to external IO of destination country program; tracks movements of goods at country program level within external IO until goods are transferred to internal IO	I			A	I	R			
Makes sure that finance has received invoices from Carriers and Service Providers for payment processing			I	A	R	I			

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

THIRD-PARTY LOGISTICS (3PL) PROVIDERS

To manage international transport, CRS contracts with Third-Party Logistics (3PL) providers. The roles and responsibilities of these external service providers are highlighted in a flow chart in the Processes section of this chapter and are summarized below.

Transport Carrier/Agent

The carrier is the company or person legally entitled to transport goods on behalf of the shipper. A carrier and/or shipper may choose to appoint an agent/broker to act as an intermediary or point of contact on their behalf when facilitating transport and related services. The carrier, shipper, and/or their designated agent/broker have a shared responsibility in ensuring that all documents and information are shared with the appropriate parties.

Freight Forwarder

The Freight Forwarder is an expert in the logistics network. Freight forwarders do not move goods themselves but can arrange the transport of goods using a variety of shipping modes. International freight forwarders have experience preparing and processing customs documents and can perform many of the activities associated with the international transportation of goods. They can also review, issue, and/or collect documents required by the consignee, including bills of lading, export declarations, commercial invoices, and other export/import documents.

For a good list of criteria to use in selecting an experienced and trustworthy freight forwarder, see Fritz Institute/CILT *Certification in Humanitarian Logistics* Unit 4: Transport.

Clearing and Forwarding Agent

The Clearing and Forwarding Agent is based in the country of destination and focused on the import process. Clearing and forwarding agents can communicate between CRS and the government/port authorities and can manage customs inspections. This role gives timely, accurate data and guidance to CRS staff about import requirements or any changes in government/customs regulations that might directly impact CRS. In some cases, the Clearing and Forwarding Agent oversees the transport of goods to a CRS storage facility or the service delivery point.

Port Authority

The Port Authority manages the port. This role oversees berthing, loading/unloading, scheduled arrivals and departures of vessels, port security, dock workers, and other laborers.

Port Agent

The Port Agent makes sure that CRS is informed about what is happening at the port and is responsible for the duties listed below.

- Communicating the estimated and actual arrival and berth of vessels
- Observing the vessel berthing and unloading processes
- Arranging for the availability of stevedores to unload the vessel
- Submitting import documentation to the port authority

CRS staff may be appointed to serve as the Port Agent (under some circumstances, the Logistics Manager or Supply Chain Manager may serve in this role), or CRS may hire a company or individual to serve in this role.

Surveyor/Inspector

The Surveyor/Inspector inspects cargo as it is loaded or unloaded from a vessel or container and is responsible for the duties listed below.

- Tallying, sampling, weighing, and examining the condition of cargo and the condition of containers, vessel holds, and port equipment.
- Preparing reports with tally totals and potential losses and damages.
- Inspecting the quantity and quality of the goods and conformance with specifications.

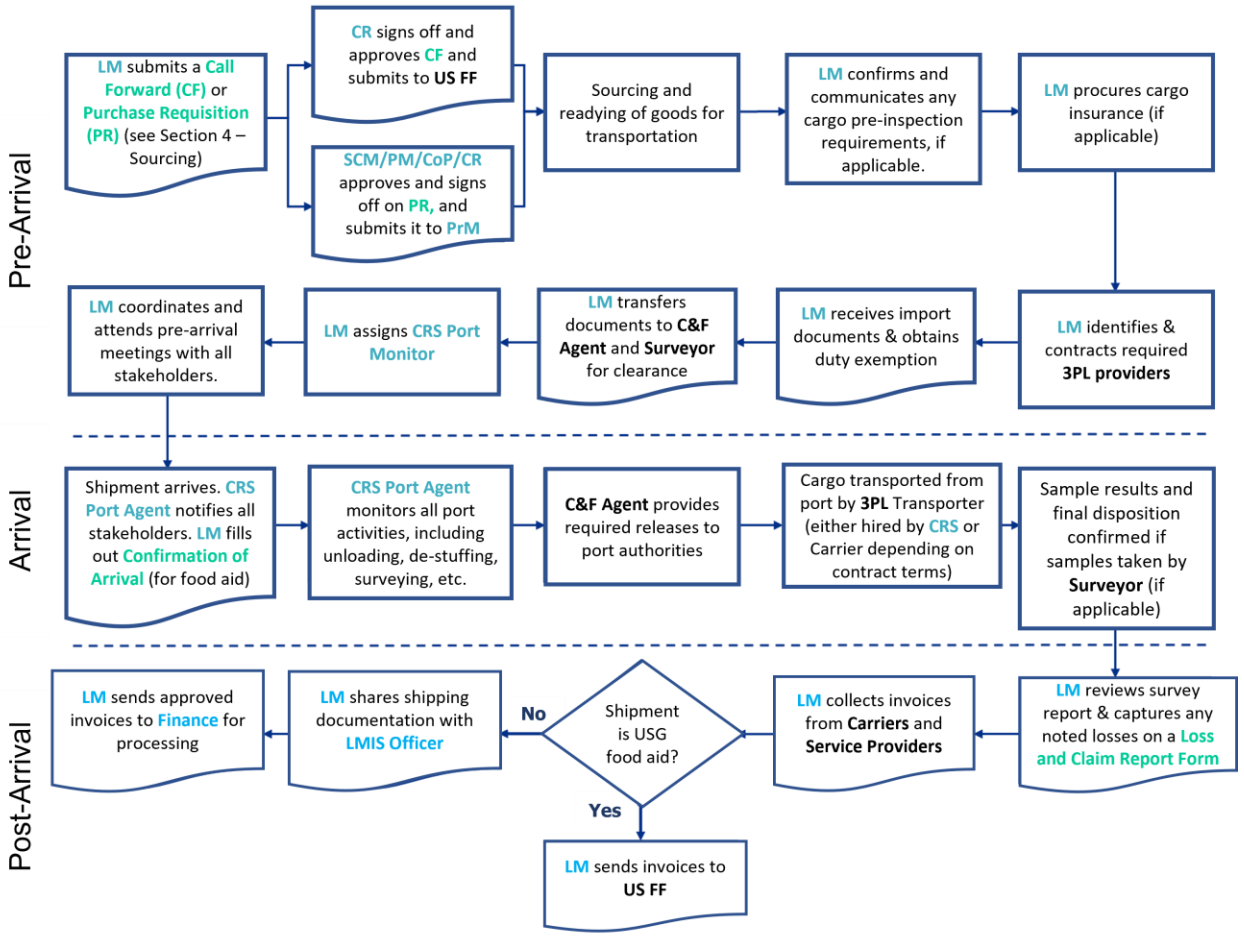
During the international transportation process, cargo might be inspected multiple times:

- during loading at the country of origin;
- during unloading at the port at the country of destination; and
- during the unloading at the ship-to location.

Surveyors/Inspectors may be a private company or may belong to a government department.

7.4 PROCESSES

For the full titles and responsibilities of the roles abbreviated in the figure below, see the Roles and Responsibilities chapter.



The process flow for international shipping for Global Fund insecticide treated nets differs from the general flow reflected above. For more specific information about health items in international shipping, see the Health Annex.

PRE-ARRIVAL

Planning

Transportation needs should be determined at the start of a project and should be evaluated and updated annually for multi-year programs. Transportation needs should also be re-evaluated following changes in project deliverables or changes to the local context (e.g., changes to the regulatory environment). For more information, see the Start-Up chapter.

Goods that need to be sourced internationally have long lead times so there should be routine planning and regular coordination among procurement, logistics, programming, and country program leadership in advance of when goods are needed.

Identifying and Contracting Third-Party Logistics (3PL) Providers

Many Third-Party Logistics (3PL) providers are involved in the international transportation process (see Third-Party Logistics (3PL) Providers section in this chapter). During the start-up of a project, the Logistics Manager in collaboration with the Procurement team should identify and contract Third-Party Logistics (3PL) providers when the project involves purchases or donations of goods that are being shipped internationally.

Global International Transportation can also support country programs with international transportation questions or needs. This team works with international freight forwarders like LifeLink Logistics for USG food assistance programming. For support, contact the Supply Chain Regional Technical Advisor or gscminfo@crs.org.

Transport management is both complex and time-consuming. By using reputable service providers, the logistics team can reduce direct oversight of transport operations and spend more time on planning and monitoring. Whenever possible, contract with full-service and reputable Third-Party Logistics (3PL) providers. During the tendering process, always request relevant certification from prospective suppliers. For information on sourcing contracting these services, see the Start-Up and Procurement chapters.

Identifying & Contracting Third-Party Logistics Providers Checklist

CHECKLIST *Identifying & Contracting Third-Party Logistics Providers*



The **Logistics Manager** and the **logistics team:**

- ☐ Contracts Third-Party Logistics (3PL) providers as needed such as Freight Forwarders, Clearing and Forwarding Agents, Transportation Agents, and Surveyors. For information on sourcing contracting these services, see the Start-Up and Procurement chapters.

Please see below for context-specific callout boxes that also apply.

During emergencies, it is common to work with a common services provider such as the U.N. Logistics Cluster (LC) or a partner that can import goods duty free. For more information, see the Start-Up chapter and the Logistics Cluster Humanitarian Operational Coordination of Logistics and Air Transport

Calculating Quantities, Weights, and Volumes of Goods to Transport

Use CRS' Weight and Volume Calculator to determine the number of containers or the amount of vessel space needed to meet requirements. For more information on calculating weights and volumes of goods, see Design chapter.

Logistics staff should keep a history of the weights and volumes of commonly transported items. This information is useful for estimating the required number of trucks based on the volume and weight of goods.

The logistics team should plan for reasonable surplus transport capacity. Building in buffer capacity helps CRS adhere to dispatch schedules, avoid pipeline breaks, respond to ad hoc transport requests, and make sure sufficient resource availability to cargo within the set deadlines.

Optimizing the use of space/capacity for all modes of transport can lead to reduced climate impact and freight cost savings. To facilitate more environmentally and economically sustainable supply chain practices, procurement and logistics staff can:

- require suppliers to **optimize space on a per-load or per shipment basis**;
- identify opportunities during purchasing to build a full container/truck load;
- identify opportunities for cargo consolidation with improved planning and consolidation of CRS preferred freight service providers; and
- identify opportunities with packaging to reduce the dunnage weight and space demands, if such reduction does not compromise cargo integrity during transport and storage.

Establishing Registration and Host Country Agreements (HCAs)

The host country agreement (HCA) with all registration should be established before organizing any international transportation. For more information, see the Start-Up chapter.

Reviewing Import and Customs Clearance Requirements

This section and the subsequent remaining sections of the Pre-Arrival processes provide guidance on the preparation of goods arriving at the country of destination (or importing country) from the country of origin (or exporting country).

Importing & Customs Clearance Checklist

CHECKLIST *Importing & Customs Clearance*



The **Logistics Manager:**

- ☐ Continuously monitors changes to government regulations about import or customs clearance requirements.
- ☐ Talks with the appointed Customs Clearing Agent to make sure that all required documentation is provided and that the cargo can be released quickly.

Completing Pre-Shipment Inspection and Cargo Insurance

Pre-Shipment Inspection & Cargo Insurance Checklist

CHECKLIST

Pre-Shipment Inspection & Cargo Insurance



The **Logistics Manager:**

- ☐ Determines the amount of free time available for cargo arriving at the port in case of delays to avoid demurrage, storage, detention, and other related charges.
- ☐ Determines if the cargo is subject to any pre-inspection requirements, before authorizing any cargos for shipment.
- ☐ If pre-inspection is required: Contacts the requesting entity to arrange for pre-inspection of goods in the exporting country.
- ☐ Obtains the inspection certificate that is issued after goods are pre-inspected.
- ☐ Tells the freight forwarder and other relevant parties if there is hazardous cargo since hazardous cargo may be subject to additional shipping and/or document requirements (or even restrictions).
- ☐ Shares any available material safety data sheets for hazardous goods with the freight forwarder, who shares this information with the carrier or carrier's agent.
- ☐ Determines if transportation insurance coverage is needed, based on the value of the goods (the freight forwarder should be able to provide a quotation).
- ☐ If transportation insurance coverage is needed: Works with Procurement staff to obtain insurance coverage.

To determine if pre-inspection is required, research local government regulations. Governments often require pre-inspection of cargos to quantify and qualify cargo for customs valuation or assessment of duties. In addition, pre-inspection helps prevent illegal imports.

☐ **Please see below for context-specific callout boxes that also apply.**

The country program is not responsible for pre-shipment inspection and cargo insurance determination if the goods being transported are USG food assistance commodities. For more information, see Appendix B: USG Food Assistance International Transport.

Completing Cargo Loading, Tracking, and Document Transfer

The documents required for each shipment vary depending on the goods being shipped, country of origin, mode of transport, national government laws and/or requirements in the destination country, and donor regulations. Some commonly required shipping documents are the bill of lading or air Waybill, Cargo Manifest, donation and/or regulatory authority certificates, Packing List, commercial invoice, etc. For more information, see the Documentation section in this chapter.

Cargo Loading & Document Transfer Checklist

CHECKLIST *Cargo Loading & Document Transfer*



The **Freight Forwarder** or **other party responsible for tracking the loading of goods:**

- ☐ Tells the Logistics Manager at the destination country program that loading has been completed and gives both the estimated date and time of departure and the estimated date of arrival at the port of discharge and/or named delivery destination point.
- ☐ Provides final copies of required shipping documents in advance of cargo arrival so that the logistics team and the relevant parties can prepare for the importation and customs clearance process with the local government ministry or authority.

Cargo Tracking Checklist

CHECKLIST *Cargo Tracking*



The **Freight Forwarder** and **Clearing Agent**:

- ☐ Track the cargo's estimated time of arrival (ETA) and urgently tell CRS about any significant events (e.g., a strike, poor road conditions, etc.) that may cause any type of delay.

Cargo Tracking & Document Transfer Checklist

CHECKLIST *Cargo Tracking & Document Transfer*



The **Logistics Manager** or **other staff responsible for tracking shipping documents and the shipment of cargo**:

- ☐ Prepares requests or applications for duty-free exemption for submission to the relevant government ministry.
- ☐ Reviews all documents to make sure they are in proper condition and to confirm that all required documents have been received (recommended tool: documentation checklist).
- ☐ Maintains all shipping documentation in a shipping file to track all shipping-related documentation, and keeps all documents for the specified retention period (see Records Retention Policy).
- ☐ Makes sure that all required documents are submitted to the right parties (e.g., Clearing and Forwarding Agent, Surveyor, etc.) to facilitate unloading and customs clearance.
- ☐ Tells relevant parties if any documentation is delayed.
- ☐ Tracks shipments with a master shipping ledger with information that includes carriers, names of vessels, packing list numbers, sales order numbers, tonnages, final delivery locations, etc.
- ☐ **If weekly status updates are not provided by the Clearing Agent and the Freight Forwarder:** Asks urgently about the status of the shipment.

☐ **Please see below for context-specific callout boxes that also apply.**

For USG programs, if transporting controlled substances, additional national approvals such as the right to import controlled substances are required. For more information, see the Health Annex.



For GIK goods (e.g., USG food assistance) or international movements of CRS inventory (e.g., from a UNHRD warehouse), the staff assigned the LMIS Officer persona from Global International Transport or LMIS Officer from a country program will perform an inter-organization transfer from the external IO where the goods originated to the external IO of the destination country program. **All shipping documentation should be attached to this transaction.** From there, the LMIS Officer for the destination CP tracks movements within the external IO until the goods are transferred to the internal IO. For more information on dispatch and distribution transfers, see the Insight Supply Chain Management Reference Guide: Inventory Management and the following job aids: Interorganizational Transfer and Subinventory Transfer.



Preparing for Cargo Arrival at Port of Destination

As the cargo's estimated time of arrival (ETA) approaches, the logistics team at the port of destination should prepare for cargo arrival.

Pre-Arrival of Cargo at Port of Destination Checklist

CHECKLIST *Pre-Arrival of Cargo at Port of Destination*



The **Logistics Manager:**

- ☐ Makes sure that a CRS Port Agent is appointed to be present at the port during cargo arrival.
- ☐ If there are no current contracts with a Surveyor in place: Works with procurement staff to contract a Surveyor.
- ☐ Once there is an existing contract with a Surveyor: Offers details about the estimated time of arrival (ETA) and gives a copy of the bill of lading.
- ☐ Sets up a pre-arrival meeting with the appropriate stakeholders (Carrier's Local Agent, Shipment Surveyor, CRS Surveyor, Clearing Agent, CRS Port Agent, and others) to clarify roles and responsibilities.
- ☐ Confirms names and contact information of agents and representatives who will be at the port/terminal during discharge and unloading operations.
- ☐ When possible, works with the Clearing Agent to complete customs pre-clearance.
- ☐ Confirms that all required documents have been received by government, port authorities, and ministries according to national import requirements.
- ☐ Makes sure that any reconstitution responsibilities have been assigned and works with the Surveyor to make sure that reconstitution materials are available.
- ☐ Depending on the incoterm, works with the CRS Agent to review availability of berthing, unloading equipment (e.g., cranes), port warehouse space, and labor.
- ☐ Tells the Warehouse Manager the estimated time of arrival (ETA) of the goods so that the Warehouse Manager can begin preparing the storage facility for the upcoming receipt.

ARRIVAL

For USG food assistance, the Logistics Manager must confirm the arrival of the vessel by sending the Confirmation of Arrival (COA) Form to the Global International Transportation and LifeLink Logistics (the U.S. Freight Forwarder). The Logistics Manager should also keep Global International Transportation and LifeLink Logistics informed about the any losses that occurred during the unloading process. For more information, see Appendix B: USG Food Assistance International Transport.

Berthing, Inspection, and Unloading

Ocean Shipment Arrival Checklist

CHECKLIST *Ocean Shipment Arrival*



After the vessel arrives at the terminal or port, the **CRS Port Agent**:

- ☐ Informs the Logistics Manager and makes sure that the Clearing Agent and the Surveyor are present for the vessel berthing and unloading process.
- ☐ Watches the process of opening of the cargo holds and visually inspecting the cargo.
- ☐ Confirms that there are enough trucks and equipment available for cargo discharge/unloading.
- ☐ Monitors cargo during unloading and inspection to protect it and prevent losses.
- ☐ Oversees the Surveyor to make sure contractual duties are being fulfilled (e.g., gathering samples of damaged cargo, providing reconstitution materials to stevedores, observing the entire unloading process, etc.).
- ☐ Makes sure that damaged/doubtful commodities are immediately removed from the quay and stored in an appropriate place.
- ☐ Makes sure that a Letter of Protest is written for damaged or lost cargo (**Note**: for USG food commodities ordered via call forward, this must be done within three calendar days).
- ☐ Verifies that a Letter of Intent to file claim for losses/damages has been provided to the carrier's agent.

CONTINUED *Ocean Shipment Arrival*



After the surveying of the cargo is complete, the **Logistics Manager**:

- ☐ Notifies the Supply Chain Manager, Head of Operations, and Country Representative if there were any problems during the unloading process and notes any losses that occurred.

Importing and Customs Clearance

Customs authorities are responsible for reviewing all documentation for transportation and shipping and for inspecting imported goods to make sure that all goods conform to import controls and that all duties are collected. The CRS-appointed Clearing Agent assists in the negotiation with customs authorities and with the examination of the cargo.

Goods may be removed from customs control only after the customs authority gives written permission. Below are common reasons for custom processing delays.

- Extra time is needed for reviewing the documentation provided
- Extra time is needed for obtaining duty exemptions from the relevant government authorities
- The required documents were not provided when needed
- The goods do not correspond with what is listed in the provided documentation
- The correct customs procedures are not being followed

Supply Chain Managers and Logistics Managers must understand customs requirements or contract terms with carriers for deadlines on unloading and returning containers (e.g., number of "free" days) to avoid container demurrage and detention if cargo has been containerized.

- Container demurrage charges are applied by shipping companies when containerized cargo has not been picked-up timely from the port or ocean terminal.
- Detention charges are applied when imported containers have been picked-up from the port or ocean terminal, but the (empty) container has not been returned back within a timely period.

Transporting Goods to Destination

After the cargo is released from customs, the goods are transported to the named point of destination according to the contract terms with the supplier (or the USG food assistance shipping terms). If a Through bill of lading is not being used, the Logistics Manager may be responsible for overseeing the movement of the cargo from the port to a CRS warehouse (for more information, see the National Transport chapter).

Otherwise, the supplier is responsible for moving the cargo to a CRS-designated location outside the port, such as a CRS warehouse.

For USG food assistance goods under Through bills of lading, a delivery survey is required to be reimbursed for the discharge survey. For more information, see Appendix B: USG Food Assistance International Transport.

For more information on receiving and inspecting cargo at a CRS storage location, see the Receiving chapter.

Submitting Claims for Transport Losses

Whenever a third party (e.g., transporter) is determined to be responsible for losses while the goods are in their possession, they are liable for the reimbursement of the costs of the loss.

If CRS fails to promptly file and pursue a reasonable and legitimate loss claim against a responsible third party, CRS may be held liable by the donor for the total value of the lost goods and their transport.

Submitting Claims for Transport Losses Checklist

CHECKLIST *Submitting Claims for Transport Losses*

When a third-party service provider is determined to be responsible for losses incurred while CRS goods were in that party's possession, the **Supply Chain Manager or Head of Operations:**

- ☐ Submits a claim letter to the responsible party

  The claim letter should contain one of the following:

  1) declaration of CRS' intent to deduct the value of the loss from the party's invoice;

  2) request for cash payment from the party for the full value of the loss; or

  3) request for replacement of goods by the party of equal value and/or quantity.

☐ **Please see below for context-specific callout boxes that also apply**.

For guidance on claims for USG food commodity losses that occur during marine or inland transport, see Appendix B: USG Food Assistance International Transport.

Monitoring Service Provider Performance

Reviewing and analyzing data from third-party service providers in CRS international transport operations can provide useful information on performance such as whether goods are arriving on time and in full. For more information on metrics for supply chain KPIs, see the Monitoring chapter.

Monitoring Service Provider Performance Checklist

CHECKLIST *Monitoring Service Provider Performance*



The **Logistics Manager:**

- ☐ Documents any issues that occur during transport operations and shares "lessons learned" reports with all concerned parties to mitigate future occurrences.
- ☐ Reviews all survey reports and follows up with the Surveyor for any questions or comments about the report results.

POST-ARRIVAL

Paying the Transporter

Transporter payment depends on the terms of the donor agreement and any agreement made with the supplier. The Logistics Manager sends invoices to different entities for processing and payment, depending on whether the shipment involves USG food aid.

- For shipments that do not involve USG food aid, invoices are sent to finance.
- For USG food assistance shipments, invoices are sent to the U.S. Freight Forwarder.

For USG food assistance cargo, freight funds are disbursed to carriers in installments. The country program, Global International Transportation, Global Finance, and LifeLink Logistics (the U.S. Freight Forwarder) all play a role in the management and disbursement of these freight funds.

For more information, see Appendix B: USG Food Assistance International Transport.

Payment to the Transporter Checklist

CHECKLIST *Payment to the Transporter*



To prevent payment for work invoiced by service providers that does not match services procured under the contract, the **procurement and finance teams** should:

- ☐ Work together to ensure a formal process for carefully reviewing invoices against the terms and conditions of the related contracts.
- ☐ Follow the country program's invoicing and payment process to pay transport service providers.

If losses occur during transit, the **Logistics Manager:**

- ☐ Fills out a Loss Report and Claim Form and sends it to the Supply Chain Manager for approval.

Once the Loss Report and Claim Form has been approved, the **Supply Chain Manager:**

- ☐ Sends the form to the finance team before payment is made, explaining why the funds were not all released to the supplier (if the supplier is at fault for the losses that occurred).
- ☐ Sends a claim letter to the transporter's agent that includes either: (a) declaration of CRS' intent to deduct the value of the loss from the party's invoice; or (b) request of cash payment for the full value of the loss.

Please see below for context-specific callout boxes that also apply.

Three-way Match

Insight requires a three-way match for services before the supplier can be paid. The system will automatically perform this match between the PO, receipt, and invoice.

It is the Preparer's responsibility to receive the services in the system once the Requestor informs them that the service has been completed according to the agreement specifications. Documentation confirming receipt of services (Services Receipt note, confirmation email from Requestor, etc.) should be attached to the receipt.



Photo by Lane Hartill

Chapter 8: Receiving

8. RECEIVING

Purpose

This chapter enables warehouse and administrative staff to prepare for receiving goods and for offloading, inspecting, and putting away those goods. The processes in this chapter apply to all items that arrive at an office storage location or warehouse and to all services received.

8.1 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

CRS POLICIES AND PROCEDURES

- Accounting for Inventory Assets Policy (FIN-POL-INV-025-01E)
- Fixed Assets Policy and Procedure (POL/PRO-FIN-FAS-013)
- Finance Documentation Policy (POL-FIN-DOC-008)
- In-Kind Transactions Policy and Procedures
- Supply Chain Records Management Policy

CRS GUIDELINES

- CAT User Portal
- The Emergency Field Operations Manual (EFOM)

Insight Supply Chain Guidance

Inventory Management Reference Guide
Procurement Reference Guide
Account Alias Receipt Job Aid (for receiving GIK goods)
Account Alias Issue Job Aid (for losses)
Borrow and Return (for receiving borrowed goods from a third party)
Loan and Return Part 2 (for returns of loaned goods from a third party)
Receiving Services Job Aid
Receiving Goods Job Aid
Return Goods to the Supplier Job Aid
Subinventory Transfer Job Aid (for putting away GIK goods)

DONOR POLICIES AND REGULATIONS

- 7 CFR 1590 - USDA McGovern-Dole LRP Program
- 7 CFR 1599 - USDA McGovern-Dole Intl FFE Program
- 22 CFR 211 USAID (Regulation 211) - Transfer of Food Commodities for Food Use in Disaster Relief, Economic Development and Other Assistance

DONOR AND OTHER GUIDELINES

- Certification in Humanitarian Logistics (CHL) Unit 2 – Warehousing & Inventory
- USAID|DELIVER – The Logistics Handbook: A Practical Guide for the Supply Chain Management of Health Commodities
- For Health:
  - USAID|DELIVER, WHO – Guidelines for the Storage of Essential Medicines and Other Health Commodities
  - WHO – A Model Quality Assurance System for Procurement Agencies
  - WHO— Safe management of wastes from health-care activities
  - WHO – Annex 9: Guide to good storage practices for pharmaceuticals
  - WHO – Good Storage and Distribution Practices (working paper)

8.2 OVERVIEW

Incoming goods that arrive at a warehouse or office are officially inspected and recorded as received, then put away into storage. All receiving activities must comply with applicable CRS policies and procedures, donor regulations, and national/local requirements.

Before putting away goods into storage, CRS staff must ensure that the quantity, quality, and condition of all purchased or donated goods meet the requirements and specifications stated in the procurement and shipping documents. CRS takes **full responsibility** for received goods until they are delivered to program participants, CRS staff, or partners.

D-GOODS AND ND-GOODS

All **purchased and donated** goods are categorized as either D-Goods or ND-Goods. The figure below summarizes the differences between these two types of goods.

D-Goods



- **Distributed externally** to program participants, either directly or through partners
- Recorded and **tracked as assets** in inventory valuation accounts
- Expensed **upon distribution or upon dispatch** (when received by a partner)

ND-Goods



- **Used internally** by CRS staff or partner staff
- Recorded and **tracked as inventory** in warehouse operations accounts
- Expensed **upon receipt**

8.3 ROLES AND RESPONSIBILITIES

The table below lists the functions and activities of six roles involved in the processes of preparing to receive goods; receiving, inspecting, and putting away goods; and returning goods to the supplier.

To maintain segregation of duties and avoid conflicts of interest, procurement staff should **not** receive, inspect, or put away goods (they may be consulted during the receiving, inspection, and put-away processes but must not participate in them).

If local conditions make segregation of duties harder to maintain (e.g., if staff have both procurement and administrative responsibilities), there should be extra supervision or other mitigation measures in place to maintain proper accountability.



For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

RECEIVING GOODS

Function/Activity	Supply Chain Manager	Warehouse Manager*	Warehouse Officer**	Logistics Manager	Procurement Team	Requestor	Subject Matter Expert
Approves and notifies receiving staff of the PO/inventory transfer and shipping (e.g., Packing List), so they can prepare for upcoming receipt	A	R / I (transfer approval)	I		R (PO approval)		
Notifies surveyor and other relevant stakeholders of upcoming receipt	A	I		R	C		
Prepares receiving documentation (e.g., GRN, bin card, and tally sheets)		A	R				
Cleans and prepares receiving and stock areas and ensure that equipment is ready		A	R				
Arranges for the hiring of day laborers (as needed)	A	R			C		
Observes the opening and unloading of the container/vehicle	A	R					
Verifies the goods received against the Packing List and the PO/transfer order	A	R	C	I	C	C	
Inspects goods visually as they are moved into the receiving area, checking for quality and conformity to specifications ☐ See below for context-specific callout boxes that also apply.		A	R		C	C or R	R or C
Selects units randomly for further inspection (e.g., weighing)		A	R				
Quarantines goods if sampling and testing are required before put-away or if low quality, damaged, or non-conforming goods are found		A	R	I	C	I	
Completes and submits receiving documentation (GRN, Inspection Report, Reconditioning Report)	A, C (approval)	R	C	I	I	I	
Puts away goods in storage following FEFO or FIFO, and updates bin cards and inventory records		A	R				
Initiates returns to the supplier for reimbursement or replacement (as needed, depending on terms with the supplier)	A	C	C	I	R	I	

R=Responsible; A=Accountable; C=Consulted; I=Informed

* The **Administrative Manager** has a similar role as the **Warehouse Manager** for items stored in an office storage room. References to the Warehouse Manager in all RACIs and checklists throughout this chapter can also refer to the Administrative Manager.

When goods are being transferred between warehouses, the Warehouse Manager at the sending warehouse sends the approval notice to the Warehouse Manager at the receiving warehouse.

****Administrative Officers or Administrative Assistants** have a similar role as the **Warehouse Officer** for items stored in an office storage room. References to the Warehouse Officer in all RACIs and checklists throughout this chapter can also refer to Administrative Officers or Administrative Assistants.

Who is "Consulted" Versus "Responsible" for Inspecting Goods?

Ideally, the Requestor should be responsible for performing the initial inspection of the goods to confirm that they meet all quality requirements and product specifications. Otherwise, a Subject Matter Expert may perform the inspection and consult with the Requestor.

Below are examples of when a Subject Matter Expert would be responsible for performing an inspection instead of the Requestor.

- A Technical Advisor from a malaria project would inspect vests for a bed net distribution campaign.
- IT staff would verify that laptops are operating correctly.

RECEIVING CVA ASSETS

Function/Activity	Supply Chain Manager	Administrative Manager*	CVA Asset Custodian**	Logistics Manager	Procurement Team	Requestor (e.g., Project Manager or Project Officer)
Approves and notifies receiving staff of the PO/inventory transfer and shipping (e.g., Packing List), so they can prepare for upcoming receipt		A	R / I (transfer approval)	C	R	I
Prepares receiving documentation (e.g., GRN, bin card, and tally sheets)		A	R			
Prepares receiving and stock areas for upcoming receipt		A	R			
Verifies the CVA assets received against the Packing List and the PO/transfer order		A	R			C
Inspects goods visually as they are moved into the storage area, verifying quality and conformity with specifications See below for context-specific callout boxes that also apply.		A	R			R (initial inspection)
Completes and submits receiving documentation (GRN, Inspection Report)	C (approval)	A	R		I	I
Puts away goods in storage following CVA inventory guidance, and updates bin cards and inventory records		A	R			I

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

* The **Administrative Manager** has a similar role as the **Warehouse Manager** for items stored in an office storage room. References to the Warehouse Manager in all RACIs and checklists throughout this chapter can also refer to the Administrative Manager.

When CVA assets are being transferred between offices, the CVA Asset Custodian at the sending office sends the approval notice to the CVA Asset Custodian at the receiving office.

An **Administrative Officer or Administrative Assistant can be designated as the **CVA Asset Custodian** to manage CVA assets that are acquired for CVA programming and stored in an office storage room.

Who is "Responsible" for Inspecting CVA Assets?

Ideally, the Requestor should be responsible for performing the **initial inspection** of CVA assets to confirm that they meet all specifications.

For CVA assets, the Requestor is typically the Project Manager or the Project Officer for the CVA activity.

8.4 PROCESSES

Warehouse staff and day laborers who are assigned a role in receiving activities should have access to the minimum personal protective equipment (PPE) listed in the figure below.

Recommended Personal Protective Equipment for Receiving, Inspecting, and Putting Away Goods



Closed shoes with reinforced toes



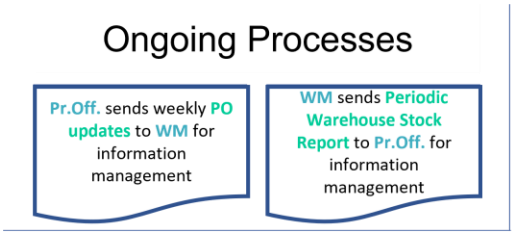
Reinforced (leather) gloves, especially for handling rough-surfaced or sharp-edged items

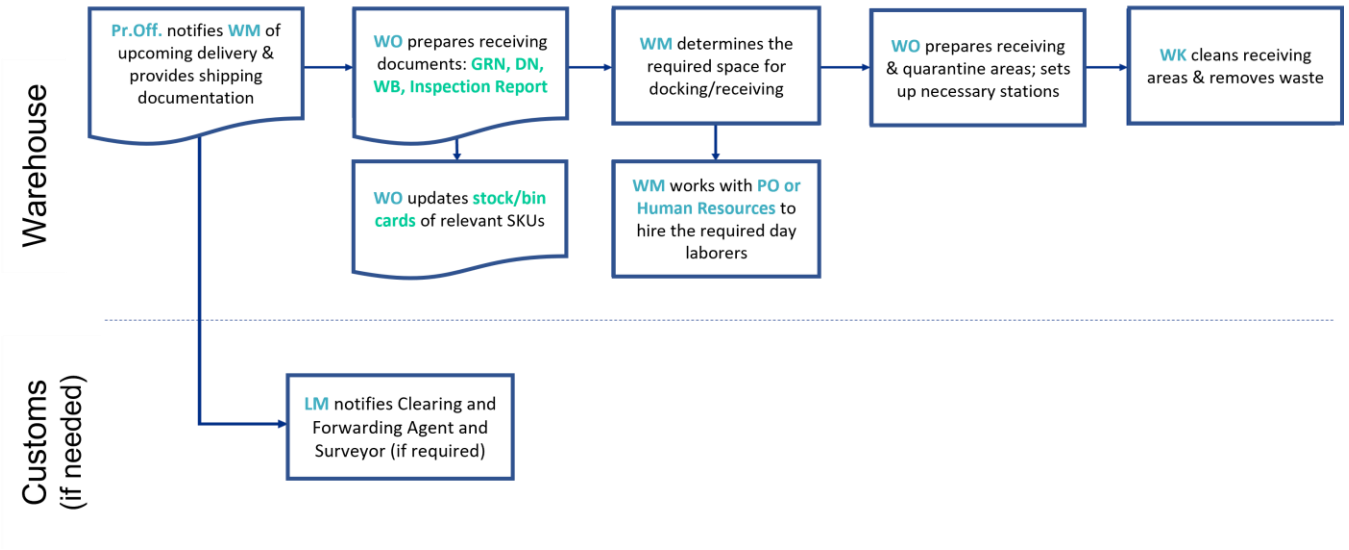




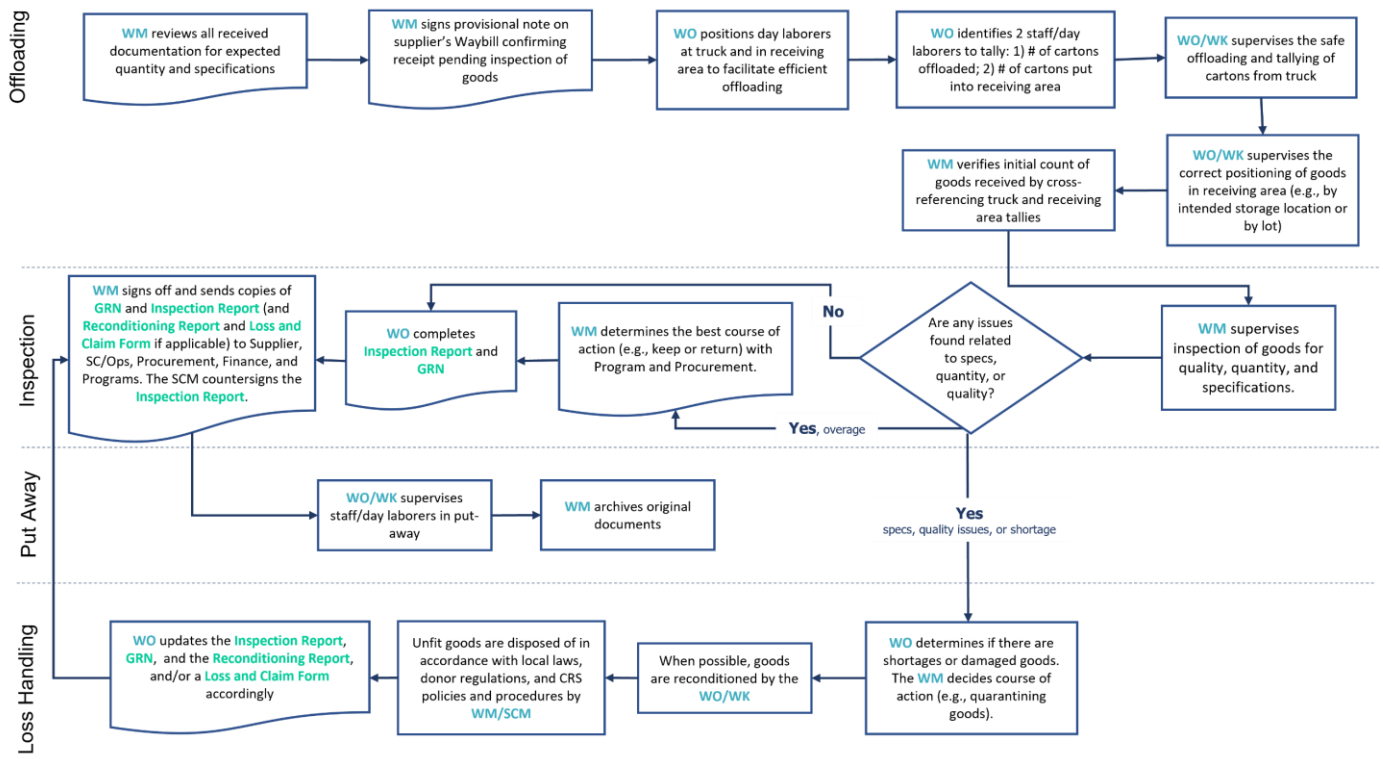
Goggles and anti-dust or respirator masks for handling items that can affect sight or respiration (e.g., flours, timber, cement, sand, packets of insecticide or chlorine)

The figure below shows **ongoing receiving processes** for supply chain staff (for the full titles and responsibilities of the roles abbreviated in this figure, see the Roles and Responsibilities chapter).





The figure below shows **the sequence of processes that constitute receiving activities** in the warehouse (for the full titles and responsibilities of the roles abbreviated in this figure, see the Roles and Responsibilities chapter).



PREPARING TO RECEIVE GOODS

The processes described below in this section may move faster in emergency contexts. For example, a team might procure goods one day, receive goods the next day, and prepare to distribute goods within the following days or weeks.

Delivery and Document Preparation

Delivery & Document Preparation for Incoming Orders Checklist

CHECKLIST *Delivery & Document Preparation for Incoming Orders*



Before incoming orders are expected to arrive (at least one month for international purchases and one week for local purchases or internal movements), the **Procurement Officer** (for purchased goods), the **Logistics Officer** (for Gifts-In-Kind or internal movements), **or the LMIS Officer** (for goods being shipped directly to or returned from a partner):

- ☐ Provides the following documentation to the Warehouse Manager:
  - ☐ PO, with detailed specifications attached (for purchased goods).
  - ☐ Inventory transfer orders, also called dispatch orders (for internal movements).
  - ☐ Shipping documents (e.g., Packing List, waybills, bills of lading, trucking lists, etc.).
  - ☐ Quality assurance documents (e.g., phytosanitary certificate (food), Controlled Medicines Certificate to Import (medicines), cold chain history report (pharmaceuticals), etc.).
  - ☐ Delivery Note (DN) (for borrowed goods being returned from a partner).
  - ☐ Valuation Report (for loaned goods being returned to a partner).

For incoming international deliveries, the **Procurement team**:

- ☐ Sends the relevant shipping documents to the Customs Clearing Agent and applies for any applicable tax exemptions.

For incoming deliveries of internationally procured or donated goods, the **Clearing and Forwarding Agent** may:

- ☐ Communicate directly with the Warehouse Manager to coordinate the clearance and receipt of incoming goods at the warehouse or office.

If a Clearing and Forwarding Agent has not been contracted, the **Logistics Manager**:

- ☐ Works with the procurement team to identify and contract an agent.

If a donor requires a surveyor and there is no existing contract with a surveyor, the **Warehouse Manager or Logistics Manager**:

- ☐ Coordinates with the procurement team to identify and contract a surveyor, starting several weeks in advance of the shipment arrival.

After receiving the supplier's contact information on the PO, the **Warehouse Manager**:

- ☐ Coordinates the delivery directly with the supplier and informs the procurement team about any delivery issues or delays.
- ☐ **For certain good types like pharmaceuticals and other specialized products**: Coordinates with surveyors and/or specialized technical experts and staff members from the requesting department to be present for quality assurance when the order arrives.

The day before an incoming order arrives, the **Warehouse Officer,** with help from the **Warehouse Keeper**:

- ☐ Prepares the following receiving documents:
  - ☐ Goods Received Note (GRN).
  - ☐ Tally Sheet.
  - ☐ Inspection Report.
  - ☐ Reconditioning Report.

Please see below for context-specific callout boxes that also apply.

Preparing to Receive Incoming Orders in Insight

Before incoming orders arrive, the **Warehouse Manager**:

- ☐ Tracks open orders in Insight, including estimated delivery dates and all related attachments and reference numbers.
- ☐ Communicates regularly with logistics, procurement, warehouse, and programming staff about the arrival time of incoming orders.

For internal inventory transfers, the **Warehouse Manager at the sending warehouse**:

- ☐ Performs an interorganization transfer to the receiving warehouse and attaches the transfer order and relevant shipping documents.
- ☐ Informs the Warehouse Manager at the receiving warehouse about the upcoming arrival of transferred goods.



Logistics and Storage Preparation

Storage & Logistics Preparation Checklist

CHECKLIST *Storage & Logistics Preparation*



Before incoming orders arrive, the **Warehouse Manager**:

- ☐ Reviews the PO with the warehouse team and plans for storage capacity and any special requirements needed for receiving, inspecting, and putting away the incoming order.
- ☐ Plans with the logistics team for the arrival of trucks to avoid congestion in the warehouse compound and to facilitate more efficient unloading of goods.
- ☐ Identifies labor and equipment needed for unloading the incoming order.
- ☐ **If day laborers are needed**: Works with the procurement team to arrange for day laborers to be available.

For more information on planning for storage space, see the Start-Up chapter.

For more information on planning for labor and equipment needs, see Planning Resource Requirements in Certification in Humanitarian Logistics Learning Materials - Unit 2.

As the arrival date for incoming orders approaches, the **Warehouse Officer,** with help from the **Warehouse Keeper**:

- ☐ Clears the receiving and quarantine areas.
- ☐ Makes sure that a supply of materials (e.g., jerrycans, empty bags, markers, cardboard boxes) and equipment (e.g., scale, funnel for liquids) are available for quality assurance and reconditioning activities.
- ☐ Prepares the storage spaces and make space available on pallets, shelves, bins, etc.

☐ **Please see below for context-specific callout boxes that also apply**.

Preparing to Receive CVA Assets

Before CVA assets arrive at the warehouse or office where they will be stored, **administrative staff**:

- ☐ Coordinate with the supplier or with the logistics team about the delivery time of the CVA assets.
- ☐ Make space available in the storeroom or other designated space for receiving, inspecting, and putting away the CVA assets (they should be kept in secure place that can be locked and where access can be limited).
- ☐ Prepare receiving documents.



RECEIVING AND INSPECTING GOODS

This section covers shipment arrival, offloading, and inspection activities that occur when incoming orders arrive at a storage location (e.g., warehouse or office).

For information about shipment arrival, offloading, and inspection activities that occur when shipments arrive at a seaport, see the International Transport chapter.

For in-depth guidance on receiving goods in Insight, see the Receiving Goods Job Aid.

Surveying the Receipt of USG Food Commodities

The USAID's Bureau of Humanitarian Assistance and the USDA both require a delivery survey when goods arrive at a CRS storage facility. They also require a discharge survey when goods arrive at the port of discharge. For both entities, the cost of a discharge survey is only reimbursed if the delivery survey is submitted with it.

The **Logistics Manager** is responsible for contracting a surveyor and for communicating the arrival of vessels at the port and the arrival of trucks at the warehouse.

For more information on contracting this service, see the Start-Up and Procurement chapters.

Arrival of Goods

Receiving & Inspection – Arrival of Goods Checklist

CHECKLIST

Receiving & Inspection - Arrival of Goods



On the day an incoming order arrives, the **Warehouse Manager**:

- ☐ Secures all entry and exit points to the receiving area.
- ☐ Ensures that non-authorized persons are restricted from entering the receiving area.
- ☐ Ensures that only people with an assigned role are present in the receiving area and that they are wearing a CRS Staff ID Badge or other identifiable clothing.

Once an incoming order arrives, the **Warehouse Manager**:

- ☐ **For containerized goods**: Breaks the container seal in front of the transporter, customs agent (if present), surveyor (if present), and other stakeholders (such as ministry employees or donor representatives).
  - ☐ **If the seal is already broken**: Ceases all receiving operations and immediately notifies the supplier and national authorities (according to national and donor regulations.
- ☐ Stamps the waybill with the following words **before** signing waybill: *"Goods received on buyer's terms and conditions. Final receipt pending inspection of goods."*
- ☐ **If the driver cannot wait for the inspection**: Sends the counter-signed waybill directly to the Supplier.
- ☐ **For purchased goods**: Notifies the procurement team that the shipment has arrived and communicates as needed about the shipment or delivery with the supplier.
- ☐ **When possible**: Reviews data about transport conditions (e.g., temperature, relative humidity, etc.) while the shipment was in transit.

Offloading of Goods

Below are best practices for moving goods off the trucks and into the receiving area.

- To facilitate the tally and ensure quality control of cargo, one warehouse staff member should be stationed next to the truck and one warehouse staff member should be stationed in the reception area. The day laborers should move the goods from the trucks to the receiving area.
- For shipments that have multiple lots or coded labels, as each package is unloaded from the truck a designated day laborer should call out the number of the package (either as designated by the Packing List or sequentially) and the Warehouse Officer or Warehouse Keeper should mark the number on the Tally Sheet.
- In the reception area, the day laborers should organize the packages by the put-away location (e.g., by lot or by bin) to facilitate put-away.

Receiving & Inspection – Offloading of Goods Checklist

CHECKLIST *Receiving & Inspection – Offloading of Goods*



During the offloading process, the **Warehouse Manager**:

- ☐ Makes personal protective equipment (PPE) available for use by staff and day laborers (if hired) and ensures that it is used effectively.
- ☐ Monitors the safety of staff and day laborers and, if needed, trains day laborers in package handling techniques to reduce strain and injury.
- ☐ Oversees the proper use of equipment.
- ☐ Communicates any quantity variances and other issues found during receiving to the Supply Chain Manager, procurement, and the requestor.

After the container seal is broken and the receipt of goods is acknowledged, the **Warehouse Officer**:

- ☐ Organizes the day laborers to offload the goods from the trucks and into the designated receiving area.
- ☐ With support from the **Warehouse Keeper** and **day laborers**: Visually inspects all goods during the offloading process and checks package status and quality (e.g., leaks, package damage) and other identifiable characteristics (e.g., packaging, labelling, lot- and serial numbers, and expiration dates).
  - ☐ Day laborers should set aside into quarantine any suspect packages (opened/tampered with, damaged, spoiled, expired, obsolete, or otherwise non-conforming (for in-depth guidance on quarantining, reconditioning, and loss handling of goods, see the Warehouse and Inventory Management chapter).
- ☐ Takes photos of receiving operations, especially of clearly damaged or suspect packages, for attachment to the Goods Receiving Note and inspection reports.

After the goods are tallied and visually inspected during offloading and are placed in the receiving area, the **Warehouse Manager or Warehouse Officer**:

- ☐ Verifies that the tally sheets match the supplier waybill, Packing List, and PO.

If there are goods that are missing, have been quarantined, or were not ordered, the **Warehouse Officer**:

- ☐ Notes this on the waybill and the Goods Received Note (GRN) (if using).

Handling Quantity Variances Found During Receiving

To determine whether there is a true shortage, the Warehouse Manager should track the quantities received from each truck against the waybill and wait for the complete delivery from all trucks. In many cases, the tally from one truckload might indicate a short landing but another truck in transit might be carrying excess goods. In other cases, there may be differences between the waybills and clearance documents.

If there are quantity discrepancies, the Warehouse Manager notes the actual quantity received and initiates the claim process.

☐ ■ **Please see below for context-specific callout boxes that also apply.**

Verifying the Quantity of Health Products Received

In addition to verifying tally sheets against the waybill, packing list, and PO, the **Warehouse Manager**:

- ☐ Works with technical experts to review the Certificates of Analysis, which certify that the manufacturer has met quality control.

For in-depth guidance on the receipt of health goods, see the Health Annex.

Recording Receipt of Goods in Insight

The figure below lists the roles that are responsible for recording different **receipt** transactions in Insight for different types of goods.

	Purchased Goods	GIK initiated by Global International Transportation	GIK received directly at CRS Storage Location	Borrowed Goods	Goods directly received by partner
Responsible personas	Warehouse Manager (or Administrative Manager), Warehouse Officer (or Administrative Assistant)	LMIS Officer	Warehouse Manager (or Administrative Manager), Administrative Assistant		LMIS Officer
Transaction Type	Receive Lines	Subinventory transfer from the Port locator to the Receiving subinventory	Account Alias Receipt into the Receiving subinventory		Receive Lines into External IO's receiving subinventory (purchased goods) or Account Alias Receipt into Partner Subinventory (donated goods)

All shipping and receiving documents listed in the Supply Chain Records Management Policy should be attached to the relevant receiving transaction in Insight.

For more information on receiving goods and services in Insight, see the Insight Inventory Management Reference Guide.

As shown in the example below, warehouse staff should receive into stock **only** items that are acceptable for distribution or use. CRS must acknowledge delivery and receipt of each shipment of goods, even if a shipment has any of the following problems.

- Quantity variances (overages or shortages of items).
- Damaged or suspect containers or packages that have been quarantined for further inspection (quarantined goods).
- Goods that were ordered but not received (missing goods).
- Goods that were received but not ordered (excess goods).

For shipments with any of these problems, goods that are acceptable for distribution or use are put away into storage, and any **damaged/suspect/excess goods are put into quarantine**.

The figure below illustrates the flow of acceptable goods into storage and the flow of damaged/suspect/excess goods into quarantine for a hypothetical shipment that contains damaged, suspect, or excess goods. The figure also shows the way quarantined goods are noted on the waybill or Goods Received Note (GRN) and the Inspection Report.



For further guidance on handling quantity variances and discrepancies, see the Handling Overages and Shortages of Goods section in this chapter.

Inspecting Goods

All received goods are subject to inspection, as shown in the figure below. A technical expert should be present for the inspection of goods that require specialized technical expertise to ensure that the product meets specifications (CVA assets, laptops, bed nets, etc.).



In rapid onset emergency responses, the inspection process might be done simultaneously during offloading and put-away processes so the goods can be received and prepared quickly for dispatch or distribution.

Below are two different methods that may be used to select goods randomly for closer visual inspection.

In the representative sample method, a representative sample of the goods in each batch/lot is selected randomly for close inspection. This method is recommended by the Food and Agriculture Organization of the United Nations (FAO) as a simple method that works for most goods, as shown in the figure below.

Number of Packages in Batch/Lot	Number of Packages for Close Inspection
1 - 10	Every package (100%)
11 -25	2 - 5 (20%)
26 - 50	4 - 8 (15%)
51 - 100	5 - 10 (10%)
>100	The square root of total packages, rounded up to the nearest whole number (e.g., for 200 packages: ffl200 = 14.14, so 15 packages should be closely inspected)

In the acceptable quality limit (AQL) method, a batch/lot of goods is accepted or rejected based on the percentage of defective items identified in the batch (or a sample of the batch). The maximum threshold, which is the acceptable percentage of defective goods found, should be pre-determined.

For guidance on how to do acceptable quality limit (AQL) sampling or on inspection considering different product types, see “What is AQL in Simple Terms?” at AQL Calculator.

CHECKLIST *Receiving & Inspection – Close Inspection of Goods*



Before close inspection of goods, the **Warehouse Manager**:

- ☐ Reviews the terms and conditions of the PO or contract and the specifications of the goods.
- ☐ Communicates the chosen inspection method and any special considerations for close inspection of the goods to the Warehouse Officer and the Warehouse Keeper.

After receiving instructions from the Warehouse Manager about the chosen method and special considerations for close inspection of goods, the **Warehouse Officer**:

- ☐ Selects packages randomly from each lot/batch for closer inspection using the chosen inspection method.

With each inspection sample, the **Warehouse Officer**, in coordination with the technical expert (if required):

- ☐ Ensures that the sampled package is labeled appropriately and legibly with lot/batch numbers, expiration or best-used-by dates (BUBDs), and special handling and storage instructions, as applicable.
- ☐ Inspects each sampled package for any obvious signs of damage, infestation, or spoilage.
- ☐ Inspects each sampled package's **contents to the lowest unit possible without creating unnecessary waste** for conformity to the requestor's specifications.
- ☐ Inspects each sampled package by weight against the theoretical gross weight of the package (if known) or by weighing one package, opening it to confirm its contents, and then weighing all the other sampled packages against that weight.
- ☐ Takes photos of any non-conforming or damaged goods found during inspection and to be attached to the Inspection Report.
- ☐ **For samples required to be sent to a laboratory for testing**: Follow the laboratory's sampling protocol carefully with support from the Warehouse Manager and the Supply Chain Manager.

If any sampled packages that were opened for inspection cannot be easily resealed, they must be sent to quarantine for reconditioning.

Please see below for context-specific callout boxes that also apply.

Inspecting, Quarantining, Sampling, and Testing Health Commodities

All health goods are subject to random selection by CRS staff for close inspection to ensure conformity with all product, health, and quality specifications.

With certain pharmaceuticals and other medical supplies (see product requirements), the entire lot should be placed in quarantine during the offloading process. A random sample from those lots should be sent to an accredited laboratory for testing. The results of the laboratory test determine if and when lots are removed from quarantine.

- Lots determined to be unfit for use should remain in quarantine, pending disposal.
- Lots determined to be acceptable for use should be removed from quarantine and put away into storage.



Inspecting CVA Assets

Program staff must be present during the inspection of CVA assets to verify that the assets meet product specifications such as printed security features, values, serial numbers, printed messaging, etc.



CONTINUED *Receiving & Inspection – Close Inspection of Goods*



If non-conforming, low quality, or damaged goods are found in the inspection sample, the **Warehouse Officer:**

- ☐ Places these goods into quarantine.
- ☐ Notifies the Warehouse Manager of the inspection findings and quarantine of goods.

After receiving notification that non-conforming, low quality, or damaged goods have been founds and quarantined the **Warehouse Manager:**

- ☐ Contacts the Supply Chain Manager, the requestor, and the procurement staff in charge of the purchase to determine the next steps.

If further inspection is advised (for significant deviations from product/quality specifications), the **Warehouse Officer:**

- ☐ Selects another sample of packages from the lot/batch to inspect (e.g., for 200 packages where 15 packages were selected for inspection, select another 15 packages for inspection).
  - ☐ If required by the requestor and/or the Supply Chain Manager, this process repeats until 100 percent of the packages have been inspected.

After close inspection of goods is finished, the **Warehouse Officer:**

- ☐ Completes the Inspection Report with detailed analysis of the inspection, attaches photographs of any rejected/quarantined items, and attaches any other relevant visual documentation.
- ☐ **If the rejections or quantity discrepancies are confirmed**: Sends the Inspection Report immediately to the requestor, Procurement Manager (for purchased goods), the Procurement Officer assigned to the purchase, Supply Chain Manager, and Head of Operations (responsible for communicating with Country Representative) to decide on reimbursement or replacement of rejected goods or discount on the shipment.
  - ☐ Goods that are rejected or damaged must remain in quarantine until disposal or return to the supplier (for information on returns, see Returning Goods to the Supplier in this chapter).
- ☐ **For goods that can be reconditioned**: Works with the Warehouse Keeper to recondition the goods (for information about the reconditioning process, see Reconditioning Goods in the Warehouse and Inventory Management chapter).
- ☐ **For goods that have been reconditioned**: Reports any losses from reconditioning in the Loss Report and Claim Form.

After close inspection of goods is finished, the **Warehouse Manager** and the **Supply Chain Manager:**

- ☐ Countersign the Inspection Report.
- ☐ **For goods that cannot be reconditioned and must be disposed**: Determine the appropriate disposal methodology according to national laws and donor requirements (for information on the disposal process, see Disposing of Inventory Losses in the Warehouse and Inventory Management chapter).

CONTINUED *Receiving & Inspection – Close Inspection of Goods*



Handling a Loss Caused by a Third Party

A third party contracted by CRS (e.g., a transport service provider) is responsible for reimbursing the cost of any loss of goods that occurs while they are responsible for such goods.

When CRS determines that a third party is responsible for losses that are discovered during the receiving and inspection processes, the **Supply Chain Manager**:

- ☐ Sends a claim letter to the responsible party that either: 1) declares the CRS intent to deduct the value of the loss from the party's invoice; or 2) requests a cash payment for the full value of the loss.

Please see below for context-specific callout boxes that also apply.

Recording Inspections in Insight

The figure below lists the roles that are responsible for recording different **inspection** transactions in Insight for different types of goods.

	Purchased Goods	GIK initiated by Global International Transportation	GIK received directly at CRS Storage Location	Borrowed Goods	Goods directly received by partner
Responsible personas	Warehouse Manager (or Administrative Manager), Warehouse Officer (or Administrative Assistant)	LMIS Officer	Warehouse Manager (or Administrative Manager), Warehouse Officer (or Administrative Assistant)	Warehouse Manager (or Administrative Manager), Warehouse Officer (or Administrative Assistant)	LMIS Officer
Transaction Type	Inspect Lines (attach inspection documents to provide more details) *	Subinventory transfer to the put away locator (attach inspection documents to provide more details)			Attach partner's inspection report to receipt transaction

* If the goods are in the expected condition, select "Acceptable" or "Above Average" as the inspection quality. If goods are not in the expected condition and should be returned, select "below average", "unacceptable", or "reject and notify."

For more information on receiving goods and services in Insight, see the Insight Inventory Management Reference Guide.

After the inspection is recorded in Insight, the Accounts Payable team does a four-way match to process supplier payments. The four-way match is a review of the supplier invoice, PO, receipt, and inspection.

Handling Overages and Shortages of Goods

For in-depth guidance on handling losses, overages, or shortages found during the receiving and inspection processes for food commodities that have arrived under a through bill of lading, see Appendix B: USG Food Assistance International Transport.

Receiving & Inspection – Overages Checklist

CHECKLIST *Receiving & Inspection – Overages*



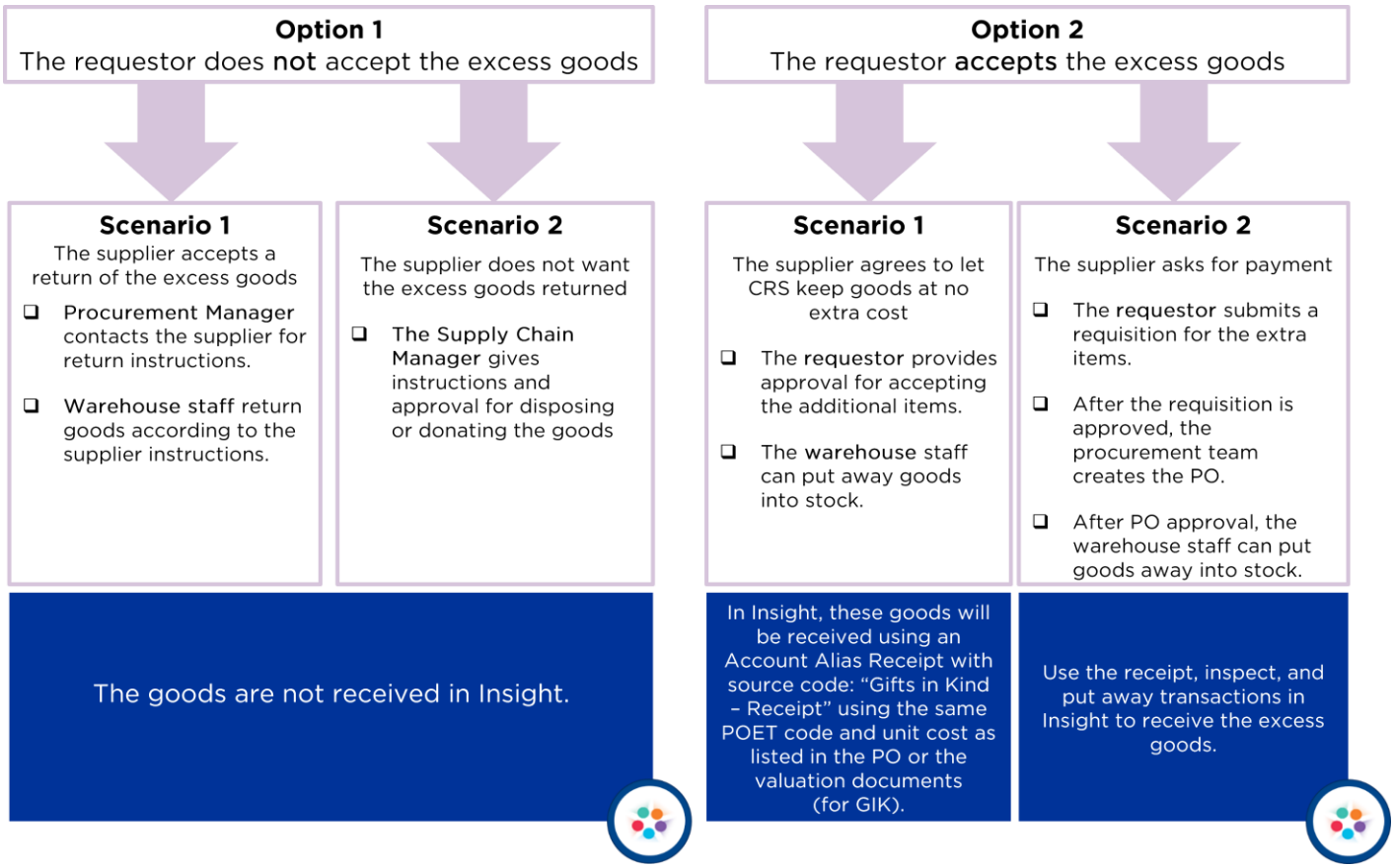
If more goods arrive than what was ordered, the **Warehouse Manager:**

- ☐ Instructs the Warehouse Officer and the Warehouse Keeper to place the excess goods in quarantine.
- ☐ Contacts the requestor, procurement team, and the Supply Chain Manager to inform them about the excess of goods and to determine the best course of action.

Once the course of action is determined, the **procurement team:**

- ☐ Contacts the supplier to communicate CRS' preferred option and to receive instructions from the supplier on next steps.

Below is a decision tree for determining what to do with the excess goods and the process steps that should be followed for each scenario.



Receiving & Inspection – Shortages Checklist

CHECKLIST *Receiving & Inspection – Shortages*



If fewer goods have arrived than what was ordered, the **Warehouse Manager:**

- ☐ Instructs the Warehouse Officer to document the quantity that is missing and to provide a possible reason for the missing quantity in the Inspection Report.
- ☐ Sends all applicable receiving documentation (e.g., survey report, Inspection Report, Goods Received Note, or GRN) with an explanation for the quantity variance to the requestor, Procurement Manager, Supply Chain Manager, and finance team for reconciliation with the supplier.

Once the receiving documentation is complete, the **procurement team:**

- ☐ Communicates with the supplier to determine next steps (requestors should **never** communicate directly with suppliers).

Please see below for context-specific callout boxes that also apply.

Recording Shortages in Insight

When there is a shortage of goods received, the line quantity should be reduced by the missing amount when doing the Received Lines transaction.

PUTTING AWAY GOODS

Before the put-away process begins, arrangements should be made for special storage considerations (e.g., cold chain, temperature or humidity requirements, hazardous or fragile goods). Zoning areas and storage equipment in the storage area should be organized to segregate goods by the donor, lot, and/or item type.

For more information about planning for warehouse space and layout, see Start-Up, Warehouse and Inventory Management, and Certification in Humanitarian Logistics Learning Materials – Unit 2.

Below are best practices for storing goods in a warehouse.

- To reduce the risk of damage from water, pests, heat, or dust, goods should be placed at least:
  - 10 cm off the floor (using pallets),
  - 1 m away from walls and other stacks, and
  - 1 m away from the ceiling.
- Some goods are removed from their primary packages and the inner packages of goods are stacked on shelving units.
- Goods stocked on shelves or racks that are located next to walls should not be stored in contact with the wall.

Storage space (especially flat space) can be hard to find in some emergency contexts, so it is important to maximize whatever space is available. For example, some NFIs can be stacked closer together or closer to walls. If pallets are not available and if goods are being stored for a short amount of time, a tarp may be used to keep the goods off the floor.

Best Practices for Storing and Stacking CVA Assets

Store all CVA assets in orderly piles of clearly marked quantities to facilitate inventory counting. When possible, store different shipments/lots on different shelves.

Do not store CVA assets on the floor unless they are boxed, and shelving is not available or available space has been depleted.

For loose CVA assets, use paper and tape to wrap assets into bundles of 50 or 100. Leave a gap between piles so "stacks" are not missed when counted.

When stacking bags or boxes, use interlocking layers to improve stack integrity.

Preparing for Put Away in Insight

Before goods are put away, the **Warehouse Manager**:

- ☐ Reviews the locators in Insight and ensures that they match the physical mapping of the warehouse.
- ☐ **If new locators are needed**: Creates those locators and updates the warehouse mapping plan before put-away begins.

For more information on these transactions in Insight, see the Create and Deactivate Locators Job Aid and the Insight Inventory Management Reference Guide.

Putting Away Goods Checklist

CHECKLIST *Putting Away Goods*



During put-away, the **Warehouse Officer:**

- ☐ Supervises the day laborers who transfer packages that pass inspection into the designated storage spaces and who put goods away following FEFO/FIFO methodology, Stacking Guidelines (discussed later in this section), and package markings (i.e., for cartons marked with arrows, the goods should be placed with arrows pointing up).
- ☐ Ensures that package identification labels (e.g., lot, serial number, and expiration/best-used-by dates, or BUBDs) are clearly visible and legible to facilitate correct picking and movement of goods.
- ☐ Creates Bin Cards for each bin, shelf, or stack and enters all identifying information (including Insight locator information).

Please see below for context-specific callout boxes that also apply.

Putting Away CVA Assets

All CVA assets should be packed and stored in a way that facilitates efficient dispatch.

The location of each group of CVA assets should be clearly documented in the storage plan for auditing and reporting purposes (e.g., identifying the donor who funded the CVA assets, reporting when the CVA assets were delivered, etc.).

When putting away CVA assets into storage, the **CVA Asset Custodian**:

- ☐ Stores CVA assets in a secure, locked location with limited access within the office (only two keys).
- ☐ Keeps one key and gives one key to their supervisor, the Supply Chain Manager, or the Head of Operations.

Recording Put-Away in Insight

The figure below lists the roles that are responsible for recording different **put-away** transactions in Insight for different types of goods.

	Purchased Goods	GIK	Borrowed Goods	Goods directly received by partner
Responsible personas	Warehouse Manager (or Administrative Manager), Warehouse Officer (or Administrative Assistant)			LMIS Officer
Transaction Type	Put Away Lines Record lots and serial numbers	Subinventory transfer to the designated to locator Record lots and serial numbers. Attach inspection documents to provide more details.		Subinventory transfer to designated Partner locator Record lots and serial numbers. Attach inspection documents to provide more details.

For more information on putting away goods in Insight, see the Insight Inventory Management Reference Guide.

FEFO/FIFO Methodology

All goods with the same expiration or best-used-by date (BUBD) should be in the same lot and should be separated from other items with longer expiration dates.

For goods without expiration dates, use the FIFO methodology (i.e., items that arrive first should be moved to the most easily accessible location in the bin).

The figure below shows how goods may be put away in stacks using FEFO/FIFO methodology.

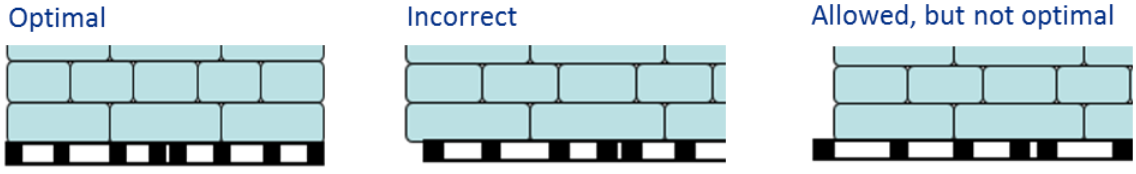


Source: John Snow, Inc./DELIVER in collaboration with the World Health Organization. Stock Rotation and Preventing Damaging and Contamination. *Guidelines for the Storage of Essential Medicines and Other Health Commodities*. 2003. Arlington, Va.: John Snow, Inc./DELIVER, for the U.S. Agency for International Development, pp. 18 & 44.

Stacking Guidelines

Stacking on Pallets

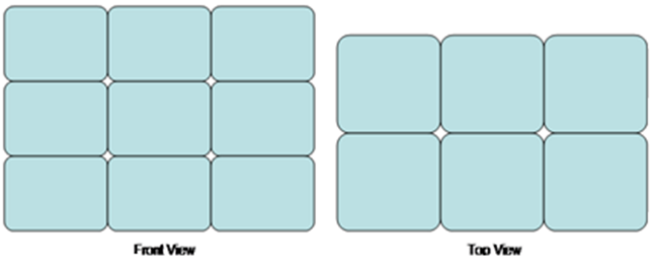
The first layer of packages should fully cover the pallet so that stacks are flush to the edge of the pallets and do not overhang the pallets.



Stacking Methods

Simple Stacking

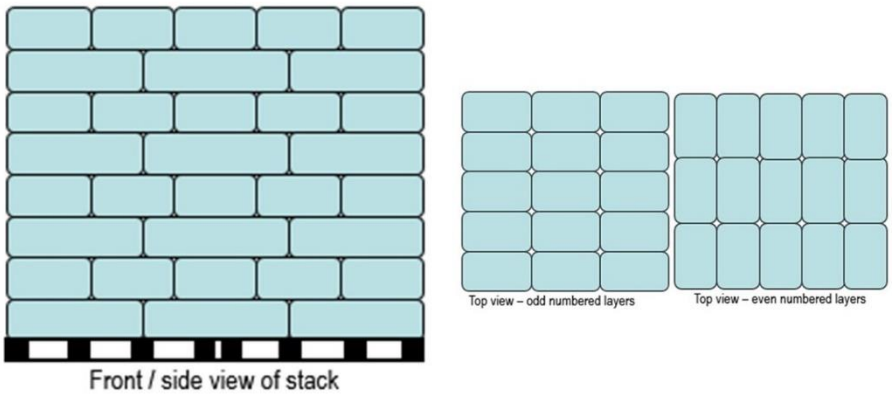
In this method, shown in the figure below, packages are aligned side-by-side on pallets, and subsequent layers are added using the same alignment.



Simple stacking is appropriate for goods received in bulk with packaging that has the same dimensions. The disadvantage of simple stacking is that stability concerns can limit the stack sizes and heights.

Cross Stacking

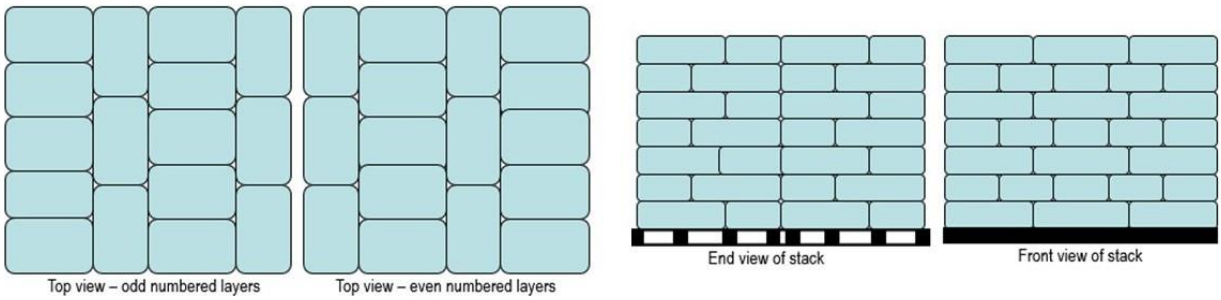
In this method, shown in the figure below, packages are stacked in alternating layers. Each layer should contain the same number of packages to facilitate inventory counts. The first layer with all packages is laid lengthwise on a pallet, with the next layer's packages laid widthwise on the layer below.



For bulk storage, cross stacking is better than simple stacking because it allows for higher, more stable stacks.

Block Stacking

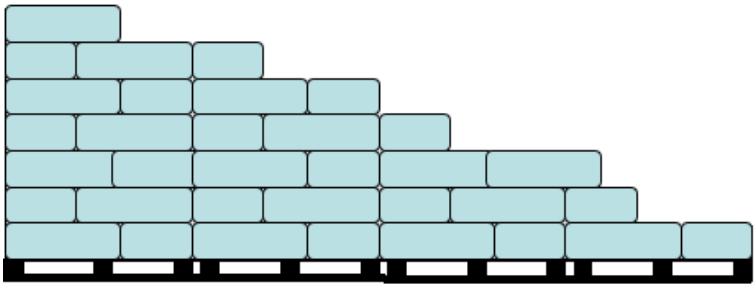
In this method, shown in the figure below, each layer blends rows of packages laid side-by-side with an adjacent row laid end-to-end. Subsequent layers are reversed over the layer below it. Each layer should contain the same number of packages to facilitate inventory counts.



For bulk storage, block stacking is better than cross stacking because it allows for stacks of maximum height and stability that also have good airflow.

Step Stacking

In this method, shown in the figure below, packages are placed to create steps. The width of the step should be 2 to 2.5 meters to allow two-way traffic of workers up and down the stack.



Outdoor Storage Guidelines

While CRS generally avoids storing goods outdoors, it is not always avoidable, and in some cases, even advisable (e.g., fuel).

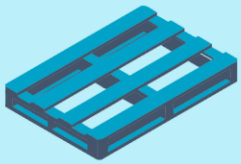
In emergencies, if mobile storage units (MSUs) have not been erected yet or safe structures to store items in cannot be found, it is likely that goods will be stored outdoors.

Guidelines for Storing Goods Outdoors



Cover the Storage Area

Use tarps or sheets with anchors or heavy items on the seams to keep the covering secure during high winds.



Store Goods on Pallets

Limit damage from moisture or rain by keeping goods off the ground.



Erect a Roofed Enclosure

Protect goods that must be stored outdoors (e.g., fuel) or are stored outdoors on a short-term basis (e.g., bales of plastic sheets, plastic goods like buckets).



Never Store High-Value, Vulnerable Goods Outdoors

Electronics, pharmaceuticals, and medical supplies should never be stored outdoors.

Some Food Items Cannot Be Stored Outdoors

Flours, blended foods, canned items, or ready-to-use supplementary or therapeutic food should never be left or stored outdoors.

The following can be stored outdoors:

- Cartons and drums of vegetable oil
- Whole grain cereals and pulses (for short period only as it can be vulnerable to mold)

PAYING DAY LABORERS

Day laborers are only paid after they have finished their assigned duties.

- If their total earnings for the year are less than 1,000 USD, they are paid using a generic supplier number.
- If their total earnings for the year are 1,000 USD or more, they are paid using their supplier master number (and must be added to the CRS Supplier Master before they can be paid).

For in-depth guidance on generic suppliers and registering suppliers, see the Supplier Master Policy.

RECEIVING SERVICES

The checklist below is an overview of receiving services and paying service providers (e.g., consultants).

Unlike goods, services cannot be returned. All contracts should specify the requirements for services and the expectations of service providers in the payment terms and conditions, and payment should not be made until the specified terms and conditions are satisfied.

For more information on these activities, see the Procurement chapter and the CRS webpage on How to Pay a Consultant.

Receiving Services Checklist

CHECKLIST *Receiving Services*



After services have been rendered or deliverables have been met according to the SOW or terms of reference, the **Requestor** (requesting staff or administrative staff):

- ☐ Receives and reviews the supplier's invoice.
- ☐ Completes the Goods and Services Receipt Note to document whether the services received are acceptable and the supplier can be paid.
- ☐ **If the invoiced services do not meet the agreement terms and conditions (e.g., contract, SOW, terms of reference)**: Contacts procurement to determine the most appropriate resolution (procurement staff will let the Requestor know if it is appropriate for them to handle the situation directly with the supplier).
- ☐ If the Country Program is not using Insight supply chain modules: Sends the supplier's invoice to finance for processing with supporting documentation attached (e.g., PO, Goods and Services Receipt Note, etc.).

Please see below for context-specific callout boxes that also apply.

Receiving Services in Insight

The staff member with the "Requisition Preparer" persona is the one who creates service requisitions and receives services in Insight on behalf of the Requestor.

After the Requestor has communicated that the service has been rendered or the deliverable has been met, the **Requisition Preparer** receives the service in Insight.

After services are received in Insight, the Accounts Payable team does a three-way match to process supplier payment. The three-way match is a review of the supplier invoice, PO, and receipt. Unless the service agreement includes a provision for advanced payment, a service provider cannot be paid until the Requisition Preparer receives the service in Insight.

For more information, see the Insight Procurement Reference Guide or the Receiving Services job aid.

RETURNING GOODS TO THE SUPPLIER

There are several reasons that goods might need to be returned to the supplier, as shown in the figure below.



Returning Goods to the Supplier Checklist

CHECKLIST *Returning Goods to the Supplier*



If goods need to be returned to the supplier, the **Warehouse Manager:**

- ☐ Ensures that the goods have been placed in quarantine.
- ☐ Contacts procurement for return instructions.
  - ☐ Procurement staff review the supplier contract or communicate with the supplier to receive the return instructions.
- ☐ Provides the return instructions to the Warehouse Officer.

After receiving the return instructions, the **Warehouse Officer:**

- ☐ Follows the supplier's instructions to prepare the goods for return.
- ☐ Prepares the Delivery Note (DN).

Please see below for context-specific callout boxes that also apply.

Returning Goods in Insight

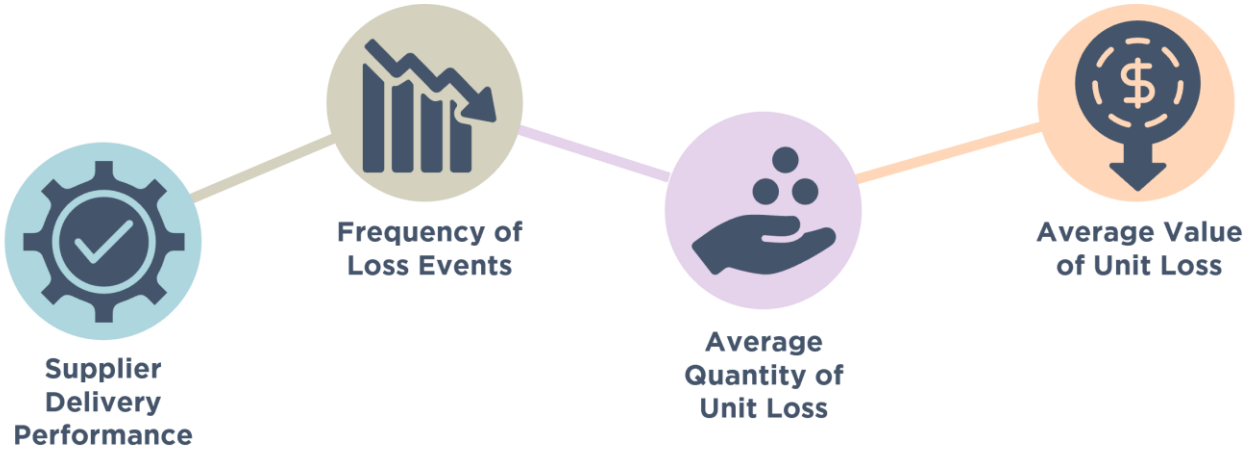
When returning goods in Insight, the **Warehouse Manager** or **Warehouse Officer**:

- ☐ Moves goods into the quarantine locator using the Put Away Lines transaction.
- ☐ Enters the return details of the goods using a Return Receipts transaction, including any Return Material Authorization (RMA) numbers provided by the supplier.
- ☐ Runs the Return Delivery Note (DN), which contains the details of the return.

For more information, see the Supply Chain Records Management Policy, Inventory Management Reference Guide, and the Return Goods to the Supplier Job Aid.

PERFORMANCE MONITORING

Below are examples of metrics that may be used to monitor the performance of receiving activities and suppliers.



For more information about these metrics and how they can be used for performance monitoring, see the Performance Indicator Reference Sheets (PIRS) section in the Monitoring chapter.



Photo by Hadjara Laouali Balla

Chapter 9: Warehouse and Inventory Management

9. WAREHOUSE AND INVENTORY MANAGEMENT

Purpose

This chapter enables supply chain staff to set up, organize, and manage storage facilities and inventory according to best practices. Staff can use this chapter as a resource to organize, track, and manage the flow of goods in and out of storage facilities. Additionally, this chapter enables staff to monitor the accuracy, effectiveness, and efficiency of warehouse and inventory management processes.

The warehouse management process includes receiving, inspecting, quarantining, and reconditioning (if necessary), kitting, and dispatching goods as well as handling inventory losses.

The inventory management process includes the analysis, classification, counting, and replenishment of stock and inventory, including loaned and borrowed goods.

In this chapter, the term "storage facility" means any facility, room, or other area used to store D-goods or ND-goods. This includes warehouses, ad hoc storage facilities (e.g., mobile storage units, or MSUs), storerooms inside of a facility, storage rooms inside the offices of country programs, and any other locations where goods may be held.

CRS staff working with health commodities (e.g., health supplies, pharmaceuticals, and medicines) should refer to the Health Annex for specific information on warehouse and inventory management of health items.

9.1 PREFACE

Warehouse and inventory management are separate but interrelated supply chain functions. Both functions are important for the overall health, quality, and performance of the supply chain.

Quality assurance and quality control policies, processes, and tools (e.g., warehouse inspections and inventory counts) are designed to protect all goods in inventory. Quality is especially important for consumables like food and medicines.

Supply chain staff involved in warehouse or inventory management should continuously monitor the status of storage facilities and goods and report any quality issues (actual or potential) immediately.

For more information about the differences between warehouse and inventory management, see the first section (Section 2.1) of the Certification in Humanitarian Logistics Learning Materials – Unit 2 Warehousing and Inventory.

9.2 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

CRS POLICIES AND PROCEDURES

- POL-FIN-DOC-008 – Finance Documentation Matrix (Cash Voucher Assistance tab) (POL-FIN-DOC-008)
- PRO-FIN-IKD-019.01 – Accounting for USG In-Kind Commodities for Distribution
- PRO-FIN-IKD-019.02 – Accounting for Non-USG In-Kind Resources Received
- PRO-FIN-INV-025.01 – Accounting for Purchased Inventoriable Goods
- POL-OOD-GSCM-001 – Inventory Counts

Insight Supply Chain Guidance

- Inventory Management Reference Guide
- Account Alias Issue Job Aid
- Account Alias Receipt Job Aid
- Interorganization Transfer Job Aid
- Subinventory Transfer Job Aid
- Borrow and Return Job Aid
- Loan and Return Part 1 and Part 2 Job Aids
- Cycle Count Job Aids: Set up, Schedule, Record, Approve
- PIC Job Aids: Create, Record Tags, Approve Count, Finalize Adjustments
- Return Goods to CRS (Back Upstream) Job Aid

CRS GUIDELINES

- The Emergency Field Operations Manual (EFOM)
- CAT User Portal

DONOR POLICIES AND REGULATIONS

- 7 CFR 1499 – USDA Food for Progress
- 7 CFR 1590 – USDA Local and Regional Food Aid Procurement Program
- 7 CFR 1599 - McGovern-Dole International Food for Education and Child Nutrition Program
- 22 CFR 211 (Reg 211) – Transfer of Food Commodities for Use in Disaster Relief, Economic Development, and Other Assistance
- 22 CFR 228 – Rules for Procurement of Commodities and Services Financed by USAID

- EOD-110 – Recoopering Packaged Commodities for Food Aid Programs
- Guide to Global Fund Policies on Procurement and Supply Management of Health Products
- Mandatory Standard Provisions for U.S. Nongovernmental Organizations
- Mandatory Standard Provisions for Non-U.S. Nongovernmental Organizations

DONOR AND OTHER GUIDELINES

General

- Generally Accepted Commodity Accounting Principles (GACAP)
- Logistics Cluster – Logistics Operational Guide (LOG)
- TOPS - Warehouse Staff Safety Guide
- USDA Sanitation Performance Standards Compliance Guide

Food Assistance

- TOPS Commodity Management Handbook
- TOPS Commodity Management Toolkit

Health

- Management Sciences for Health (MSH) - MDS-3: Managing Access to Medicines and other Health Technologies
- USAID|DELIVER – The Logistics Handbook: A Practical Guide for the Supply Chain Management of Health Commodities
- USAID|DELIVER – Guidelines for Warehousing Health Commodities
- USAID|DELIVER and WHO – Guidelines for the Storage of Essential Medicines and Other Health Commodities
- USAID|DELIVER – Using Last Mile Distribution to Increase Access to Health Commodities
- WHO - A Model Quality Assurance System for Procurement Agencies
- WHO - Guidelines for Safe Disposal of Unwanted Pharmaceuticals
- WHO Safe Management of Wastes from Health-care Activities

9.3 OVERVIEW – WAREHOUSE MANAGEMENT

Warehouse management refers to maintaining the storage facility along with the planning, set-up, goods movement, and monitoring activities that occur within the storage facility. Key activities include the regular inspection, cleaning, repair, and maintenance of warehouse equipment, supplies, storage areas, storage bins, and goods as well as the implementation of critical safety and quality protocols.

LOCATION PLANNING

For in-depth guidance on setting up a storage location (e.g., determining capacity, mapping the layout and flow of goods, creating new storage locations in Insight, etc.), see the Start-Up chapter and Certification in Humanitarian Logistics Learning Materials – Unit 2 Warehousing & Inventory.

Part of the process of continuous planning is managing locators for storage locations. Locators may need to be set up or deactivated throughout the project lifecycle. For more information about locators, see the Insight Inventory Reference Guide and the Create and Deactivate Locators Job Aid.

Weight and Volume Requirements

Storage planning activities should take place continuously throughout the project cycle. Effective storage planning reduces costs by making sure that available space is used and by minimizing the size of the storage facility. Volume and weight are both important factors for determining storage space capacity needs.

For more information about calculating the volume and weight of goods, see the Design chapter. For determining the weight and volume of goods, see the Weight and Volume Calculator. For determining warehouse capacity, see the Warehouse Capacity Calculator.

SET-UP

Security and Safety Controls

It is very important to maintain the safety and security of all CRS storage facilities along with the inventory and CRS staff, day laborers, and visitors there. Warehouse staff should be trained in all safety, security, and evacuation protocols. The figure below highlights some best practices for maintaining warehouse security and safety.



Install physical barriers or other deterrents to enclose and inhibit unauthorized access to storage facilities and their cargo handling areas.

Maintain the integrity of the facility and other structures by periodic inspection and repair.



Install alarm systems and/or video surveillance equipment where possible to monitor the premises.



Install a panic button at high-risk storage locations in the guardhouse, office, and other locations determined by senior managers to call for help during an emergency.



Install adequate lighting inside and outside the facility (e.g., entrances and exits, cargo handling and storage areas, fence and perimeter lines, and parking areas).



Install high-quality locks on all windows, doors, gates, and fences. Keys to all locks must be controlled and issued by the Supply Chain Manager, Head of Operations, or other designated security personnel.



Prohibit smoking in and around the premises, except in designated areas that are outside the building and away from flammable materials.



Fill out Security Incident Reports when there is a safety or security incident (e.g., fire, staff injury, theft, burglary, handling, or fumigation accident, etc.).

All CVA assets must be stored indoors in a secure place with restricted access (e.g., safe, lockable room, closet, or cabinet). When CVA assets are not being received, loaded, activated, transported, or dispatched, they must not be left unattended or stored in an unlocked location (even temporarily or overnight).

Building Access Controls

Every storage location should have a system in place to identify individuals who are authorized to enter the premises (staff and visitors) and to control the movement of visitors inside the warehouse. Various forms may be used to track visitor and vehicle activity in and out of the premises to decrease the risk of unauthorized access to the warehouse and goods in storage.

The figure below lists best practices for controlling the movement of visitors in and around the warehouse compound.



Armed security guards can be posted only after approval by the Vice President for Overseas Operations.

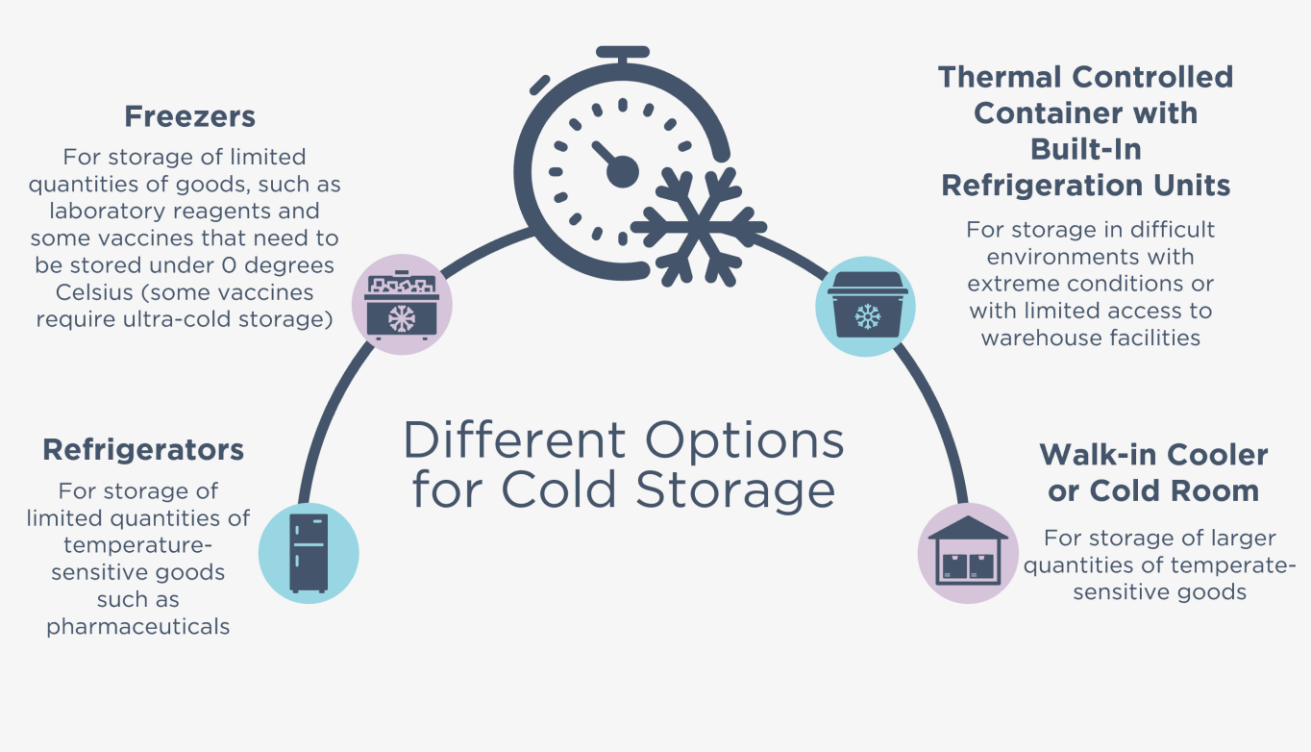
Equipment and Supplies

The figure below lists various types of equipment and supplies that should be available to make sure the warehouse is functioning smoothly and protecting the quality of goods stored there.



Cold Storage

When temperature-sensitive goods require cold storage, supply chain staff should decide on the best cooling option based on the volume, fragility, and duration of the goods in stock. The figure below describes different options for cold storage.



Warehouse staff should monitor the temperature of cold storage equipment regularly. If temperatures rise above or fall below specified ranges, the goods must be quarantined (while kept in cold storage) and must be independently sampled and tested before restocking into inventory.

For more information on cold chain equipment and supplies, see UNICEF's Cold Chain Technical Support Guidance.

Bin Cards

This card is placed physically next to an item in the storage area and is used to record details about goods in storage and track the movement of goods. A bin card identifies a specific batch of an item and should include the following information.

- Item code.
- Lot or serial number.
- Packing list number (if available).
- Expiration date.
- POET code.
- Transaction details (receipts, issues, transfers, etc.).

A new bin card is created for each new PO, batch, or expiration date of an item.

In the field, bin cards that identify stacks of items might be called stack cards. In this handbook, the term "bin card" refers to both a bin card and a stack card.

FIRE RISK MITIGATION

Every storage facility should have systems in place for fire protection, prevention, egress, and firefighting. The subsections below list ways to mitigate fire risk and steps to take in fire response.

Fire Protection System

- Install smoke detectors throughout the storage facility; test and replace batteries regularly.
- Place fire extinguishers inside and outside all storage facilities, with signage that shows the locations of the fire extinguishers throughout the warehouse.
- Train all staff on the proper use of fire extinguishers and other firefighting equipment.
    - Conduct initial training for new staff during orientation.
    - Conduct refresher training for all staff every one to two years.
    - Designate staff members to serve as "fire marshals".

For information on fire extinguishers, see the Fire Extinguishers section in this chapter.

Fire Prevention Protocols

- Prohibit smoking in or near storage facilities and cargo handling areas.
- Segregate hazardous and highly flammable goods from other goods in the storage facility.
- Never exceed the building's legal occupancy limits.
- Remove debris from inside and outside all storage facilities during cleaning.
- Create a buffer zone around the perimeter of a storage facility that is kept clear of grasses, trees, shrubs, or any other materials that could become fuel for a fire.
- Inspect the warehouse regularly to identify any potential fire threats.

For information on cleaning and inspection activities, see the Inspection, Cleaning, and Maintenance section in this chapter.

Fire Egress Plan

- Mark exits and other potential points of egress clearly with high-visibility signage.
- Post fire evacuation routes and named evacuation assembly points at all exits and other potential points of egress from the warehouse.
- Inspect the warehouse regularly to make sure that exits are accessible and free of any blockages.

Firefighting Equipment

Every storage facility should have standard firefighting equipment (e.g., buckets and piles of sand or dry powder in different areas throughout the warehouse) and different types of fire extinguishers.

- Place at least a fire extinguisher outside the warehouse.
- Place the appropriate type of fire extinguisher (see table below) inside the warehouse within 15 meters of the entrance.

For materials that require a specific type of fire extinguisher (see table below), place the appropriate fire extinguisher close to that bin of materials **in addition to** the standard firefighting equipment (i.e., a bucket with a pile of sand or dry powder).

Signage should be posted in the warehouse to identify the locations and types of fire extinguishers. This signage should be hung on the wall or from the ceiling at least two to three meters off the floor, so it is visible from most places within the warehouse.

Fire Extinguishers

The figure below lists the appropriate types of fire extinguishers to use depending on the class and type of fire. In most cases, dry powder can also work for different classes and types of fires.

Type		Class of Fire						Comments
		Class A	Class B	Class C	Class D	Electrical	Class F	
		Combustible Materials	Flammable Liquids	Flammable Gases	Flammable Metals	Electrical Equipment	Deep Fryers	
Examples		Paper, wood	Paint, gasoline	Butane, methane	Lithium, potassium	Generators, pumps	Chip pans	
Extinguisher	**Water**	✓	X	X	X	X	X	Do not use on liquid or electric fires
	Foam	✓	✓	X	X	X	X	Not suited to domestic use
	Dry Powder	✓	✓	✓	✓	✓	X	Can be used safely to 1000 volts
	CO_2	X	✓	X	X	✓	X	Safe on both high and low voltage
	Wet Chemical	✓	X	X	X	X	✓	Use on extremely high temperatures

Below are some important considerations about fire extinguishers.

- One fire extinguisher can cover an area of 450 square meters (for most materials) or an area of 300 square meters (for highly combustible materials).
- For highly combustible materials, a fire extinguisher should be within reach at a maximum distance of nine meters.
- Once a fire extinguisher has been used, it should be removed from service, inspected, and recharged.

An inspection card must be attached to each fire extinguisher certifying that a certified technician performed annual inspection and maintenance activities as required by the manufacturer and local laws.

EMERGENCY RESPONSE PLAN

Every storage facility should have an emergency response plan in place that identifies the following information and is posted near telephones, exits, and other points of egress within the warehouse.

- Emergency contacts.
- Emergency procedures.
- Detailed evacuation routes.
- Named evacuation assembly points outside the facility.

Emergency Contacts

Every storage facility should keep an updated list of emergency contacts in a centralized location inside the warehouse, with phone numbers for the following:

- Local fire department/brigade.
- The nearest hospital.
- The CRS main office.
- Country leadership.
- Local ambulatory services.

Evacuation Plan

Every storage facility should have an evacuation plan in case of fire or other emergencies.

The Security and Evacuation Plan developed by country programs should include sections and guidance specific to storage facilities. Any guidance by country programs on developing evacuation plans for storage facilities must be aligned with the Safe and Sound Manual.

WAREHOUSE AND WORKER SAFETY

Every storage facility should have protocols in place to maintain the safety of individuals within the warehouse. The figure below highlights best practices to maintain worker safety.

Best Practices for Maintaining Safety of Individuals within the Warehouse

1

Warehouse staff and laborers should have access to appropriate Personal Protective Equipment (PPE).

Common PPE includes:



Closed shoes with reinforced toes



Hardhats



Safety glasses



Gloves



Masks



Security guards should be issued uniforms, flashlights and batteries, hats/caps, pants, closed-toe shoes, identification, etc.

2

3

Warehouse staff should be trained on the following:

- How to determine which PPE to use based on the activity or types of materials involved
- How to handle goods and equipment to reduce the risk of short- or long-term injury
- How to identify, address, and report security threats (actual or potential)
- How to identify fire and how to use firefighting equipment such as fire extinguishers
- How to perform basic first aid
- How to follow security protocols (e.g., visitor and vehicle access, end-of-shift procedures) to secure the storage location

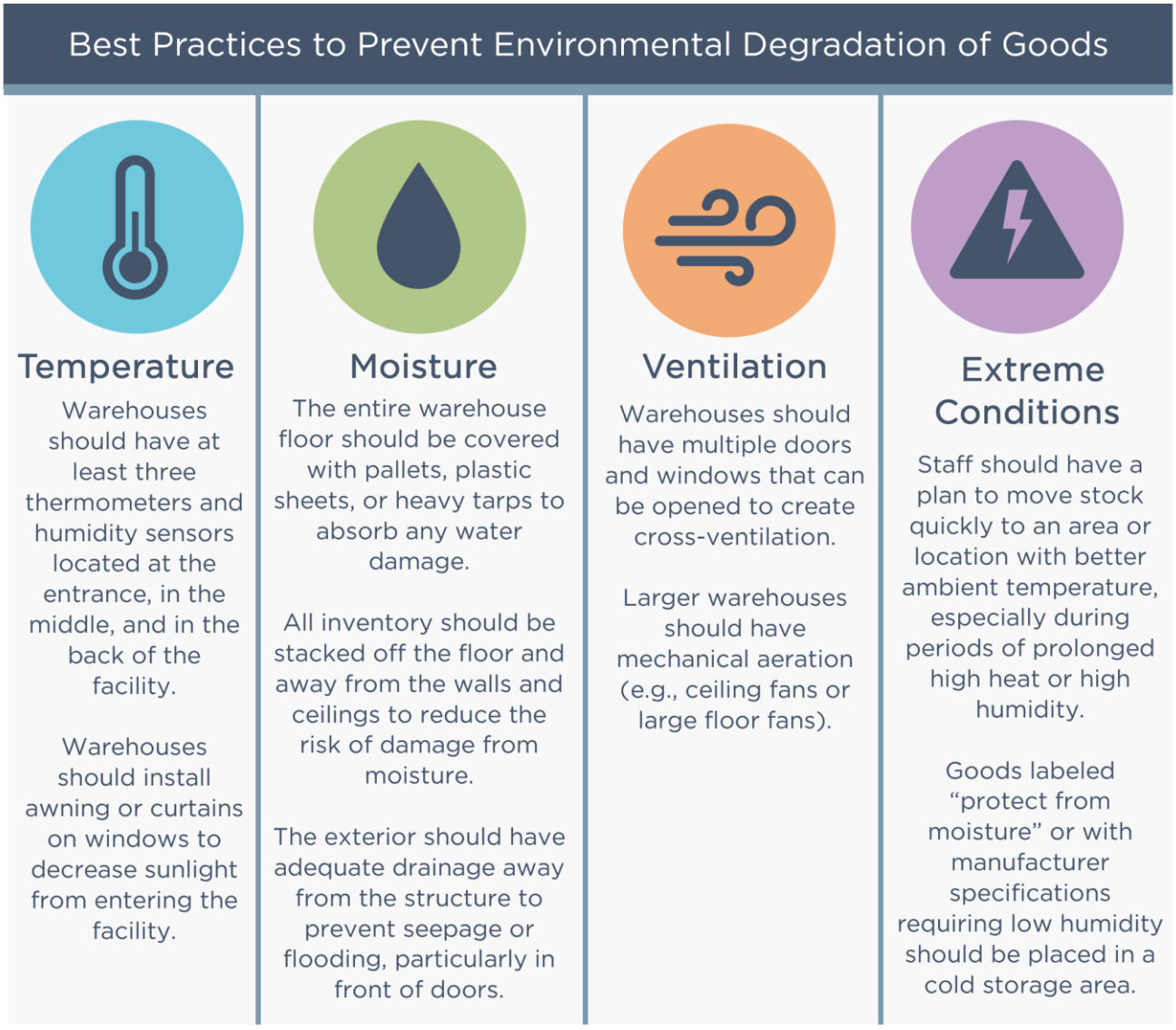


ENVIRONMENTAL CONTROL

Heat, humidity, moisture, and sunlight are the main causes of degradation of goods in a storage facility. The actions listed below are important to maintain inventory quality, especially for goods like food and medicines.

- Controlling the temperature and humidity of the warehouse.
- Checking regularly for pools of water in and around the warehouse premises; and repair leaky roofs immediately.

The figure below highlights some best practices to reduce the risk of the degradation of goods by environmental factors.



If temperatures or humidity levels rise above or below acceptable thresholds specified for any goods stored in the warehouse, warehouse staff should put a plan in place to regulate the temperature and humidity levels.

PEST CONTROL

Infestation by insects, rodents, birds, bats, snakes, and other pests are major threats to the quality of goods, especially in warm and humid climates. For quality assurance, the warehouse must be monitored continuously to prevent costly financial and programmatic losses that result from pest infestations.

Prevention

The figure below highlights some best practices to reduce the risk of infestation by pests.



Detection

For insects, look for insects flying around stacks of food or laying eggs.

For rodents, look for evidence of droppings and smell of urine. To see if rodents are active, spread talcum powder near access points and along walls on a regular (weekly) basis.

Removal and Disposal

If there is evidence of rodents, place traps around vulnerable parts of the warehouse and map the locations of the traps on the warehouse plan. Traps should be inspected daily and rotated frequently. The figure below highlights important considerations for handling, removing, and disposing of dead animals.



The methods listed below may be used to control rodents or birds.

- Spring traps and glue traps that use inexpensive, non-poisonous bait such as peanut butter.
- Ultrasonic devices that emit a high-pitched frequency to repel pests.

The methods listed below are **not** recommended for pest control.

- **Poisonous Bait** – Rodents attracted out of hiding by poison often carry the poison back to their nests and die there.
- **Natural Predators** – Cats introduced to patrol the warehouse for rodents and birds could consume poisoned animals and die in an isolated location in the warehouse.

Not only do decomposing animals pose a contamination risk, but they also produce noxious odors that attract other animals and pests.

Fumigation

If goods (particularly food) are heavily infested with insects, fumigation is an option for consideration. Fumigation fills an area with gaseous pesticides (fumigants) to suffocate or poison the pests within that area. Fumigation is an extremely hazardous activity that requires contracting the services of licensed professionals.

Quarantine

When goods appear to be infested, all suspect items must be quarantined. Quarantined items must be sampled to determine the degree of infestation. If sampling reveals that quarantined items are heavily infested (more than 15 insects found per kilogram), samples must be sent to the lab for a fitness test.

For more information on quarantining, loss, and reconditioning processes, see also Quarantining, Reconditioning, and Loss Handling.

INSPECTION, CLEANING, AND MAINTENANCE

Storage locations should be cleaned and inspected regularly. All storage and handling equipment should be inspected, cleaned, and maintained regularly. These quality assurance activities are important to safeguard both the goods and the staff in the warehouse.

The Warehouse Manager is responsible for creating the checklists, schedules, and logs for cleaning and maintenance activities that are to be performed on a daily, monthly, quarterly, and annual basis. The Warehouse Manager should also provide training (e.g., basic repair and maintenance of equipment, inspection, and reporting) and oversight of all required cleaning and maintenance activities.

The Warehouse Officer and the Warehouse Keeper perform the daily and monthly activities. The Warehouse Manager typically performs the quarterly and annual activities.

Damaged goods that are discovered during inspection, cleaning, or maintenance must be removed from inventory for reconditioning or loss handling. For more information about these processes, see Reconditioning and Loss Handling.

Below are lists of recommended (but not exhaustive) inspection, cleaning, and maintenance activities.

For more information on activities that should be performed monthly at a minimum, see the Warehouse Inspection Checklist.

Daily Activities – Inspection, Cleaning, and Maintenance

The Warehouse Officer and the Warehouse Keeper are responsible for performing the activities listed below.

Activity	Frequency
Inspection	
Inspect storage equipment and infrastructure (e.g., racks, shelving, pallets, walls, floor, roof, doors, and security lights)	Daily
Inspect the generator and document the inspection using the Checklist – Generator Daily Inspection	M, W, F
Check for evidence of rodents, insects, moisture seepage, etc.	Daily
Check for and remove obstacles in all aisles	Daily – ongoing
Check and record temperature and humidity	Daily (08:00, 12:30, 16:30)
Verify that a Bin Card exists for each bin/stack and that all Bin Cards are complete and legible	Daily
Verify that the Bin Card balance agrees with On-Hand Report	Daily
Cleaning	
Sweep and clean floors	Daily

Activity	Frequency
Remove trash and debris and dispose of it outside in covered receptacles (as far as possible from the warehouse)	Daily
Clean and dust racks and shelves	M, W, F
Verify the inventory of office, cleaning, and other supplies (reorder and replenish as needed)	First and last day of the work week
Maintenance	
Maintain orderliness of stacks	Daily – ongoing
Maintain paper copies of files as required	Daily
Store equipment and supplies properly when not in use	Daily – end of day

Monthly Activities – Inspection, Cleaning

The Warehouse Officer and the Warehouse Keeper are responsible for performing the activities listed below.

Activity	Frequency
Inspection	
Inspect all stacks, pallets, shelves, racks, and floors	Once monthly
Inspect all air conditioners, fans, and lights for proper functionality (note any repairs that are needed)	Once monthly
Inspect all handling equipment for proper functionality (note any repairs that are needed)	Once monthly
Inspect all doors, windows, and their respective locks for proper functionality (note any repairs that are needed)	Once monthly
Inspect the perimeter of the warehouse for any repairs that are needed to fix security breaches, faulty lighting, or other damage or weaknesses	Twice monthly
Cleaning	
Clean the interior (window washing, floor mopping, dusting/wiping of packages) and exterior (remove weeds and debris from the premises) of the storage location thoroughly	Once monthly
Maintenance	
Perform basic maintenance and repairs of the structure and equipment (as needed)	Once monthly

Quarterly and Annual Activities – Inspection, Maintenance, and Repair

The Warehouse Manager should be responsible for performing the activities listed below.

All annual inspection activities listed below should occur during the annual PIC (for more information, see PICs).

Activity	Frequency
Unannounced quality control inspection by Supply Chain Manager	Quarterly
Inspect all security controls and security log sheets	Quarterly
Inspect and service facility equipment (with the assistance of relevant technicians): • All temperature and humidity monitoring devices • All fire safety equipment • The generator • Specialized warehouse handling equipment (e.g., pallet trucks, forklifts)	Annual
Inspect and service all handling equipment	Based on manufacturer recommendations
Inspect and repair/replace all storage equipment such as shelves, racks, and pallets (as needed)	Annual
Inspect and calibrate all scales	Annual

9.4 OVERVIEW – INVENTORY MANAGEMENT

Inventory management refers to the maintenance of goods stored in a warehouse to balance supply and demand for the distribution or use of goods by CRS programs, projects, and end users (e.g., CRS staff, partners, and program participants). Key inventory management activities include classifying and organizing inventory in storage as well as regular analysis, counting, monitoring, replenishment, and reporting of working stock.

DOCUMENTATION

Many different documents and forms are used to track the movements of goods in and out of inventory. It is important to keep inventory documentation accurate and updated with the most recent information.

Insight can automatically produce many of these reports and forms including Inventory on Hand Report, Goods Received Note (GRN), Delivery Note (DN), cycle count sheets (known in Insight as Cycle Count Listing Report), and Loss Report. For a full list and description of reports that are available, see Insight Supply Chain Management Reports.



The documents and forms described below provide the location, description, quantity, quality, status, and movement of items that are stored in a warehouse. For examples or templates of these forms and reports, see Tools, Reports, and Forms.

Inventory-on-Hand Report

This report tracks all items that are currently in stock and provides information such as lot/serial number, expiration date/best used-by-date (BUBD), storage location, on-hand quantity, etc.

For country programs with full Insight functionality, this report is generated by the system.

For country programs that have not yet implemented Insight supply chain modules, the report of working stock should be kept in the system of record (e.g., physical warehouse ledger).

Insight is the official system of record for CRS and there is no requirement for storage facilities to maintain an additional system of record.



Tracking Working Stock with Electronic CVA Assets

For various reasons, the serial numbers of electronic CVA assets are not tracked in Insight.

Instead, the status and movement of these e-cards or vouchers are tracked by the electronic platforms of Financial Service Providers (FSPs) and the Cash and Asset Transfer (CAT) platform. These platforms are managed by programming staff.

CVA assets with built-in tracking mechanisms (e.g., barcodes or QR codes) can be tracked manually in the system of record by recording their serial numbers in a physical ledger or a software application like Excel (for an example, see the CVA Asset Ledger).

The CVA Asset Custodian is responsible for tracking the status and movement of CVA assets (including manual tracking of electronic CVA assets) and for reporting working stock.

For more information about the role and responsibilities of the CVA Asset Custodian, see the Roles and Responsibilities chapter (under Warehouse Keeper).

For information about documents and forms used to track status and movement of stock, see the Bin Cards and Stock Movement Forms sections in this chapter.

Stock Movement Forms

These forms track the movement of goods in and out of the storage facility.

- Goods Received Note (GRN).
- Delivery Note (DN).
- Packing List.
- Bin Cards.
- Stock request and dispatch documentation.
- Distribution reports.
- Loss/return notes.

Stock Monitoring Reports

These reports track regularly occurring activities in the storage facility related to the storage of goods.

- Inventory on-hand Report
- Cycle Count Listing Report
- Physical Inventory Tag Listing
- Approved Loss Report and Losses Pending Approval Report
- Loan Status Report

Reconditioning, Loss, and Disposal Reports

These documents track the status of goods and the quantity of goods that are removed from the supply chain pipeline for any reason other than distribution to program participants or CRS staff.

Insight provides two reports to track loss: Approved Loss Report and Loss Pending Approval Report.

STOCK-KEEPING UNITS (SKUS)

For the Insight system, CRS created and maintains the "CRS Item Master," an up-to-date and ever-growing electronic list/catalog of all goods currently available for procurement. Each item is assigned a unique eight-character item number and a brief description of the goods. Some items in the Item Master carry specifications (e.g., ACTALP02 = ACT, AL 20/120mg, pill, 1x6 blister pack, BEANBL02 = BEANS, black, dry) while others are quite generic (e.g., VOUCHR01 = PAPER VOUCHER, FFILTR01 = FUEL FILTER). When an item does not appear on the Item Master, country program staff may request that it be added. If the existing Item Number is not specific enough to manage the inventory at the level of detail needed, then the country program may request a more specific item number be created.

For example, the Item Master has item number BOOKGN01, a general item number for books. If the country program needs to monitor levels of stock of specific books, for example for an education program, they may request item numbers to be created for each type of book, such as math books, English books, and history books.

The item number should act as the stock-keeping unit (SKU), which requires it to be specific enough to meet the needs of the country program to manage stock levels and plan for replenishment.

To request a new item, create and submit a new item request in Insight. Make sure to fill out all required fields for the detailed specifications. The Supply Chain Manager will then receive an automated email notification for approvals in Insight. The status of the item request can be tracked in Insight in the Item Requestor Dashboard.

For more information on these steps in Insight, see the New Item Request Job Aid.

9.5 ROLES AND RESPONSIBILITIES – WAREHOUSE MANAGEMENT

WAREHOUSE SECURITY AND SAFETY

The senior managers of country programs are responsible for developing and implementing warehouse safety and security protocols, including evacuation protocols.

The Warehouse Manager is responsible for overseeing the security of the warehouse structure and compound.

The Warehouse Manager, in coordination with the Supply Chain Manager and the Head of Operations, is responsible for overseeing the safety of all individuals within the warehouse structure and compound.

The Administrative Manager is responsible for overseeing the security of the CRS office storeroom.

Fire Protection and Prevention

The Warehouse Manager, in coordination with the Supply Chain Manager and the Head of Operations Officer, is responsible for mitigating the risk of fire at a CRS storage location.

The Supply Chain Manager or the Head of Operations Officer is responsible for performing a visual inspection of all fire extinguishers monthly.

GOODS IN OFFICE STORAGE ROOMS

The Administrative Manager has a similar role as the Warehouse Manager for items stored in an office storage room. References to the Warehouse Manager in all RACIs and checklists throughout this chapter can also refer to the Administrative Manager.

The Administrative Officer or Administrative Assistant can have a similar role as the Warehouse Officer for items stored in an office storage room. References to the Warehouse Officer in all RACIs and checklists throughout this chapter can also refer to the Administrative Officer and/or the Administrative Assistant.

CVA ASSETS IN STORAGE LOCATIONS

The Administrative Officer or Administrative Assistant can be designated as the CVA Asset Custodian to manage CVA assets that are acquired for CVA programming and stored in an office storage room.

For more information on the role and responsibilities of the CVA Asset Custodian, see the RACI for Receiving CVA Assets in the Receiving chapter).

INSPECTION, QUARANTINE, RECONDITIONING, AND LOSS HANDLING OF GOODS

The figure below lists the functions and activities of six roles involved in the processes of inspecting goods, quarantining goods for possible reconditioning or loss handling, reconditioning goods for future distribution or use, and handling inventory losses.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Function/Activity	Warehouse Manager*	Warehouse Officer*	Supply Chain Manager	Head of Operations	Finance Team	Requestors
Oversees inspection of damaged goods, including testing and sampling at a qualified laboratory (if needed)	R		A	I		I
Places damaged goods in quarantine	A	R	I			I
Reconditions goods if goods can be recovered	A	R	I			I
Completes and submits the Reconditioning Report for approval	A	R	C	C		I
Puts away reconditioned goods into inventory	A	R				I
Investigates any losses and reasons for the losses, and complete and submit the Loss Report and Claim Form	R	C	A	I		I
Approves the Loss Report and Claim Form and submit the report to the stakeholders	I		R	R	I	I
Appraises the value of any loss	C		R	A	C	C
Determines the method of disposal and work with the logistics team to arrange transport to the disposal site			R	A		C
Announces location, date, and time of any sale, donation, or destruction of damaged goods to donors, local government authorities, and CRS senior staff (if goods cannot be reconditioned)			R	A		I
Witnesses the disposal of goods and signs a certificate of disposal**			R	A		
Completes and submits the Disposal Report and supporting documentation			R	A		
Approves the Disposal Report and sends documents to relevant stakeholders			I	R	I	I
Reviews trends in losses, investigates possible causes, and decides the appropriate action to reduce loss and damage	C		R	A		

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

* Staff with other job titles may be assigned to this role. For more information, see Roles and Responsibilities – Warehouse Management.

** In this chapter, the term "certificate of disposal" refers to a Certificate of Sale, a Certificate of Donation, or a Certificate of Destruction that is completed to document the disposal of goods that are considered inventory losses.

KITTING, PACKING, AND REPACKAGING OF GOODS

The figure below lists the functions and activities of five roles involved in the processes of kitting, packing, and repackaging goods for distribution and use.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Function/Activity	Warehouse Manager*	Warehouse Officer*	Supply Chain Manager	Finance Team	Requestors
Completes the Kitting Production Plan after receiving kitting approval	R	I	A		I
Prepares the kitting area and make kitting supplies available	A	R			
Picks kit components from inventory and place components in the kitting area	A	R			
Packs kitting components into kits	A	R			
Inspects kits, verifies completion of the kitting process, and signs the Kitting Production Plan	R		A		
Verifies the valuation of the kit and notify the Program Manager that the kitting process is complete			R	I	I
Puts away kits into stock and creates or updates bin cards	A	R			
Updates inventory records	R		A		I

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

* Staff with other job titles may be assigned to this role. For more information, see Roles and Responsibilities – Warehouse Management.

9.6 ROLES AND RESPONSIBILITIES – INVENTORY MANAGEMENT

INVENTORY COUNTING

The figure below lists the functions and activities of six roles involved in organizing, managing, and performing inventory counts.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Cycle Counts

Function/Activity	Warehouse Manager*	Warehouse Officer*	Supply Chain Manager	Head of Operations	Programming Team	Finance Team
Trains new staff on how to conduct cycle counts	C		R	A		
Prepares the cycle count Schedule and Cycle Count Listing Report	I	I	R	A		
Makes sure that the cycle count is "blind" by removing bin cards	R	I	A			
Conducts the cycle count	A	R	I			
Reviews and shares the results shown on the Cycle Count Listing Report and compare with the stock on-hand listed in the inventory records and on Bin Cards	R	C	A			
Asks for a recount if variances are found	I		R	A		
Investigates the recount if variances are still found	R	C	A	I		
Reviews investigation findings and approves adjustments	C		R	A	I	I
Updates bin cards and inventory records	R		A			
Documents any losses on the Loss Report and Claim Form	R		A	I		
Performs quarterly random and announced counts			R	A		

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

* Staff with other job titles may be assigned to this role. For more information, see Roles and Responsibilities – Warehouse Management.

Full Physical Inventory Counts (PICs)

The figure below lists the functions and activities of eight roles involved in organizing, managing, and performing PICs.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Function/Activity	Warehouse Manager*	Supply Chain Manager	Head of Operations	Country Representative	PIC Leader**	PIC Count Team**	Finance Team	Programming Team
Schedules PIC for each storage facility	I	R	A	I			I	I
Assigns staff to PIC Teams			R	A	I	I		
Hires an external auditor (when the fiscal year-end valuation of country program's D-goods is over 750,000 USD)		I	R	A			I	
Trains the PIC Count Team on how to conduct the count	C	R	A		I	I		
Hires day laborers (if needed)	I	R	A					
Makes sure that goods are properly arranged and all inventory records are up to date	R	A	I					
Assigns counters to bins and oversee the counting process			A		R	I		
Counts assigned bins and records the number of count sheets					A	R		
Assesses the quality of goods during the count and randomly selects goods for closer inspection					A	R		
Collects, reviews, and submits count sheets		I	A	I	R	C		
Compares counted quantities with inventory records				R	C			
Determines if a recount is necessary				R	I			
Oversees the recount and submits results			A	I	R	C		
Approves count and determines whether discrepancies need to be investigated		I	I	R				
Inspects any suspect packages found during the count and determine the next steps	R	A						
Updates Bin Cards and inventory system records	R	A						
Investigates causes for discrepancies and determine corrective actions for resolving discrepancies		R	A	I				
Submits Period Inventory Valuation Report and compile PIC Report	I	R	A	I			I	I
Receives and shares external audit firm report (if applicable)		I	R	A			I	

R=Responsible; A=Accountable; C=Consulted; I=Informed

* Staff with other job titles may be assigned to this role. For more information, see Roles and Responsibilities – Warehouse Management.

** The PIC Leader and the PIC Count Team should be composed of staff who are not responsible for inventory management activities or oversight.

LOANING AND BORROWING GOODS

The figure below lists the functions and activities of six roles involved in the processes of loaning and borrowing goods.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Function/Activity	Warehouse Manager*	Supply Chain Manager	Logistics Manager	Program Manager	Finance Team	Third Party**
Loaning Goods						
Receives and reviews the approved loan request		R	I	C		
Arranges for transport of the loaned goods (if CRS is responsible for transportation)	I	A	R	I		I
Picks and packs the requested items to be loaned and prepare shipping documentation	R	A	I			
Communicates the dispatch of the loaned goods	R	A	I	I		I
Receiving Loan Returns						
Tracks loan agreement and communicates upcoming loan return	I	R		I		C
Receives, inspects, and puts away the return of loaned goods	R	A		I		I
Verifies the valuation of the returned loaned goods	C	R		I	C	
Borrowing Goods						
Receives and reviews the approved borrow request from the requesting department	I	R	I	C		I
Arranges for transport of the borrowed goods (if CRS is responsible for transportation)	I	A	R			I
Receives, inspects, and puts away the borrowed goods into storage	A	R	I	I		I
Returning Borrowed Goods						
Tracks the agreement to make sure that borrowed goods are returned by the agreed-upon date(s)		R		C		I
Identifies the method to be used for the return	C	R		C		I
Creates and shares the Dispatch Plan and arranges for transport of borrowed goods (if CRS is responsible for transportation)	I	A	R	I		C
Develops a goods valuation report (for replacement goods)		R		I	C	I
Picks, packs, and dispatches return of borrowed goods	R	A	I	I		I

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

* Staff with other job titles may be assigned to this role. For more information, see Roles and Responsibilities – Warehouse Management.

** The third party could be an external party or another CRS office or project that is loaning goods or borrowing goods.

9.7 PROCESSESS – WAREHOUSE MANAGEMENT

INSPECTING AND RECEIVING GOODS

For in-depth guidance on the processes of inspecting and receiving goods, see the Receiving chapter.

The figure below summarizes two different types of damage that can be found during the inspection process.



Physical Damage

- Easy to detect during visual inspection
- Main indicator is crushed or torn containers (caused by physical stress such as crushing or tearing when the products are packaged, loaded or off-loaded, unpackaged, or when the cartons or inner boxes are stacked in their bins)
- Laboratory testing not typically required to recondition and use the product



Chemical Damage

- May not be obvious during visual inspection
- Different indicators are changes in color, unusual odors, or other changes to the consistency of the product
- Laboratory testing is often required to determine product fitness before goods can be reconditioned

Identifying Potential Inventory Losses

The figure below describes common indicators of damage or spoilage to goods and the recommended actions to take for each indicator. The Warehouse Manager is responsible for inspecting packages for damage or spoilage (see all factors included in Why Loss Occurs) and determining the necessary actions or next steps.

Indicator: What to look for	Action: What to do about it
Damage to the outer packaging or inner packaging (e.g., tears, perforations, water or oil stains, broken vials, torn packets) Goods inadvertently left outside the storage facility	• Quarantine all damaged packages • Visually inspect contents for physical or chemical damage and signs of pests • Recondition or dispose of items that cannot be reconditioned (follow national and donor guidance for reconditioning and disposal) • Put away only undamaged goods or reconditioned goods
Rancidity, color changes, foul odors, or other similar damage that is detected easily by appearance or smell	• Quarantine all damaged items • Take a random sample of the damaged items and submit it to a laboratory for fitness analysis • Recondition and put away goods that are determined to be fit for human consumption or use • Dispose of goods that are determined to be unfit for human consumption or use
Packages not labeled with the dates of manufacture, expiration dates, batch/lot numbers, or labeled with illegible information	• Use a permanent marker to write the expiration date and batch/lot numbers on the unmarked outer and inner packages • Record the batch/lot number, manufacturer's name, and storage requirements on the Bin Cards
Light or empty containers	• Notify the Supply Chain Manager about missing goods (possible theft, removal without proper/complete documentation, removal for reconditioning or testing, etc.)

Sampling of Suspect Consumable Goods for Laboratory Testing

Random sampling and laboratory testing is the best way to verify the quality of suspect consumable goods such as food or medicines. Sampling is a rigorous process that is subject to international, national, and donor regulations and must be managed carefully by trained and qualified staff (especially for medical supplies).

Sampling of Suspect Consumable Goods for Testing Checklist

CHECKLIST *Sampling of Suspect Consumable Goods for Testing*



When laboratory testing is needed to determine the quality and fitness of suspect consumable goods, the **Warehouse Manager or an independent Sampling Agent**, following all national and donor regulations:

- ☐ Takes a statistically significant random sample of the quarantined goods and sends it to the designated ISO-certified lab for testing (may be in another country)

The **Warehouse Manager:**

- ☐ Documents the dispatch of the sample on the appropriate documents (Delivery Note, or DN, Packing List).

Goods can be reconditioned or disposed only after the analysis and report of the suspect goods has been received from the laboratory and the required approvals have been obtained.

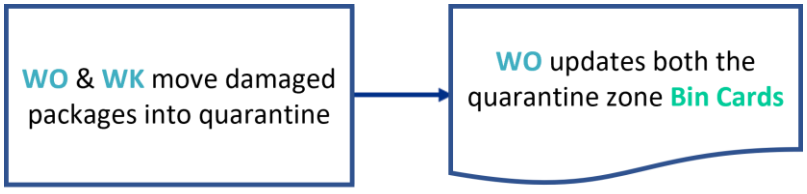
Quarantining, Loss Handling, and Reconditioning

The need for quarantining, loss handling, and reconditioning of goods can happen at multiple points along the supply chain (e.g., at the port, at receipt, during storage, at the service delivery point, etc.). This chapter focuses on these processes in the context of a storage location.

For more guidance on these processes at other points in the supply chain, contact the Supply Chain Manager or the Regional Technical Advisor for support.

QUARANTINING GOODS

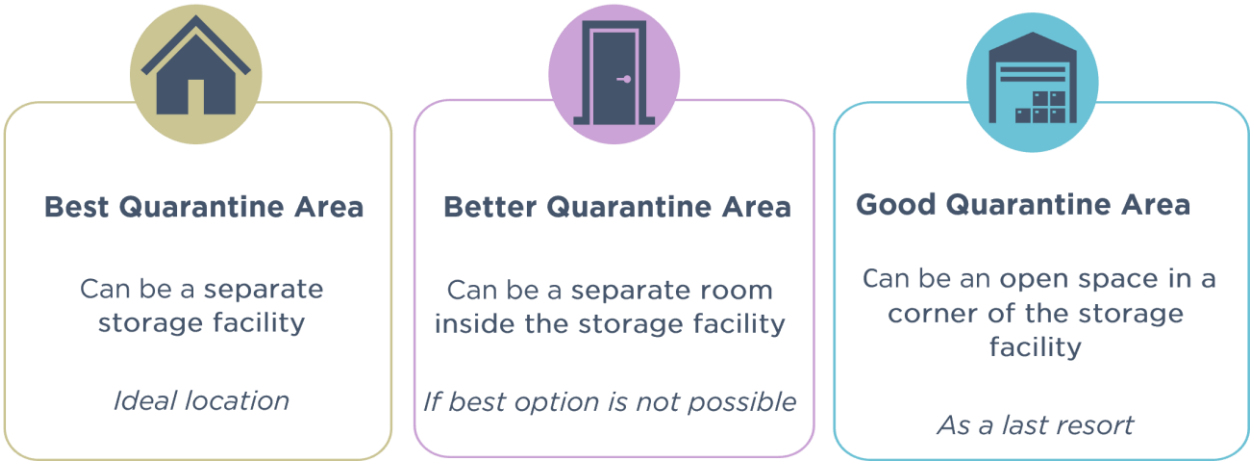
Quarantining is a quality control process for identifying and segregating goods or packages that require reconditioning or loss handling, as shown in the figure below.



For detailed context of the quarantining process with the related processes of reconditioning and loss handling, see the Loss Handling and Reconditioning Goods sections in this chapter.

The process starts by removing damaged goods or packages from the supply chain and visually examining the contents of a package. Any goods or packages that cannot be recovered should stay in quarantine until further instructions or approval for disposal. Once items are moved to the quarantine area, the inventory records should be updated and bin cards should be created for tracking the quarantined items.

The quarantine area in a warehouse should be separate from the storage area(s) and should be secured to restrict access when possible. The figure below shows potential options for selecting the quarantine area in a warehouse, depending on the design and number of storage facilities that are in the compound.



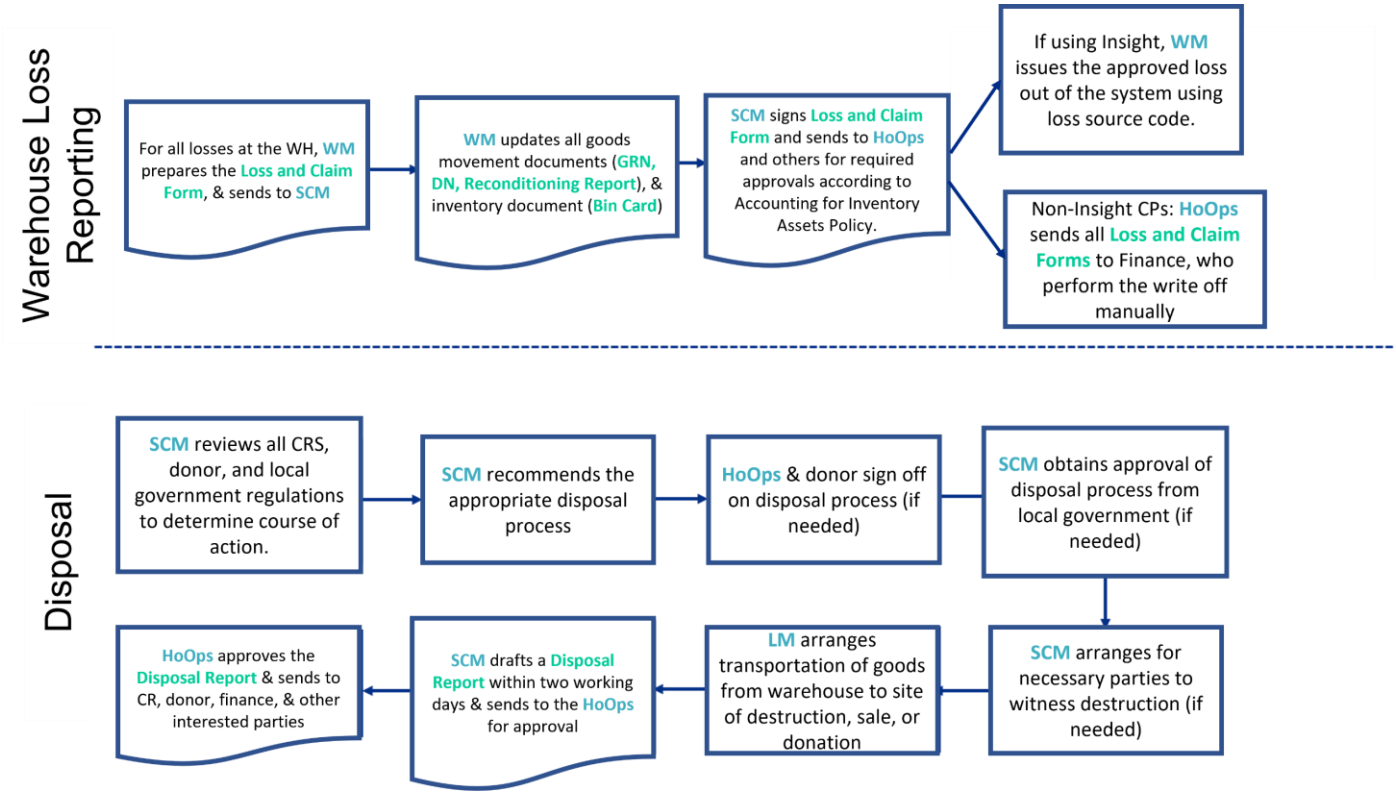
Quarantined CVA assets should be physically placed in a quarantine bin to keep them out of circulation. In Insight, electronic CVA assets that are damaged or returned from the field should be placed in a quarantine locator until the CVA assets are destroyed or wiped clean before being returned to inventory.

PUTTING AWAY GOODS INTO STORAGE

For in-depth guidance on putting away goods, see the Putting Away Goods section of the Receiving chapter.

LOSS HANDLING

Any goods that cannot be distributed or used are considered a loss. The figure below shows the process for handling the loss of goods.



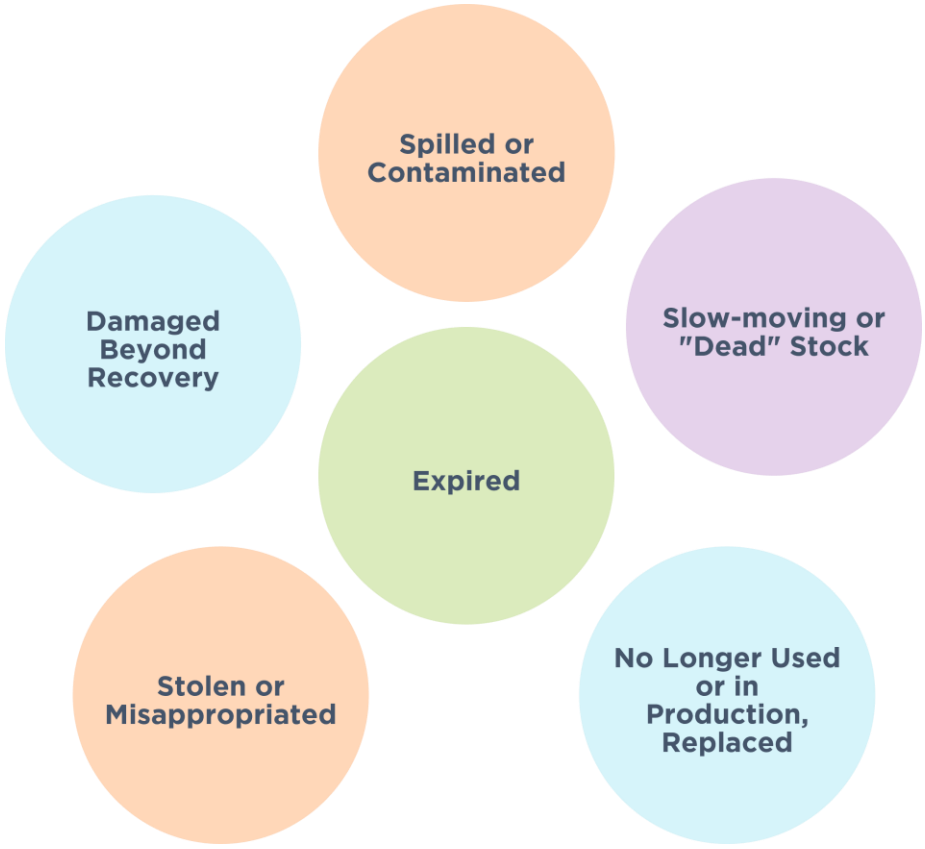
Where Loss Occurs

Loss can occur anywhere along the supply chain and can be reduced by the design and implementation of loss mitigation strategies. The figure below lists the most common places where significant damage and loss occur throughout the supply chain.



Why Loss Occurs

Loss of goods can occur during storage at a CRS storage facility for many reasons, including those listed below.



Sometimes loss can be caused by the conditions in the storage facility itself (e.g., degradation of goods due to heat, moisture, infestation, etc.) or the failure of staff to follow warehouse or inventory management processes carefully and regularly (e.g., cleaning and inspection). For more information on warehouse processes and controls that mitigate the risk of damage and loss to inventory while in storage, see Quality Management (especially the sections on Environmental Control and Pest Control) and Security and Safety (especially the sections on Building Access Controls and Fire Risk Mitigation).

It is important for staff to follow all processes described in this handbook, which are designed to mitigate the risk of loss and waste.

Documenting and Reporting Loss

When a loss of goods occurs, it must be investigated and reported per CRS policies and procedures, donor regulations, and local laws.

Details of the loss should be documented in the Loss Report and Claim Form, and supporting documentation should be included for claims against the responsible parties and for the finance team to document and justify the loss.

When loss is identified, especially if due to misappropriation, CRS should report the loss immediately to the donor (unless instructed not to do so by the donor) and the appropriate local government authorities. Never attempt to conceal the source of loss. Donors expect and appreciate transparency, which usually generates good will with them.

The loss report should detail the whole situation: how the loss was discovered, the method used to investigate the loss, the timeline for reporting the outcome, and how CRS will mitigate the risks in the future.

Whoever was responsible or accountable for managing the goods or service delivery point where the loss occurred is responsible for documenting and reporting the loss, as shown in the figure below.

If **CRS** was responsible (or accountable) for managing the goods or Service Delivery Point	If a **Partner** was responsible (or accountable) for managing the goods or Service Delivery Point
The person responsible for overseeing and managing goods at that location should complete the Loss Report and Claim Form and submit the form with supporting documentation to the Supply Chain Manager	The partner should complete all loss and disposal reports and submit the reports to CRS on the scheduled basis that is specified in the agreement

For more information on documenting and reporting loss, see the CRS Policy on Accounting for Inventory Assets (FIN-POL-INV-025-01E).

Handling the Loss of Goods Checklist

CHECKLIST *Handling the Loss of Goods*



If losses are found, the **Warehouse Manager**:

- ☐ Investigates the reasons for the loss.
- ☐ Reports the loss on the Loss Report and Claim Form.
- ☐ Gives the Loss Report and Claim Form with all supporting documentation to the Supply Chain Manager for review and approval.
- ☐ Updates bin cards and inventory system records.

When a Loss Report and Claim Form is submitted for initial review and approval, the **Supply Chain Manager:**

- ☐ Reviews all relevant CRS policies and procedures, donor regulations, award documents, and other sources to determine any specific requirements for reporting losses.
- ☐ Ensures that all relevant information and supporting documentation is included.
  - ☐ If additional information is needed: Works with the Warehouse Manager to complete the information.
- ☐ If approved: Gives the Loss Report and Claim Form to the Head of Operations for final approval.

When an approved Loss Report and Claim Form is submitted for final review and approval, the **Head of Operations:**

- ☐ Reviews the Loss Report and Claim Form.
- ☐ If approved: Gives the Loss Report and Claim Form and all other supporting documents (including official claims that CRS has made against responsible parties) to the finance team and the donor.
  - ☐ If applicable: Includes a police report and a memo as supporting documentation about the success or failure to recover the value of goods.

On a regular basis, the **Supply Chain Manager:**

- ☐ Reviews KPIs related to loss to determine if there are trends or likely causes for repeated patterns of loss.
- ☐ Informs the Head of Operations immediately if there is any indication of a pattern of abuse, neglect, or malicious activity.

Please see below for context-specific callout boxes that also apply.

Reporting Losses of Food Commodities

The time frame for reporting USDA and USAID losses depends on the value of the loss, as summarized below.

For USDA food commodities:

- Losses valued above 20,000 USD must be reported immediately.
- Losses valued 1,000 to 20,000 USD must be reported within 15 days.

For USAID food commodities:

- All damaged, loss, or misused food commodities must be reported quarterly.
- Specific information about losses valued above 500 USD must be reported using the Damaged and Missing Commodity Report and the Commodity Status Report (see Quarterly Web Interfaced Commodity Reporting System - User's Guide).
- "Large losses" must be reported to donors as soon as the potential or actual losses are declared.

The USAID does not define "large losses," but the USDA defines them as valued at or above 20,000 USD. CRS applies this rule to USAID food commodities.



Reporting Losses of CVA Assets

A Loss Report and Claim Form must be filled out if CVA assets were damaged or lost by a person or agency (CRS or a partner) while the goods were in their possession.



Collecting on Claims Involving USG Commodities

Donors generally require three attempts at minimum to collect on claims.

For guidance on claims involving USAID commodities, see 22 CFR 211.9 (f).

For guidance on claims involving USDA commodities, see 7 CFR 1599.10.



Disposing of Inventory Losses

Goods that can no longer be used as intended are considered losses. These goods must be disposed of safely and in compliance with all CRS policies and procedures, donor regulations, and local laws.

The disposal of goods that are considered losses must occur as soon as possible after approval. Storing unusable inventory takes up space, risks being used accidentally or misappropriated, can negatively impact the quality of other goods, and requires oversight by managers.

Every disposal should be documented with a certificate of disposal (i.e., Certificate of Sale, Certificate of Donation, or Certificate of Destruction) that is signed and dated by the Supply Chain Manager and a witness to the disposal if possible. The disposal process should also be photographed and photos should be attached to the Disposal Report.

Disposing of Inventory Losses Checklist

CHECKLIST *Disposing of Inventory Losses*



Before disposal of inventory losses, the **Supply Chain Manager:**

- ☐ Appraises the value of the losses with the Head of Operations.
- ☐ Checks with local government authorities about requirements for disposal of inventory losses.
- ☐ Recommends a disposal process based on the nature of the damage and the national health and safety regulations.
- ☐ Informs and seeks out approval for the chosen disposal method with the Head of Operations and with the donor (if required).
- ☐ Notifies the donor in advance of the planned disposal (if required).
- ☐ **Depending on national regulations and the reason for disposal:** Works with the Logistics Manager, procurement team, and programming team to arrange witnesses for the disposal (can be a contracted surveyor, freight forwarder, donor representative, or government official).
- ☐ Notifies donors, local government authorities and CRS senior staff of details of the disposal (e.g., the location of the disposal site or the date and time of sale, donation, or destruction).

Before disposal of inventory losses, the **Logistics Manager:**

- ☐ Arranges transportation of the damaged goods with the logistics team from the storage facility to the site of disposal.

During disposal of inventory losses, the **Supply Chain Manager:**

- ☐ Observes and documents the disposal along with any witnesses who are present.

After disposal of inventory losses, the **Supply Chain Manager:**

- ☐ Completes a Disposal Report.
- ☐ Submits the Disposal Report with a signed certificate of disposal and photos to the Head of Operations for review and approval.

After disposal of inventory losses, the **Head of Operations:**

- ☐ Reviews and approves the Disposal Report, certificate of disposal, and supporting documents.
- ☐ Submits the Disposal Report to the Country Representative, finance team, and other relevant stakeholders (e.g., Regional Office, donor, and Global Program Support Officers).

CVA Assets

Disposal of Unfit CVA Assets

CVA assets that are damaged, expired, or obsolete (e.g., surplus CVA assets printed with project-specific information) should be destroyed by one of the following methods.

- Marking with the word "VOID" in permanent ink.
- Cutting or shredding into pieces.

Unless specifically required by the donor, CVA assets can be destroyed without informing or getting approval from the donor.

When CVA assets must be destroyed, the **CVA Asset Custodian**:

- ☐ Performs the actual destruction, witnessed by three staff members that do not have custodial functions
- ☐ Documents destruction of the items in the Certificate of Destruction and attaches it to the Disposal Report (to be filed upon request for auditing purposes)
- ☐ Removes the destroyed items from inventory

The procurement costs of items (**not** the value of the cash or vouchers transferred to program participants) should be used when recording the value of CVA assets on destruction and disposal forms.

For information about handling generic and multi-use electronic CVA assets that have been recovered from program participants and can be reused, see the Returning CVA Assets section.

Health Commodities

Disposal of Unfit Health Goods

Any health item that is expired, obsolete, damaged, or otherwise unfit **must be destroyed** in accordance with WHO protocols, donor regulations, industry best practices, CRS policies and procedures, and national laws and health regulations (contact the relevant ministry of health for instructions).

The disposal of health products, pharmaceuticals, and medicines is a complicated, specialized process that requires technical expertise. CRS supply chain staff should not dispose of health goods unless they have been trained and certified to do so.

For more in-depth guidance of the safe disposal of health items, see the Health Annex, the WHO Guidelines for Safe Disposal of Unwanted Pharmaceuticals, and the WHO Safe Management of Wastes from Health-care Activities.

Food Commodities

Disposal of Unfit Food Goods

For USAID food assistance projects, CRS should follow 22 CFR 211.8(b)2.

For USDA projects, CRS should follow 7 CFR 1499 and 7 CFR 1599.

For food supplied by other donors, staff should review that donor's regulations and the award document for reporting requirements. Whenever possible, communicate directly with donor representatives located in the country or region. They should be invited to observe the disposal or to assign a third party to observe and report on their behalf.

Food should be disposed of by one of the methods listed below in order of preference, from most preferred to least preferred.

1. **Sale (at the highest possible price)**
   For use as animal feed, fertilizer, or other industrial purpose
2. **Donation to a Donor-Funded Program**
   For use as livestock feed
3. **Donation to a Local Cooperative, Charity, or Government Institution**
   For use as animal feed or other non-food use
4. **Destruction (if unfit for sale or donation)**
   Incinerated or buried and covered with lime to prevent salvage by people or animals or use for any other purpose

When the food is sold, all donor and CRS branding should be removed.

Other Commodities

For other types of losses of D-goods or ND-goods (e.g., excess or obsolete stock), the disposal should be completed following CRS policies and procedures and with all requirements and regulations of donors and local and national governments.

Adjusting Inventory Valuation

When a claim for D-goods loss cannot be established against a third party, the value of the goods in inventory must be adjusted to reflect the loss (see the CRS Policy on Accounting for Inventory Assets for more information, including requirements and thresholds for approving loss). For these inventory adjustments, the finance team reviews all the supporting documentation, and the Supply Chain Manager works with finance staff to address questions and missing documents or information.

Inventory adjustment does not apply to ND-goods because they are expensed upon receipt and do not appear in inventory valuation accounts as assets.

Adjusting Inventory Valuation in Insight

When goods are issued out using a loss source code (see Recording Loss in Insight), the inventory valuation is automatically adjusted in the system. Goods must be issued out using the POET they were received with. If the loss must be charged to a different POET, reach out to the Supply Chain RTA for support.

Notifying Donors of Disposal of Inventory Losses

Depending on the value of the loss, the donor's permission may be required before the disposal of goods. If donor requirements are more stringent than CRS policy and the thresholds listed below, the donor requirements take precedence.

- For losses valued at less than 500 USD, CRS must inform the donor but may dispose of such goods without prior donor approval.
- For losses valued greater than or equal to 500 USD, CRS must submit a written request for permission from the donor (or an official from the donor's diplomatic post) to dispose of the goods.

If the donor (or the diplomatic post) does not respond within 15 days to a CRS request for permission to dispose of donated goods, CRS may dispose of the goods in the manner described in its request(s) and should inform the donor (or the diplomatic post) of the actions taken to dispose of the goods.

Recording Loss in Insight

The information for all Insight transactions described below is contained in the Item Loss Report. For more information about the transactions or the selection of the most appropriate Source Code and Reason Code, see the Insight Inventory Reference Guide, the Account Alias Source Code Guidance, and the Account Alias Issue Job Aid.

Selecting Reason Codes in Insight

Every Account Alias Issue of a loss of goods must also include a Reason Code (e.g., contaminated, short-landed, unfit, water damage, stolen/missing, defective, torn, spoilage, reconditioned, etc.). This code helps supply chain staff identify and monitor the most common reasons for loss of goods.

Recording Storage Facility Losses in Insight

After the disposal of inventory losses, the **Warehouse Manager**:

- ☐ Performs an Account Alias Issue of the storage facility loss from the quarantine or loss locator, choosing the most appropriate Source Code **and** Reason Code for the loss.
- ☐ Attaches the Loss Report and Claim Form, certificate of disposal, and all other supporting documentation.

Recording Partner or SDP Losses in Insight

After receiving approved loss documentation and evidence of the disposal of inventory losses, the **LMIS Officer**:

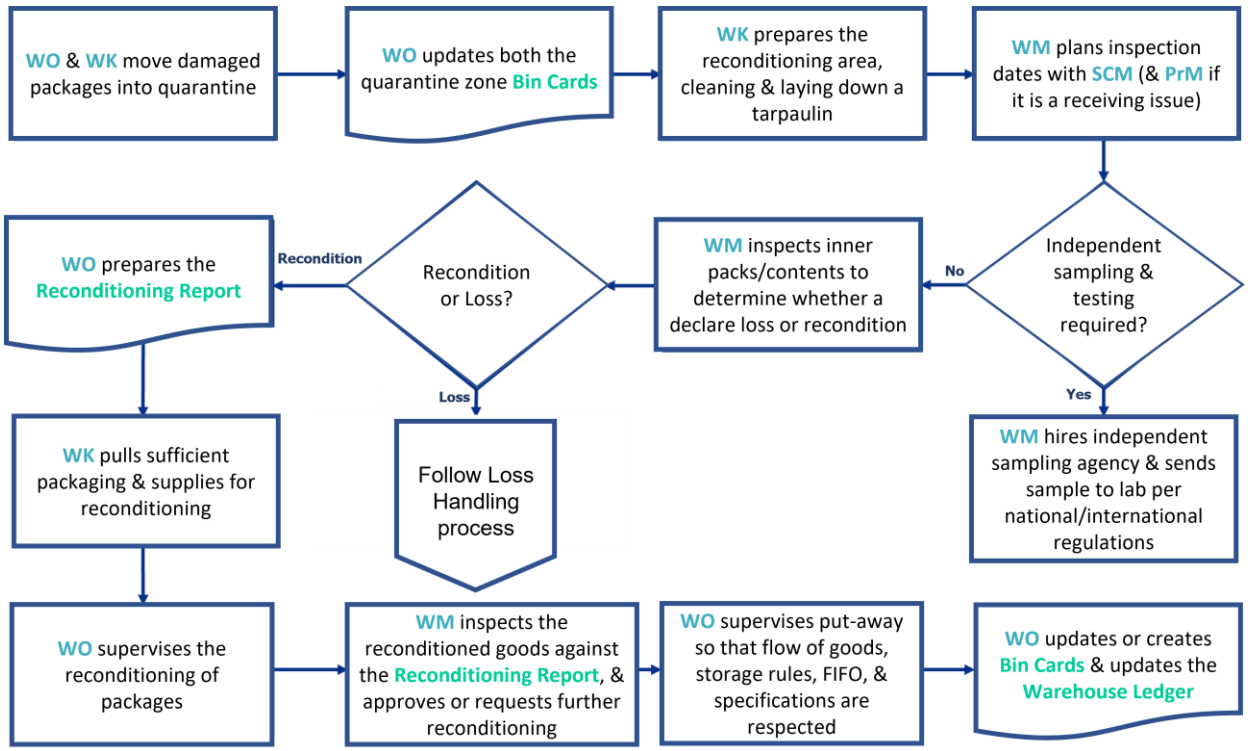
- ☐ Performs an Account Alias Issue of the loss from the locator where the loss occurred, choosing the most appropriate Source Code **and** Reason Code for the loss.
- ☐ Attaches the approved loss reports and all other supporting documentation.

For more information, see the Supply Chain Records Management Policy.

RECONDITIONING GOODS

Reconditioning (also called "re-bagging" or "reconstitution") is the process of taking damaged items and making them whole again for storage, distribution, or use by one or more of the actions listed below.

- Repairing viable items.
- Combining parts of other less-than-whole units to create a new viable whole unit.
- Repackaging a partial unit.



Before some types of goods can be reconditioned (e.g., damaged or spoiled food, damaged medicines, or pharmaceuticals), a qualified laboratory may need to test a sampling of the damaged or spoiled goods to determine the fitness of those goods.

Reconditioning of Damaged or Spoiled Goods Checklist

CHECKLIST

Reconditioning Damaged or Spoiled Goods



When damaged or spoiled goods are discovered, the **Warehouse Officer and/or Warehouse Keeper:**

- ☐ Places goods into quarantine.
- ☐ Alerts the Warehouse Manager that the goods have been moved to quarantine.
- ☐ **If goods are moved from their storage location:** Notes the movement of goods on the appropriate bin card.

Once damaged or spoiled goods have been moved into quarantine, the **Warehouse Manager:**

- ☐ Gives instructions to the Warehouse Officer about inspecting the goods before reconditioning them.
- ☐ Oversees the opening of all outer packaging (if needed) to determine if the inner packaging and contents are in good condition, then decides whether to recondition the goods or declare a loss (see Loss Handling).
- ☐ **If goods can be reconditioned:** Gives instructions to the Warehouse Officer about reconditioning the goods.
- ☐ **For goods that have high programmatic value:** Contacts programming staff or a senior supply chain staff member to witness the reconditioning process.

Before quarantined goods are inspected or reconditioned, the **Warehouse Officer:**

- ☐ Works with the Warehouse Keeper to prepare an area designated for inspection and reconditioning.
- ☐ Cleans the designated area for inspection and reconditioning.
- ☐ Lays out a clean tarp or plastic sheet on the ground to collect spillage and prevent contamination from dirt, oil, etc. when opening and inspecting packages.
- ☐ Gets packaging and supplies ready for inspection and reconditioning.
- ☐ **For goods that have risk of contamination:** Gets protective clothing (e.g., gloves, hair nets, masks) ready for reconditioning.

CONTINUED *Reconditioning Damaged or Spoiled Goods*



After receiving reconditioning instructions from the Warehouse Manager, the **Warehouse Officer:**

- ☐ Repacks the undamaged goods into new packaging with the Warehouse Keeper and/or day laborers.
- ☐ Consolidates undamaged inner contents into complete packages (if possible).
- ☐ Marks each package as "reconditioned" with the date of reconditioning, the expiration date of the contents, and the total volume and weight of the contents.
- ☐ Completes a Reconditioning Report (see Reconditioning Report Template) with reconditioned item details (item code, lot or serial number, expiration or best-used-by date (BUBD), receipt reference number), weight and volume of recovered goods, and weight and volume of losses.

After damaged or spoiled goods have been reconditioned, the **Warehouse Manager:**

- ☐ Inspects the reconditioned goods.
- ☐ Requests additional inspection or repackaging before the goods can be put away.
- ☐ Sends the Reconditioning Report to the Supply Chain Manager for approval.
- ☐ Tells relevant stakeholders (e.g., requestor) that reconditioning is finished and gives them the Reconditioning Report.

After the reconditioned goods are approved, the **Warehouse Officer:**

- ☐ Supervises the put away of reconditioned goods into the appropriate storage locations.
  - ☐ Reconditioned goods may be stored in a designated location marked as "reconditioned" items.
  - ☐ Only goods of one item type/SKU should be stored in each "reconditioned" location.
- ☐ Updates all associated Bin Cards and inventory system records.

Goods should be reconditioned as close to the original packaging and quantity or weight as possible, with packages having the right marking and branding elements as required by the donor agreement.

Any repackaged inner or outer packages that are incomplete should be left open or labeled as partial packages and placed in an accessible location in storage.

Reconditioned goods should be prioritized for distribution above FIFO protocols.

Please see below for context-specific callout boxes that also apply.

Using a Quarantine Locator in Insight for the Reconditioning Process

After damaged or spoiled goods have been found, the **Warehouse Officer, Warehouse Manager, or Administrative Assistant**:

- ☐ Places damaged goods in a quarantine locator using a subinventory transfer.

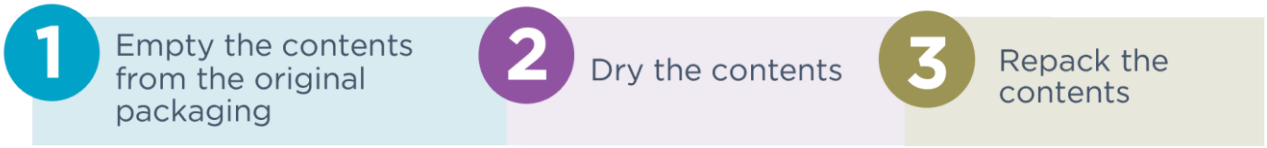
After reconditioning activities are complete and the Reconditioning Report has been approved, the **Warehouse Officer, Warehouse Manager, or Administrative Assistant**:

- ☐ Moves reconditioned items from the quarantine locator to the original storage locator or a new one using a subinventory transfer.
- ☐ Attaches the approved Reconditioning Report.

Goods that have been deemed losses should remain in the quarantine locator until loss instructions are provided. If necessary for tracking purposes, a new loss locator can be created, and the loss can be moved there until it is approved and able to be issued from the system. For more information on these steps, see the Insight Inventory Reference Guide and the Subinventory Transfer Job Aid.

Wet Bags or Packages

If packages are wet, staff should follow the steps in the figure below.



Evaluating Food Commodities for Reconditioning

For food commodities with any of the characteristics listed below, the contents should be sampled, and the sample should be sent to a qualified lab for testing to determine if the commodities are fit for human consumption and can be recovered or if they should be designated as loss.

- Color changes.
- Clumping.
- Foul odors.
- Evidence of pest urine or feces.
- Any other observable issues.

Liquids

When reconditioning liquids, staff should follow the best practices listed below.

- Liquids should be transferred using clean funnels and containers (e.g., jerry cans).
- Liquids should be poured over a clean bucket or basin so any spillage can be recovered.
- Reconditioned liquid goods should have the same weight and volume as the original containers.
- Containers that are partially full should be labeled.

Health and Medical Products

Reconditioning Health or Medical Commodities

Suspect or unfit health products must be placed in a secure, limited-access quarantine locator. Damaged liquid health products should be designated a loss because these products can rarely be reconditioned.

Damaged containers with contents that look fit or viable should never be put away or issued unless the contents have been tested by a qualified laboratory and the quality of the contents has been assured. These containers should be marked accordingly and held in quarantine until test results of the contents are received.

Health products with physical or chemical damage to the inner packaging or distribution units must be sampled and tested independently by a qualified laboratory before the goods can be reconditioned.

Products with only superficial damage to outer packaging may be distributed without reconditioning, if approved by the Supply Chain Manager. The Warehouse Manager can send any health products for independent testing before reconditioning them.

Health products should be reconditioned only with appropriate and sterile containers. All health supply packaging (new or reconditioned) must be labeled clearly with the following information about the product.

- Generic name.
- Components.
- Lot/batch number.
- Expiration date.
- Retest date (if applicable).
- Required storage conditions and reference to the pharmacopoeia (if applicable).
- Usage guidelines (when possible).

Any container that has been reconditioned should be sampled and tested for quality assurance.

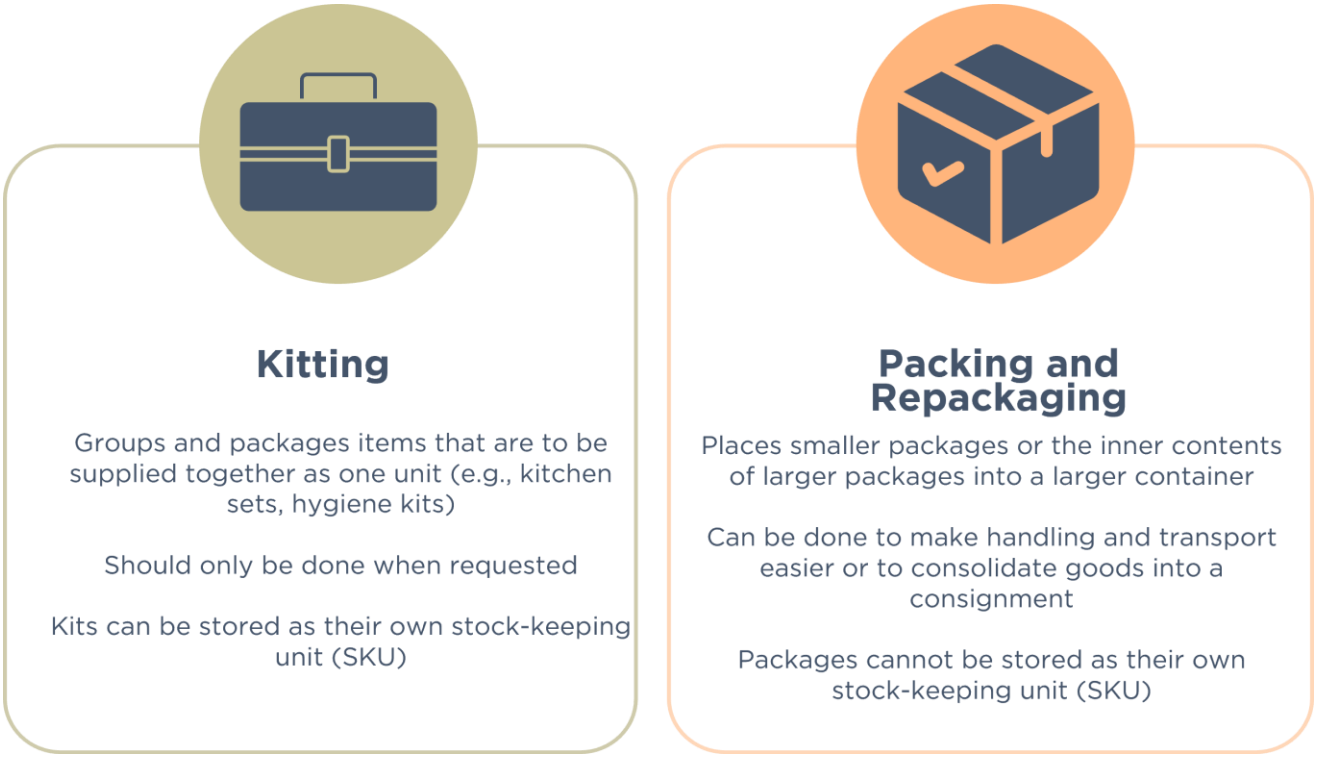
PICKING AND PACKING GOODS FOR DISPATCH

For in-depth guidance on the picking, packing, and dispatch processes, see the Dispatch chapter.

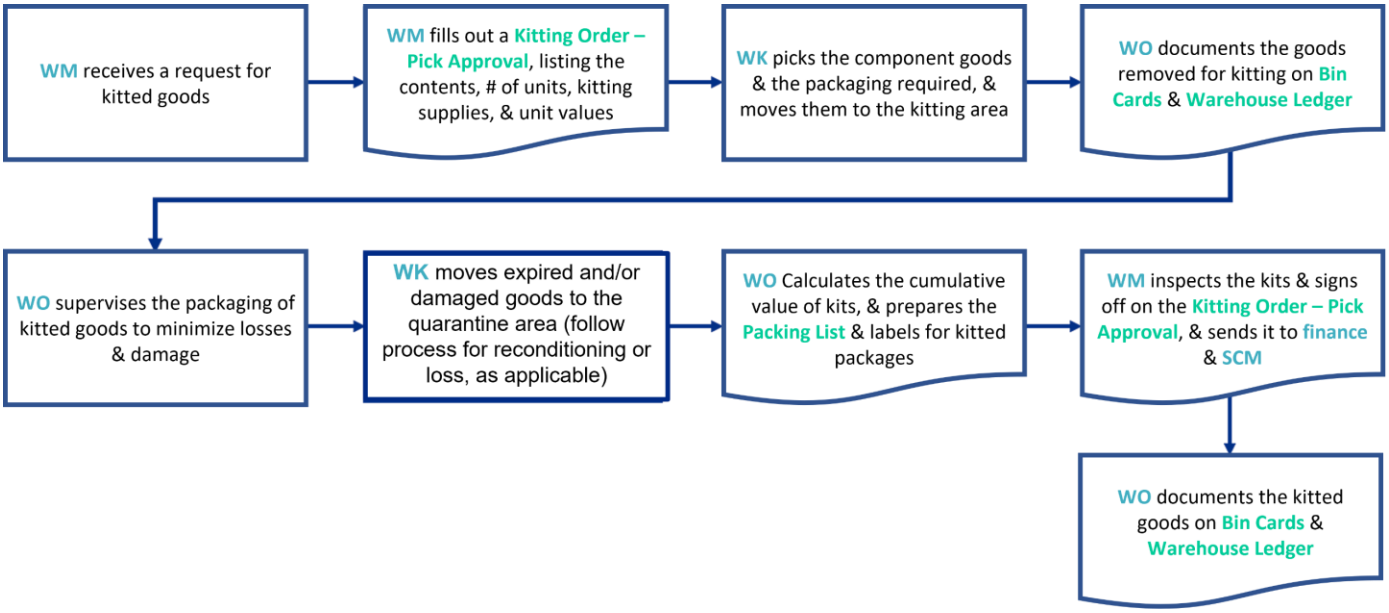
As goods get closer to the service delivery point, they may be broken down into smaller units in preparation for distribution. Breaking down large or bulk items into smaller units makes the process of distribution easier.

KITTING

Kitting is the process of putting together kits of goods to be supplied as one unit to end users (e.g., kitchen sets and hygiene kits). Kitting goods is a different activity than packing and repackaging goods, as summarized in the figure below.



The figure below shows the kitting process.



Kitting Process Checklist

CHECKLIST *Kitting Process*

After receiving an approved kitting request (or if kit replenishment is needed), the **Warehouse Manager:**

- ☐ Completes a Kitting Production Plan based on the approved request (which lists the kit components, the quantity and value of each kit component, and the kitting supplies needed).
- ☐ Determines the cost of the kit, based on the combined value of all kit components.
- ☐ Determines the expiration date of the kit, based on the kit component that has the earliest expiration date.
- ☐ Determines the lot number and item number of the kit.

Kits should be assigned a unique item number, description, and item number/SKU. Kits are supported with an individual Bin Card and managed individually as a single good in inventory records.

Within 60 days of the expiration date of the kit, the kit must be quarantined and reconditioned to replace the expired or expiring kit component(s).

CONTINUED *Kitting Process*



After receiving the Kitting Production Plan, the **Warehouse Officer**, working with the **Warehouse Keeper**:

- ☐ Prepares the kitting area and readies the kitting supplies.
- ☐ Picks the items that are kit components and places them in the prepared kitting area.
- ☐ Documents the removal of items from bins on each relevant bin card by listing the reference number on the Kitting Production Plan.
- ☐ Packs the kit components.
- ☐ Labels the kits with lot numbers and expiration dates as needed.
- ☐ If any kit component is found to be unusable because of damage or is within 60 days of the kit's expiration date: Moves the goods into quarantine, alerts the Warehouse Manager, and picks replacement items for the kit.
- ☐ Completes Packing Lists.

Once kitting has been completed, the **Warehouse Manager**:

- ☐ Inspects the kits.
- ☐ Signs off on the Kitting Production Plan and the Packing Lists.
- ☐ Informs the Supply Chain Manager that kits are completed and ready to be dispatched.

Once kitting has been completed, the **Supply Chain Manager**:

- ☐ Validates the kit's unit cost and approves the Kitting Production Plan.
- ☐ Communicates with the Requestor that the kitting process has been completed.
- ☐ Provides copies of the Kitting Production Plan with the kit's valuation to the finance team (if needed).

After the Supply Chain Manager validates the kit's unit cost, the **Warehouse Manager**:

- ☐ Updates the inventory system records.

Once Kitting has been completed, the **Warehouse Officer**, with support from the Warehouse Keeper:

- ☐ Puts the kits away into inventory.
- ☐ Prepares or updates bin cards.

Please see below for context-specific callout boxes that also apply.

Recording Kitting in Insight

The Kitting Production Plan and any other supporting documentation should be attached to each of the transactions listed below.

After the Kitting Production Plan is completed, the **Warehouse Manager**:

- ☐ Transfers all kit components listed in the Kitting Production Plan to the Kit Temp subinventory.

(After the Warehouse Manager completes the step above, the physical kitting process begins.)

Once the physical kitting process is completed, the **Warehouse Manager**:

- ☐ Performs an Account Alias Receipt of the parent kit into the locator where the kits will be stored, adding the appropriate item number, lot number (if using), expiration date, and unit cost to the transaction.
- ☐ Performs an Account Alias Issue of the kit components from the Kit Temp subinventory.

For more information about these transactions, see the Insight Inventory Reference Guide, Account Alias Source Code Guidance, the Subinventory Transfer Job Aid, the Account Alias Receipt Job Aid, and the Account Alias Issue Job Aid.

REVERSE LOGISTICS (RETURNING GOODS TO CRS STORAGE FACILITY)

For CRS, reverse logistics is an "upstream" process for partners or service delivery points to return goods to a CRS storage facility. Goods that are returned may be restocked, disposed of (if inventory loss due to damage, spoilage, expiration, etc.), reused, or repackaged.

This section focuses on the end of the return process, when returned goods are received back at a storage facility.

For information about the beginning of the return process from a service delivery point, see Returning Undistributed Goods to Storage Location (Reverse Logistics) in the Distribution chapter.

Any goods that are left over from a distribution event ("undistributed goods") should be returned to a partner or CRS facility to reduce the risk of theft, damage, or loss due to mishandling, and inaccurate accounting and reporting to donors.

Reverse logistics can be costly so supply chain, programming, and procurement staff should share information through a project lifecycle to ensure accurate forecasting and planning.

For in-depth guidance on forecasting and planning for CRS projects, see the Planning chapter.

Reverse logistics can be used to reduce waste in the supply chain by reusing packaging and refilling containers for reuse at future distributions. Additionally, reverse logistics can be used to dispose of used packaging in a more sustainable way.

The figure below highlights the most common reasons that goods are returned to a CRS warehouse by partners or service delivery points.



Returning CVA Assets

Returning CVA Assets

CVA assets are small and easily transported, so the cost of returning these goods to storage is minimal. The following CVA assets must be returned to a CRS storage location after a distribution activity or project ends.

- Surplus ("undistributed") cards.
- Damaged or malfunctioning cards.
- Cards collected from program participants before they left the service delivery point ("recovered"), including:
  - multi-use electronic vouchers or cards (the value and personal information can be cleared before re-entering into inventory).
  - generic e-cards (i.e., no project or personal information is printed on the cards).

For undistributed and recovered CVA assets, programming staff should deactivate or erase information on e-cards at the end of the assistance (e.g., distribution event, fair, or project) **before** returning them to the CVA Asset Custodian. If this is not possible, the CVA Asset Custodian should place these cards in a quarantine bin until they can be deactivated and cleared by the approved programming staff. For more information on erasing e-cards, see the CAT User Portal.

For in-depth information on reverse logistics for CVA assets and how to record these transactions in Insight, see the Distribution chapter.

Goods that are returned by reverse logistics are processed the same way as any other goods that flow into a CRS warehouse. For information about these processes, see the Receiving chapter and in this chapter see the sections on Inspecting and Receiving Goods, Quarantining Goods, Putting Away Goods Into Storage, Loss Handling, and Reconditioning Goods.

Returned goods should be processed as quickly as possible with full documentation.

Returned goods that are fit and usable should be prioritized for use of dispatch just like reconditioned, fragile, or at-risk inventory.

9.8 PROCESSES – INVENTORY MANAGEMENT

REPLENISHMENT

The storage facility network should maintain sufficient inventory levels to support the needs of CRS programming and staff. Staff overseeing inventory should monitor trends in consumption and flow rate and should communicate regularly with other staff and partners to determine when goods need to be reordered or transferred to other storage facilities to avoid inventory stockouts or surplus. Replenishment needs can also shift based on risk and security needs, the shelf life of products, the status of infrastructure, and environmental constraints (e.g., rainy season).

For in-depth guidance on planning for appropriate stock levels and replenishment needs, see the Planning chapter.

ABC ANALYSIS AND CLASSIFICATION

This system of grouping goods by their value is used to determine the level of effort that is necessary to oversee and manage different groups of goods. It is particularly useful when multiple types of goods are stored in the same storage facility. At CRS, ABC classification is used to determine how frequently cycle counts of goods should occur.

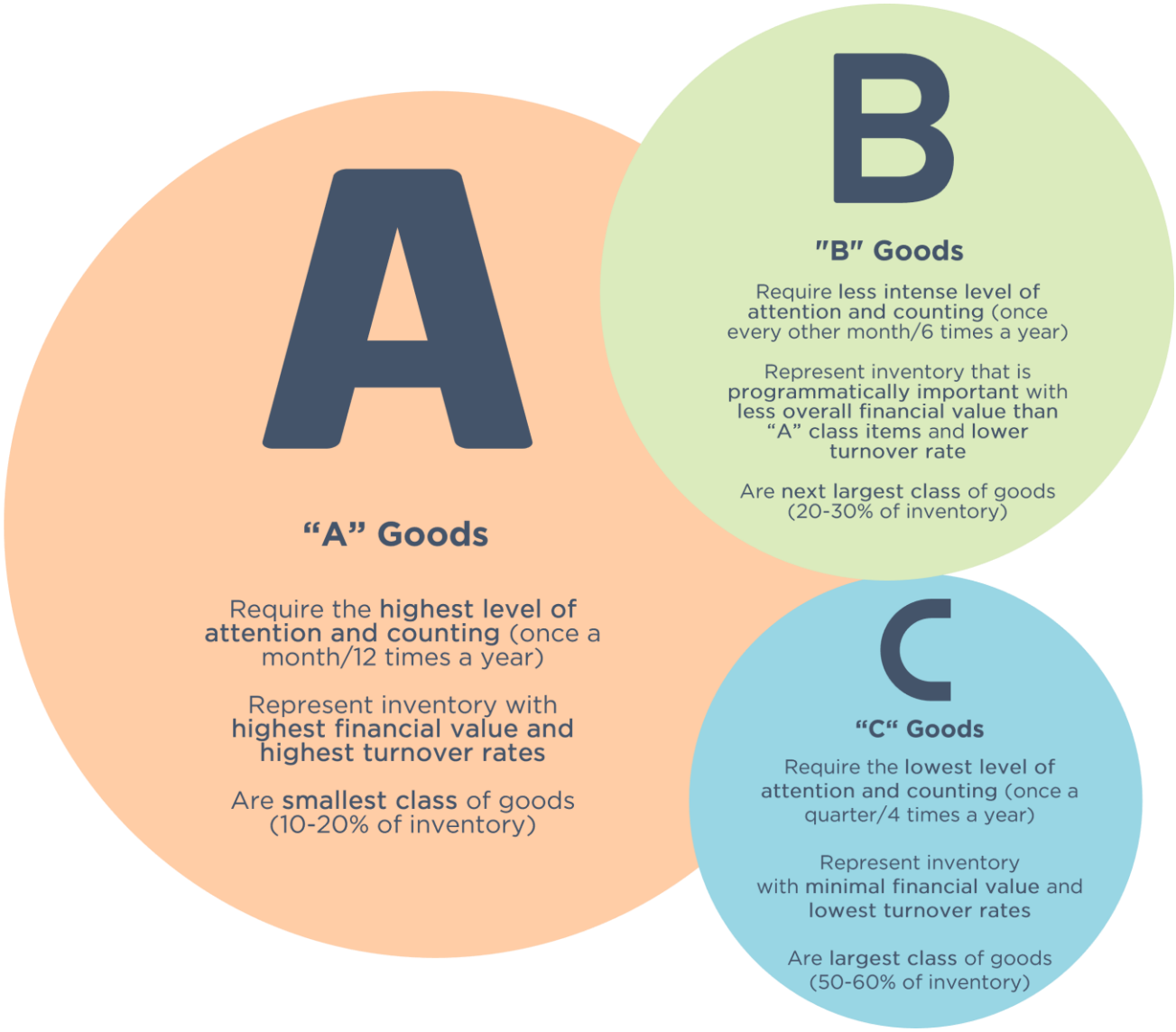
ABC analysis and classification are based on the Pareto principle ("80/20 rule"), which says that 80 percent of outputs in a system are produced from 20 percent of inputs in that system.

When the Pareto principle is applied to inventory management, it means that 20 percent of the goods in inventory represent:

- 80 percent of the total inventory value; and/or
- 80 percent of the level of effort by staff for oversight and management of these goods in inventory.

For more information on requirements and processes for ABC analysis and classification, see the ABC Analysis and Classification Policy, the ABC Analysis and Classification Procedure, and the ABC Analysis and Classification Tool.

The figure below shows how items are grouped by ABC analysis and classification.



The Supply Chain Manager analyzes goods that are currently in storage and determines the ABC classes with oversight from the Head of Operations. The Supply Chain Manager must review the analysis quarterly to account for inventory turnover.

If the Supply Chain Manager or Head of Operations wants more oversight of an item than recommended by the results of ABC analysis, the Supply Chain Manager can assign the item a higher class (e.g., a "B" item can be classified as an "A" item) but **must not** assign the item a lower class (e.g., an "A" item cannot be classified as a "B" or "C" item).

ABC Classification of CVA Assets

CVA assets are often classified automatically as "C" items because their purchase value is low. However, because their actual value (i.e., the value printed or loaded on the card or voucher) is typically much higher than their purchase value, CVA assets must be classified manually as "A" items.



Adjusting ABC Classification of Goods in Insight

In Insight, ABC analysis and classification is an automated process. Classes are updated regularly as the levels of inventory change. The Supply Chain Manager is responsible for reviewing the automated classes and adjusting if necessary.

Insight uses the ABC classes to generate the weekly cycle count schedule, which lists the items that should be counted.

For more information, see the Insight Inventory Reference Guide and the Cycle Count Set Up Job Aid.



INVENTORY COUNTING

The three main types of inventory counts that are required at all CRS-managed storage facilities are cycle counts, full physical inventory counts (PICs), and random-unannounced counts. This section focuses on cycle counts and PICs. For more information on these requirements, see the CRS Inventory Count Policy.

CRS is not responsible for counting inventory at partner- or vendor-managed warehouses unless there is a mutual agreement in place that specifies CRS' responsibility for conducting or observing inventory counting written in the (sub)award agreement.

CRS may require inventory balance reports from partners that are managing goods and distributions for CRS programming.

Both D-goods and ND-goods must be included in all inventory counts. This means that administrative staff must follow CRS policies and procedures to count goods that are stored in the office storage rooms for cycle counts, PICs, and random-unannounced counts.



Cycle Counts

Cycle counts are done regularly throughout the year to confirm the quantity of each item in inventory. The cycle count schedule listed below is based on ABC classification (see the ABC Analysis and Classification section).

- "A" goods are counted at least 12 times a year (once a month).
- "B" goods are counted at least six times a year (once every other month).
- "C" goods are counted at least four times a year (once a quarter).

Random-unannounced cycle counts are also done at each storage facility at least once a quarter. For these cycle counts, the Supply Chain Manager randomly selects 10 percent of the bins to be counted. After performing the cycle count on these bins, the Supply Chain Manager compares the count results with the Bin Card and the inventory records.

Random/unannounced counts are not recorded in Insight. If variances are found, the **Supply Chain Manager** should work with the **Warehouse Manager** to investigate the variance and approve any related Account Alias transactions.

For more information about cycle counts, see the CRS Inventory Count Policy.

Items are counted by the primary UOM. The figure below lists examples of the UOMs that are used for different types of goods.

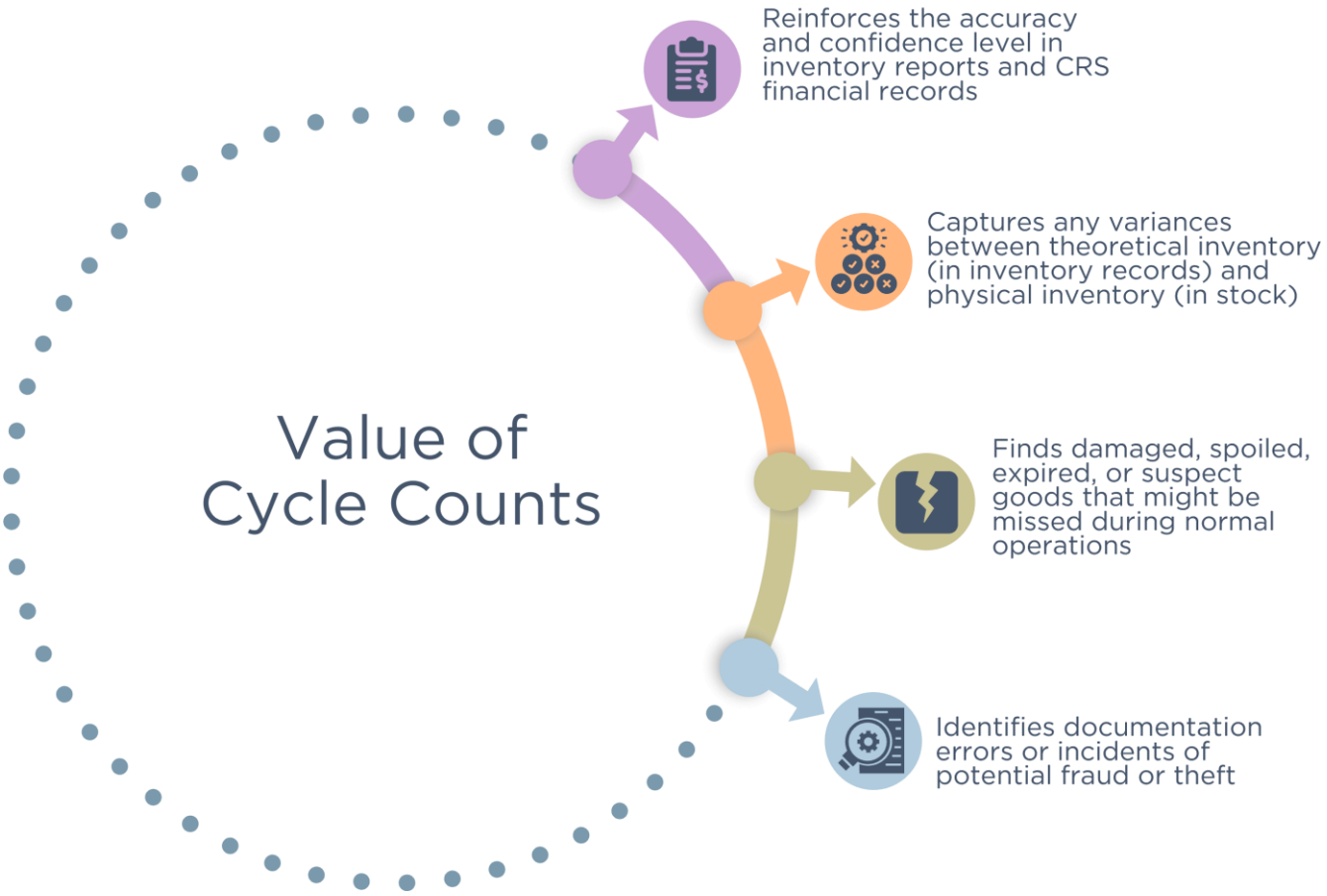
Type of Good	UOM (Insight abbreviation)
Grains and legumes	Kilogram (KG)
Bed nets Loose items in a bin Partial/open packages of goods in a bin	Each (EA)
Ballpoint pens	Package (PAC)

UOMs in Insight

The Cycle Count Listing Report lists the UOM for each item to be counted.

To verify the primary UOM without using the Cycle Count Listing Report, refer to the Item tab of the Insight Reference Data file, which is updated weekly.

Cycle counts serve a valuable function in SCM for the reasons listed in the figure below.



Best Practices

Some best practices for conducting a cycle count are described below.

For Bins

- Work from one end of the bin (palletized stack, shelf, or rack) to the other end of the bin before starting on a new bin.

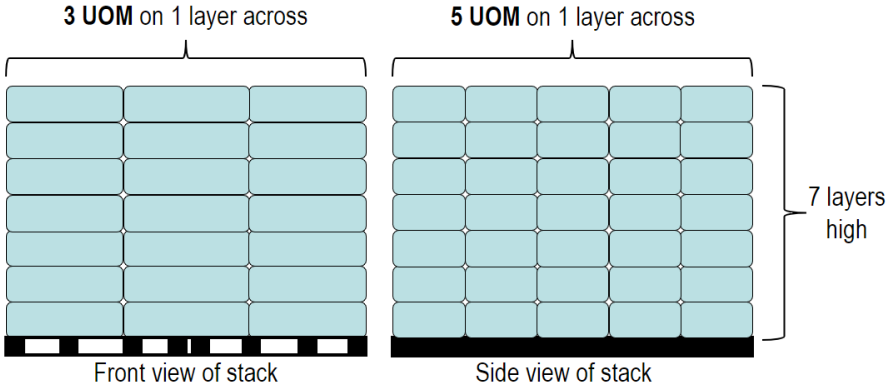
For Shelves or Racks

- Work consistently from top to bottom.
- Do not skip any shelves or levels.
- Avoid or minimize handling of packages on shelves (when possible).

For Palletized Bulk Goods

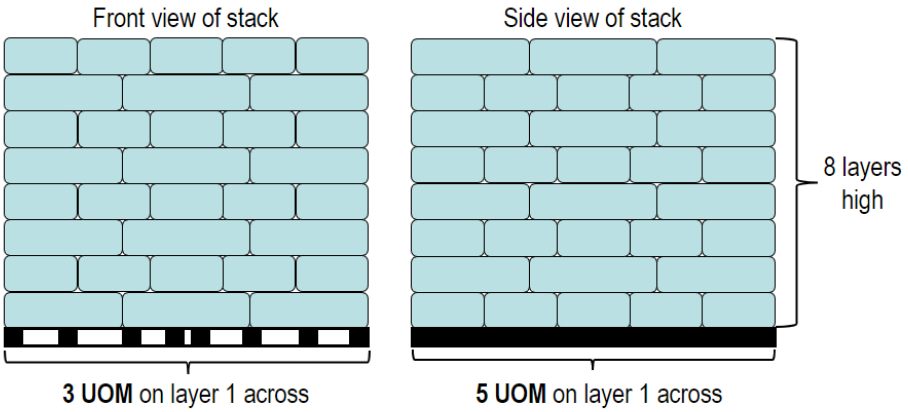
- Choose the most appropriate stacking method (simple, cross, or block) for all "like" products in inventory.
- Count the stacks.
- Calculate the number of goods using the formula that applies to the stacking method that was chosen (see examples of stacking methods and formulas in the illustrations below).

Simple Stack Counting = [(UOM layer 1 front * UOM layer 1 side) * # layers high]



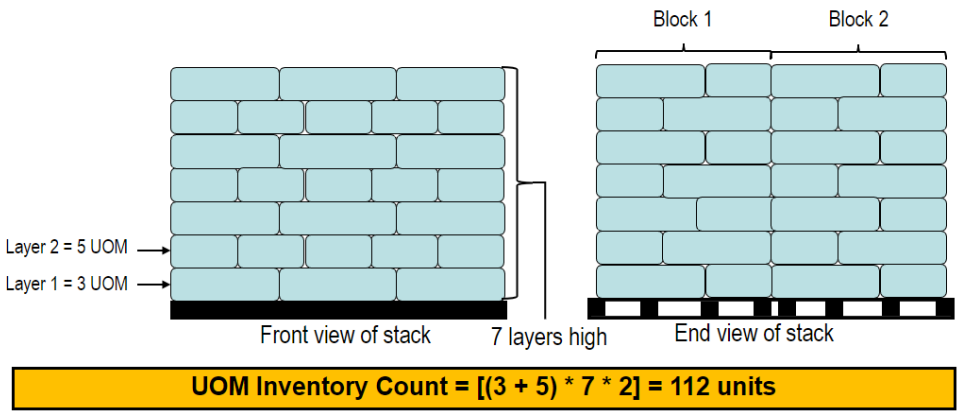
UOM Inventory Count = [(3 * 5) * 7] = 105 units

Cross Stack Counting = [(UOM layer 1 front * UOM layer 1 side) * # layers high]



UOM Inventory Count = [(3 * 5) * 8] = 120 units

Block Stack Counting = [(UOM layer 1 front + UOM layer 2 front) * # rows high * # of blocks]



UOM Inventory Count = [(3 + 5) * 7 * 2] = 112 units

For Items Suspected to Be Inventory Losses

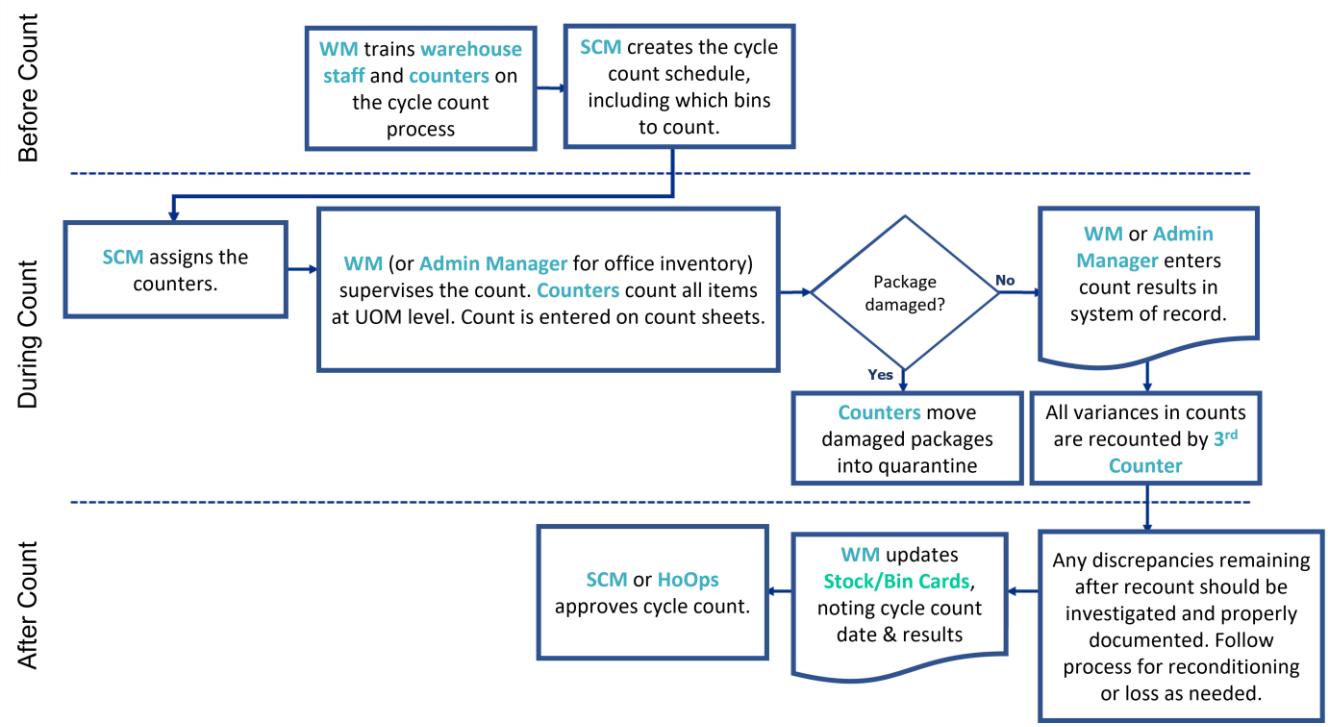
- Pull any suspect packages (e.g., damaged, spoiled, expired, obsolete, etc.) that are discovered during a cycle count from the bin.
- Include the number of suspect goods in the total number of goods that are recorded on the Cycle Count Listing Report.

After the cycle count, suspect goods should be inspected and moved to quarantine (if damaged, spoiled, expired, obsolete, etc.) or returned to stock (if fit for distribution or use).

For more information on the next steps, see the Quarantining Goods section in this chapter.

Process Flow Chart

The figure below shows the flow of process steps for cycle counts.



Preparation for Cycle Counts Checklist

CHECKLIST *Preparing for Cycle Counts*



When new warehouse or administrative staff are hired, the **Supply Chain Manager** works with the **Warehouse Manager or Administrative Manager** to:

- ☐ Train staff how to conduct cycle counts.

At least once a month, if not more frequently, the **Supply Chain Manager**:

- ☐ Prepares and gives the cycle count schedule and Cycle Count Listing Report to warehouse or administrative staff so they know which items are scheduled to be counted.

Please see below for context-specific callout boxes that also apply.

Preparing for Cycle Counts in Insight

The **Supply Chain Master Data Team** is responsible for setting up the cycle count in Insight during the creation of a new IO. If the cycle count has not been set up in Insight, submit a ticket to the CRS Service Desk.

Once the cycle count is set up and quarterly after that for each IO, the **Supply Chain Manager**:

- ☐ Reviews the ABC classification of goods and makes updates to classifications as needed (i.e., assigning a good to a higher class so that it is counted more frequently).
- ☐ Generates the cycle count schedules and sequences.

Based on the required cycle count schedule frequency, the **Supply Chain Manager**:

- ☐ Runs the Cycle Count Listing Report(s) and gives it to the Warehouse Manager and Administrative Manager for each IO.

For more information about these transactions, see the Insight Inventory Reference Guide and the Cycle Count Set Up Job Aid.

Implementation Cycle Counts Checklist

CHECKLIST *Implementing Cycle Counts*



Before a cycle count, the **Warehouse Manager:**

- ☐ Removes the bin card from each bin so the cycle count is "blind."
- ☐ Provides the Cycle Count Listing Report to warehouse and/or administrative staff.

A "blind" count means that the staff assigned as counters do not know the on-hand quantity. The quantity should not be listed on the Cycle Count Listing Report. The Cycle Count Listing Report should have information about the item, lot/serial number, and bin to help facilitate the count.

During a cycle count, the **Warehouse Officer or another assigned counter:**

- ☐ Locates the bins listed on the Cycle Count Listing Report.
- ☐ Counts all the items within that bin by UOM (e.g., kg, each, package).
  - ☐ If there are packages with inner packages, the number of units can be multiplied as needed.
- ☐ Counts all loose items and partial packages/open packages in the bin.
- ☐ Records results on the Cycle Count Listing Report.

After a cycle count, the **assigned counter/s:**

- ☐ Submits Cycle Count Listing Report with the recorded results to the Warehouse Manager or Administrative Manager.

Following Up After Cycle Counts Checklist

CHECKLIST *Following Up After Cycle Counts*



After a cycle count, the **Warehouse or Administrative Manager:**

- ☐ Reviews the count data on the Cycle Count Listing Report and compares it with the stock on-hand data listed in the inventory records and on Bin Cards.
- ☐ Performs a quick visual inspection of the damaged packages pulled from the bins and supervises their movement into quarantine or back into stock.
- ☐ Shares the count results with the Supply Chain Manager.

After receiving cycle count results from the Warehouse or Administrative Manager, the **Supply Chain Manager:**

- ☐ Reviews the cycle count (can request a recount if variances are found).

If a recount is requested, the Warehouse Manager assigns a **counter** to:

- ☐ Recount the bin.
- ☐ Record the recount results on the Cycle Count Listing Report and give the report to the Supply Chain Manager.

If there continues to be a variance after the recount, the **Warehouse Manager:**

- ☐ Investigates possible causes for the variance by inspecting all transaction documentation.
- ☐ Communicates the findings from the investigation to the Supply Chain Manager.

After receiving findings from the investigation of count/recount variance, the **Supply Chain Manager:**

- ☐ Reviews the findings from the investigation and follows up as needed.
- ☐ Approves the variance and provides instruction to the Warehouse Manager or Administrative Manager.

After a variance is approved, the **Warehouse Manager or Administrative Manager:**

- ☐ Updates the quantity on the associated Bin Card and system of record.
  - ☐ *If the variance is a negative variance*: Documents the loss on the Loss Report and Claim Form and forwards this document to the Supply Chain Manager for approval.
- ☐ Shares counting reports with programming and finance teams, as necessary.
- ☐ Discusses the findings from the investigation of the count/recount variance with the facility staff and takes corrective actions, if necessary.

Please see below for context-specific callout boxes that also apply.

Recording and Approving Cycle Count Results in Insight

After the cycle count, the **Warehouse Manager**:

- ☐ Enters the cycle count results (including any recounts).
- ☐ Attaches the Cycle Count Listing Report with the recorded results (Insight automatically approves the count lines where the physical and virtual counts match).

If there are variances, the **Supply Chain Manager** or the **Head of Operations**:

- ☐ Reviews the variances (only count lines with discrepancies between physical and virtually counts will be available for review).
- ☐ Requests a recount if needed.

If there continues to be a variance after the recount and after receiving instruction from the **Supply Chain Manager** or **Head of Operations**, the **Warehouse Manager**:

- ☐ Performs an Account Alias transaction so the on-hand stock in Insight matches the recount results.
- ☐ Attaches approval for the adjustment by the Supply Chain Manager or Head of Operations and any other supporting documentation.

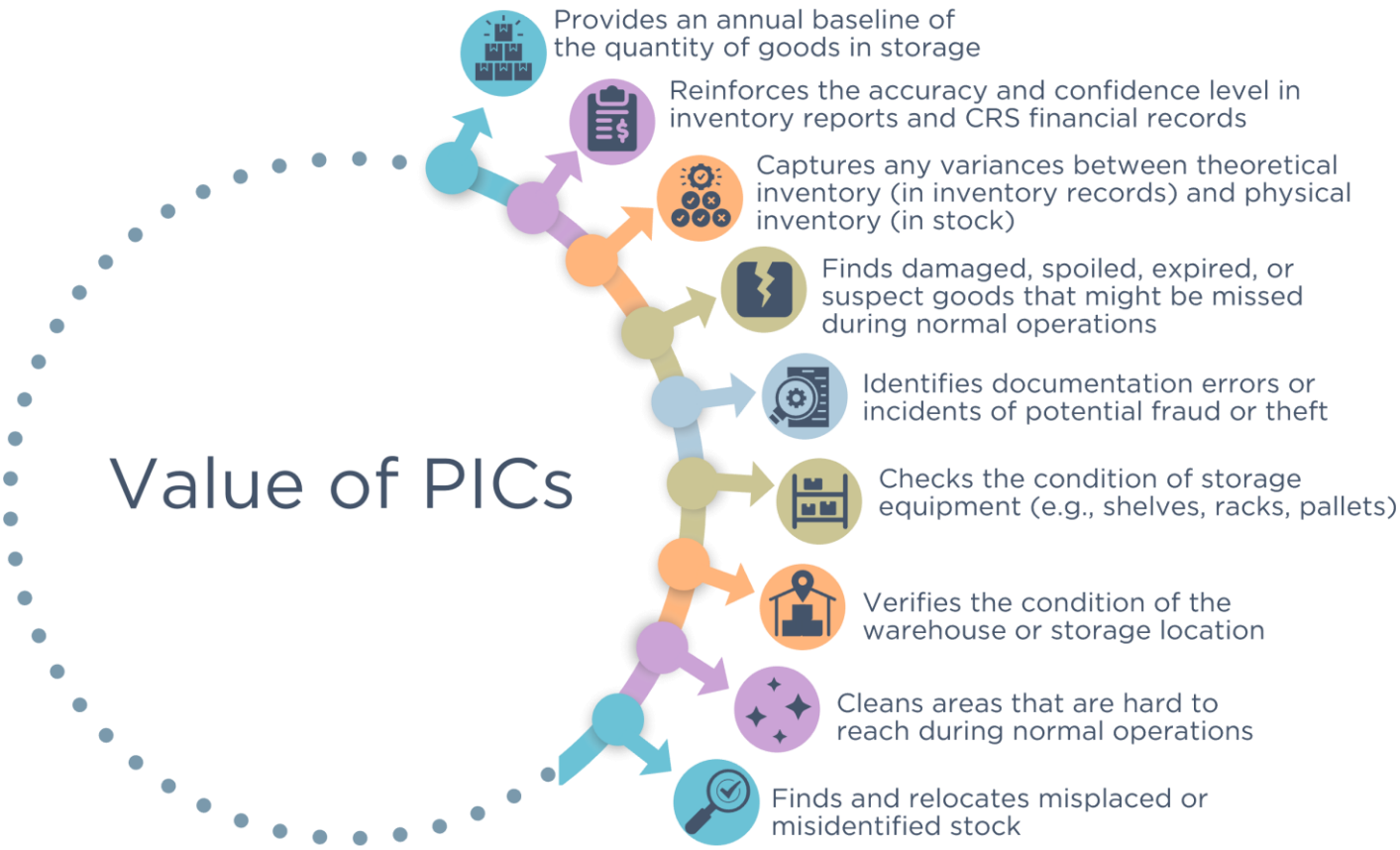
For more information about these transactions, see the Insight Inventory Reference Guide and the Cycle Count Recording and Cycle Count Approval job aids. For support on the variance adjustment, see the Account Alias Issue and Account Alias Receipt job aids.

Full Physical Inventory Counts (PICs)

PICs are conducted to confirm the quantity and quality of each type of item in inventory. At CRS, these counts are conducted at storage facilities managed by CRS as close to the end of the fiscal year as possible and during the close-out of a project (see the Close-Out chapter).

Because planning and coordinating with other departments to conduct this type of count can be labor intensive, doing more than one PIC per year is not recommended. Nevertheless, additional PICs may be required in a single calendar year by donor regulations, award requirements, high operational risk, or other reasons as determined by the senior management of country programs. A full PIC is only required at CRS-managed storage facilities.

PICs serve a valuable function in SCM for the reasons listed in the figure below.



Best Practices

Any time goods are handled, there is an increased risk of loss. It is important to remember the principle of "do no harm" during PICs.

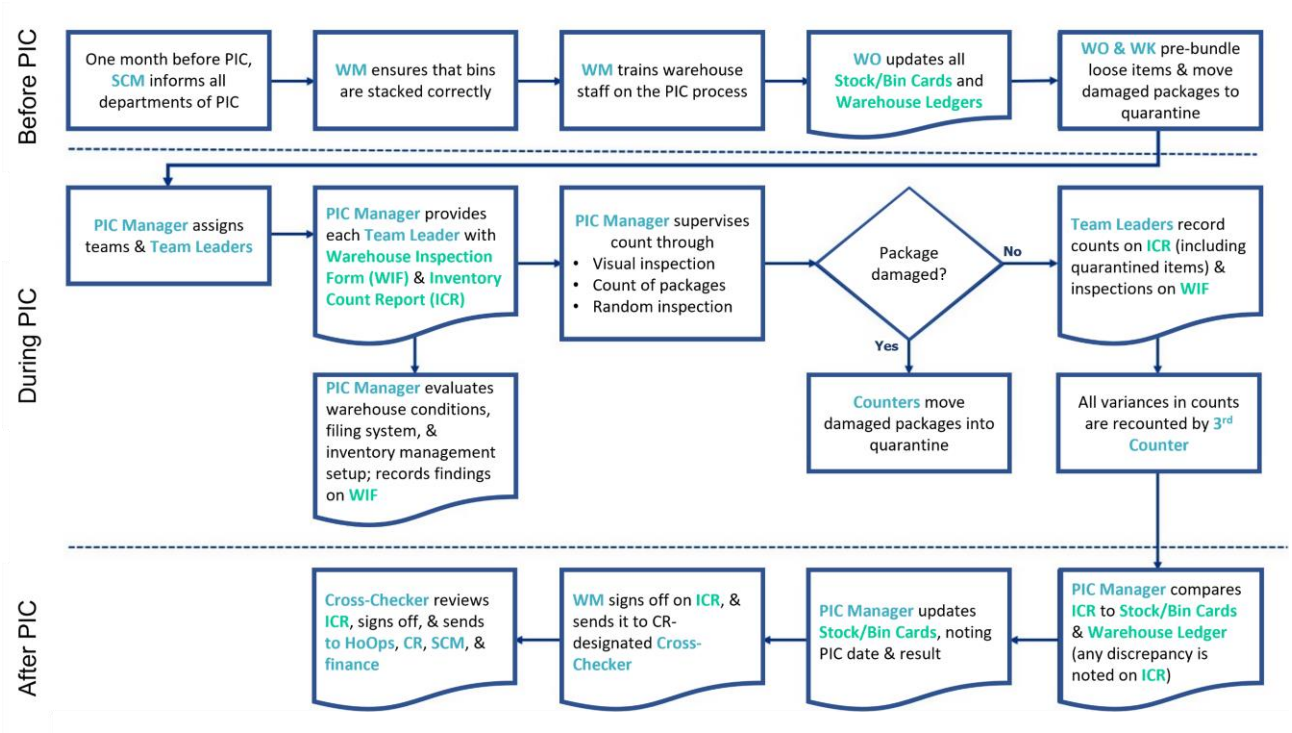
Warehouse operations must be frozen at each storage facility undergoing a PIC, but PICs do not need to happen at all storage facilities at the same time.

When the fiscal year-end valuation of D-goods (actual or projected) in a country program is over 750,000 USD, a qualified external audit firm must observe and certify the count with an official report (for specific requirements and other details, see the CRS Policy on Accounting for Inventory Assets).

Every internal IO of a country program should be included in the PIC, including IOs that are CRS offices. The following subinventories should be included in PICs: D-Stores, ND-Stores, Kit-Temp, and (internal) SDP.

Process Flow Chart

The figure below shows the flow of process steps for PICs.



Preparation

PICs must be conducted by individuals who do not have direct oversight or responsibility for inventory management (e.g., staff who are not on the logistics team).

All individuals who are handling goods during a PIC (e.g., the count team, day laborers) should be trained on how to minimize the risk of loss.

Preparing for PICs Checklist

CHECKLIST

Preparing for PICs



At the beginning of the last quarter of the fiscal year, the **Supply Chain Manager:**

- ☐ Schedules the PIC for each storage facility.
- ☐ Informs **all** departments of the schedule of PICs and deadline(s) for submission of procurement and stock movement requests to prevent inventory movement (e.g., receipts, issues, transfers, or returns during the scheduled PIC).

At least one month before the date of the PIC, the **Head of Operations:**

- ☐ Assigns staff to the count teams.
- ☐ Assigns one leader of each count team.
- ☐ **If the fiscal year-end valuation (actual or projected) of D-goods in the country program is over 750,000 USD:** Works with procurement to hire an external audit firm to observe and certify the count.

As the date of the PIC approaches, the **Supply Chain Manager:**

- ☐ Trains the count team so they know how to conduct the count, how to safely handle goods, and what equipment should be used (including personal protective equipment).
- ☐ Hires day laborers as needed.

Within the week before the date of the PIC, the **Warehouse Officer or Administrative Staff**, with support from the Warehouse Manager or Administrative Manager:

- ☐ Ensures that goods are in the correct bin and properly arranged.
- ☐ Checks that bin cards and inventory records are up to date.
- ☐ Repackages loose items as necessary following the process for reconditioning (for more information, see the Reconditioning Goods section in this chapter).
- ☐ Transfers any known obsolete or expired goods to quarantine (for information on disposal, see the Loss Handling section in this chapter).
- ☐ Ensures that equipment and supplies are available for the count (e.g., ladders, tarps, scales, pallets, personal protective equipment, markers, and any other useful materials).

Please see below for context-specific callout boxes that also apply.

Preparing for PICs in Insight

The following process should be repeated **for each IO.**

At least two weeks before the PIC begins, the **Supply Chain Manager**:

- ☐ Reviews Insight to ensure all inventory transactions are up to date (e.g., all POs received, dispatches moved to new location, distributions issued out from SDP, GIKs received, etc.).

On the day of the PIC, before the PIC begins, the **Supply Chain Manager**:

- ☐ Creates the PIC in Insight (this creates a snapshot of working stock, so warehouse operations should be frozen at this point to reduce variances in the count).
- ☐ Generates and prints copies of the Inventory Tag Listing Report for recording the count (the report lists all items in the IO with their lot/serial numbers and locators but without their quantities).

For more information, see the PIC Checklist, the Insight Inventory Reference Guide, and the Create a PIC Job Aid.

Implementation

During PICs, there should be **no** movements of goods in or out of the storage facility (e.g., receipts, issues, transfers, or returns) until the **Country Representative** has approved the PIC.

Freezing Warehouse Operations Insight

During PIC, no inventory transactions should be entered into Insight. This includes receipts, subinventory transfers, interorganization transfers, and issues. **Error correction transactions must also be frozen during PIC.**

Every bin should be counted twice during the PIC: once by one count team and once by another count team.

All goods should be moved in a way that each package can be visually inspected for quality and that all storage equipment like pallets, racks, and shelves can also be inspected. In some cases (e.g., if the storage facility does not have a lot of space for maneuvering goods), it might be necessary to rent a temporary mobile storage unit (MSU) to properly conduct the PIC.

During the PIC, a representative sample of the goods in each batch/lot should be selected randomly for close inspection by the methodology listed below.

Number of Packages in Batch/Lot	Number of Packages for Close Inspection
1 - 10	Every package (100%)
11 -25	2 - 5 (20%)
26 - 50	4 - 8 (15%)
51 - 100	5 - 10 (10%)
>100	The square root of total packages, rounded up to the nearest whole number (e.g., for 200 packages: ffl200 = 14.14, so 15 packages should be closely inspected)

Packages should be weighed to determine if there are significant variances. Sealed packages should **not** be opened.

For more information about the selection and inspection of sample goods, see the Receiving chapter.

Implementing PICs Checklist

CHECKLIST *Implementing PICs*



On the day of the PIC, before the count begins, the **PIC Leader**:

- ☐ Assigns counters to teams (depending on the size of the storage facility, there can be two to four teams with two people assigned to each team).
- ☐ Assigns bins to each team (all bins will be assigned twice, to two different teams for counting).
- ☐ Gives count sheets to each team.
- ☐ Makes sure that each count team has the supplies and equipment that are needed to conduct the count.
- ☐ Explains the counting and documentation process to count teams (if members of the team did not receive advanced training).

During PICs, warehouse or administrative staff can be on site and available to answer questions.

During the PIC, the PIC Teams, with supervision by the **PIC Leader**:

- ☐ Work consistently from top to bottom of shelves or racks, not skipping any shelves or racks
- ☐ **For sealed packages**: Count the number of sealed packages (do **not** open packages), calculate the inner contents according to the units of measure listed on the count sheet, and record calculated quantities on the count sheet.
- ☐ Select **sealed packages** randomly from each bin for close inspection (weigh package, verify that package weight is consistent with specifications of goods) and note quality assessment on the count sheet.
- ☐ **For open packages**: Count the number of units in open packages according to the units of measure listed in the count sheets and record the quantities on the count sheet.

Open packages that have been counted should be marked with an "X" in permanent ink. Any open packages should be placed in the front of the bin.

- ☐ Assess the quality of all items in each bin through a visual inspection.
- ☐ Check in and around storage equipment (pallets and shelving) for pest infestations or unusual odors, residue, or coloration or other potential issues.
- ☐ Pull any spoiled, expired, or damaged packages from the bin and place them next to the bin where they can be seen easily (if an entire bin has quality problems, flag it for a close inspection of all units).

CONTINUED *Implementing PICs*



- ☐ Record issues or anomalies on an inspection sheet or on the count sheets.

> Any packages that were pulled from the bin for further investigation should still be added to the quantity count on the count sheets. These items will undergo investigation before determining next steps for the suspect goods.

- ☐ Place a Count Card (e.g., index card, post-it) on each bin after counting it (to identify it as counted).

After completing the count, **the count team:**

- ☐ Gives the count sheets and any inspection sheets to the PIC Leader.

After the PIC is finished, the **PIC Leader:**

- ☐ Collects and reviews all the count sheets and inspection sheets from each of the count teams.
- ☐ Identifies major issues that were discovered and records those issues in a Warehouse Inspection Report.
- ☐ Gives all count sheets and inspection sheets to the Country Representative.

If a re-count is needed, the **PIC Leader:**

- ☐ Assigns a count team to count the applicable bin(s).
- ☐ Gives the re-count results to the Country Representative.

Please see below for context-specific callout boxes that also apply.

Recording PICs in Insight

After the count is completed for each IO, the **PIC team**:

- ☐ Gives copies of the Physical Inventory Tag Listing form to the **Supply Chain Manager.**

Upon receiving the Physical Inventory Tag Listing form, the **Supply Chain Manager**:

- ☐ Records the PIC results for each tag listed.
- ☐ Attaches copies of the Physical Inventory Tag Listing form, external audit firm's report (if required), inspection reports, and any other supporting documentation.

For more information, see the Insight Inventory Reference Guide and the Record Physical Inventory Tags Job Aid.

Completing the PIC Checklist

CHECKLIST

Completing the PIC



After receiving a storage facility's count sheets from the PIC Leader, the **Country Representative:**

- ☐ Compares the quantities counted with the quantities listed in inventory
- ☐ records (i.e., Insight or the system of record).
- ☐ If the fiscal year-end value of D-goods (actual or projected) in the country program is over 750,000 USD: Reviews the external audit firm's official report of the count.
- ☐ When there are variances between the count and the inventory records: Informs the PIC Leader that a re-count is needed for the relevant bins/locators.
- ☐ For interim state country programs: Approves the count (even if there are discrepancies found, pending an investigation from the Head of Operations and the Supply Chain Manager).
- ☐ For SCM Insight country programs: Approves non-discrepancy lines
- ☐ For SCM Insight country programs: Runs the PIC Results report and emails it to the Supply Chain Manager to help inform the discrepancy investigation
- ☐ Tells the Supply Chain Manager and Head of Operations if an investigation into a discrepancy is necessary.
- ☐ For SCM Insight country programs: Approves any discrepancy that is due to loss and rejects any discrepancy for any reason other than loss. (See Approve PIC Job Aid).
- ☐ Tells the Supply Chain Manager, the Head of Operations, and Finance Manager and any other relevant stakeholders that the PIC has been approved.

Warehouse operations can begin again after the PIC is approved. Any bins with significant discrepancies found during the count should remain frozen until an investigation into the discrepancies has been completed.

If moderate to significant discrepancies are found during the count, then the **Supply Chain Manager and Head of Operations:**

- ☐ Investigate the causes for the discrepancy(s).
- ☐ Gives the Country Representative a report of the investigation's findings with proposed actions to account for outstanding discrepancies and to prevent future discrepancies from re-occurring.
- ☐ Works with Finance and Program to seek approvals required as listed in Finance's Accounting for Inventory Assets policy.

Once the PIC is approved, the **Warehouse Manager:**

- ☐ Conducts a visual inspection of any suspect packages that were pulled and placed next to the bin and determines whether the packages should be re-stocked or placed into quarantine for reconditioning, additional inspection, or disposal.
- ☐ Updates Bin Cards and inventory records with the approved results of the count.

Please see below for context-specific callout boxes that also apply.

Adjusting PICs in Insight

After the PIC is approved, the **Supply Chain Manager**:

- ☐ Runs the PIC Discrepancy Reports to review any discrepancies.
- ☐ Reviews the reports with the Warehouse Manager.

For Approved Loss Discrepancy Adjustments, the **Warehouse Manager,** at the direction of the Supply Chain Manager:

- ☐ Performs the necessary Account Alias transactions (based on the PIC Discrepancy report-Approved Discrepancies due to Loss) to ensure that the right POET codes are captured in any system adjustments.

For Rejected Non-Loss Discrepancy Adjustments, the **Warehouse Manager,** at the direction of the Supply Chain Manager:

- ☐ Performs the required transactions (based on the PIC Discrepancy Report for Rejected Discrepancies due to Unrecorded Transactions) to correct the identified discrepancies.

For more information on performing the adjustment transactions, see the Finalize PIC Adjustments Job Aid.

PIC Reports in Insight

There are six reports that support the implementation and finalization of PIC in Insight.

1. PIC Status Report: This report helps monitor the progression of PIC and how many adjustments are still pending finalization.
2. PIC Results Report: This report helps the SC Manager communicate to the CR which discrepancies are due to loss and which are due to unrecorded transactions so that the CR knows which lines to approve or reject. This report can also be used to help document which losses have been approved by the required stakeholders, which is required before final issue out (requires manual entry).
3. PIC Discrepancy Report- For Approved Discrepancies due to Losses: This report provides details on which discrepancies are due to losses and thus which goods the Warehouse Manager should issue out using the PIC loss source code (after obtaining required loss approvals). The Supply Chain Manager must fill in some of the fields manually.
4. PIC Discrepancy Report- for Rejected Discrepancies due to Unrecorded Transactions: This report provides details on which discrepancies are due to unrecorded transactions and which correction transactions the Warehouse Manager must perform to adjust the discrepancy. The Supply Chain Manager must fill in some of the fields manually.
5. Inventory Transaction Overview Report: This report helps validate that the required transactions (both loss issue out and corrective actions) have been performed and can be validated against the PIC Status report.
6. Period Inventory Valuation Report: This report is required to be run on September 30th and submitted to Finance to document year-end closing balance.

Follow-Up

Follow-Up Checklist

CHECKLIST *Follow-Up*



After the PIC, the **Supply Chain Manager**:

- ☐ Prepares a final report of the PIC that includes: issues found, results
- ☐ from the investigation (if needed), a formal description of the PIC
- ☐ team and the PIC process, evaluation of the strengths and weakness of the storage facility's inventory management system, any corrective action necessary to address issues, lessons learned, and any other relevant details.
- ☐ Gives the PIC results with the Head of Operations.
- ☐ Presents a summary of the report to storage facility staff.
- ☐ Makes sure that all Bin Cards and inventory records are up to date with the correct balances.
- ☐ Works with the Warehouse Manager to dispose any inventory losses (for more information, see the Loss Handling section in this chapter).

When the fiscal year-end value of D-goods (actual or projected) in a country program is over 750,000 USD, the **Head of Operations**:

- ☐ Receives and shares the external audit firm's official report with relevant stakeholders.

On September 30th, the **Supply Chain Manager**:

- ☐ Runs and submits the Period Inventory Valuation Report to the finance department.

LOANING AND BORROWING GOODS

Sometimes CRS loans goods to a third party or borrows goods from a third party. The third party may be within CRS (another CRS project or office) or outside CRS (a CRS partner or another third party). Loaned and borrowed goods may be D-goods (like corn-soy blend) or ND-goods (like a satellite phone). There are different processes for loaning goods, returning loaned goods, borrowing goods, and returning borrowed goods.

LOANING GOODS TO THIRD PARTY

Loaning CVA Assets to Third Party

ICT4 Development or Emergency (ICT4D/E) equipment such as phones, scanners, and receipt printers are typically loaned to vendors participating in e-voucher programs. The contract with the vendor should specify the terms and conditions of the loan, including the allowable use of the devices, any compensation due for lost or damaged devices, and the period of the loan.

Loaning Goods to Third Party Checklist

CHECKLIST *Loaning Goods to Third Party*

After receiving a loan request agreement, the **Supply Chain Manager:**

- ☐ Reviews the agreement to make sure that all the loan details are provided in the request and signs off on the agreement.
- ☐ Gives the approved loan agreement, the Dispatch Plan, and any other supporting documentation to the Warehouse Manager.

After receiving an approved loan agreement from the Supply Chain Manager, the **Warehouse Manager:**

- ☐ Works with the warehouse staff to pick and pack the loan and prepare the Delivery Note (DN) and Packing List.
- ☐ Works with the Logistics Manager or contact from the third party to arrange transport of the loaned goods to the ship-to location.
- ☐ Informs the Supply Chain Manager when the goods being loaned out have been dispatched to the ship-to location.
- ☐ Keeps track of the loaned items in inventory records and prepares reports on loaned items when needed.

Please see below for context-specific callout boxes that also apply.

Loaning Goods in Insight

After receiving an approved loan request from the Supply Chain Manager, the **Warehouse Manager**:

- ☐ Creates a new locator within the D-Loan or ND-Loan subinventory.
- ☐ Moves the loaned goods to that loan locator using a subinventory transfer.
- ☐ Attaches the approved loan request, Dispatch Plan, and other supporting documentation.

The loaned item remains in this locator until it is returned. See the Insight Inventory Reference Guide and the Loan and Return Part 1 Job Aid.

Receiving Loan Returns from Third Party

Loaned goods may be returned with the exact item that was borrowed (e.g., a satellite phone, which is not consumable) or with a replacement item (e.g., reams of paper, which are consumable).

For replacement items, the loan agreement should specify the repayment in terms of quantity or monetary value (or both) because market prices can change by the time the third party repays the loan.

For replacement items, the loan agreement with the third party should clearly state the following:

- The required replacement quantity or value (e.g., 50 reams of A4 paper versus 100 USD worth of copy paper).
- Any specifications of the replacement items (e.g., copy paper weight of 20 pounds versus 24 pounds).

When returning a loan to CRS with replacement items, the third party should provide a valuation report that confirms the value of the replacement items.

Receiving Loan Returns from Third Party Checklist

CHECKLIST *Receiving Loan Returns from Third Party*



When loaning out goods, the **Supply Chain Manager:**

- ☐ Notes and keeps track of the dates of the loan period and (if needed) alerts the third party when the end of the loan period is approaching.
- ☐ Tells the Warehouse Manager when loaned goods are being returned to the storage facility and provides any supporting documentation.

When loan returns arrive at the storage facility, the **Warehouse Manager:**

- ☐ Works with the Warehouse Officer to inspect the loaned goods that were returned.
- ☐ Works with the Warehouse Officer to put away the loaned goods into storage.

If the loan return includes a replacement item(s), the **Supply Chain Manager:**

- ☐ Verifies the cost of the replacement item(s) against the loan agreement and the valuation report received from the third party.

Please see below for context-specific callout boxes that also apply.

Receiving Exact Loan Item in Insight

After the **exact** loan item is received and inspected, the **Warehouse Manager**:

- ☐ Performs a subinventory transfer of the loaned good from the D-Loan or ND-Loan subinventory to the appropriate locator.
- ☐ Attaches all shipping, receiving, and loan return documentation to the subinventory transaction.

Receiving Replacement Loan Item in Insight

After the **replacement** loan item is received and inspected, the **Warehouse Manager**:

- ☐ Performs an Account Alias Receipt of the replacement item into ND-Stores or D-Stores with source code "Loans Repayment – Receipt".
- ☐ Performs an Account Alias Issue of the loaned good from D-Loan or ND-Loan with source code "Loan – issue"
- ☐ Attaches all shipping, receiving, loan valuation, and loan return documentation to the transaction.

Receiving Loaned Items in Insight

The loan locator should remain open until after the last day of the quarter after the loan ends.

For more information, see the Insight Inventory Reference Guide and the Loan and Return Part 2 Job Aid.

If the cost of the returned items needs to be adjusted, see the Insight Cost Management Reference Guide.

BORROWING GOODS FROM THIRD PARTY

Borrowing Goods from Third Party Checklist

CHECKLIST *Borrowing Goods from Third Party*



Before borrowing goods, the **Supply Chain Manager**:

- ☐ Works with the Program Manager (or other requestor) to review donor requirements (if needed) and to develop the terms and conditions of the borrow request (e.g., return of the exact items versus return of replacement items).
- ☐ Receives and reviews the borrow request agreement from the requesting department and signs off on the borrow agreement.
- ☐ Gives the approved borrow agreement and all supporting documentation to the Warehouse Manager.

After receiving an approved borrow agreement, the **Warehouse Manager**, with support from the **Warehouse Officer**:

- ☐ Prepares for the arrival of the borrowed goods.
- ☐ Receives, inspects, and puts away the borrowed goods into storage.
- ☐ Notifies the Supply Chain Manager and the requestor that the borrowed goods have arrived and reports whether any items were rejected.

For more information about the receiving, inspection, and put away process, see the Receiving chapter.

All borrowed items should be tracked in inventory with a unique lot number.

Please see below for context-specific callout boxes that also apply.

Receiving Borrowed Goods in Insight

After physically receiving, inspecting, and putting away borrowed goods, the **Warehouse Manager**:

- ☐ Performs an Account Alias Receipt with the source code "Borrowed Goods – Receipt".
- ☐ Attaches the shipping documents (e.g., waybill, packing lists), Goods Received Note (GRN) (if required), inspection reports, and the approved borrow request to the transaction.

For more information, see the Insight Inventory Reference Guide or the Borrow and Return Job Aid.

Returning Borrowed Goods to Third Party

Borrowed goods may be returned to a third party with the exact item that was borrowed (e.g., a satellite phone, which is not consumable) or with a replacement item (e.g., reams of paper, which are consumable).

Returning Borrowed Goods to Third Party Checklist

CHECKLIST *Returning Borrowed Goods to Third Party*



After borrowing goods, the **Supply Chain Manager**:

- ☐ Monitors the borrow agreement and keeps track of the date(s) when the borrowed goods are expected to be returned.
- ☐ **If returning replacement items for borrowed goods:** Works with the finance team to develop a valuation report that confirms the value of the replacement items.
- ☐ **If returning exact items for borrowed goods:** Works with the Logistics Manager to create a Dispatch Plan with the details of the return.
- ☐ **If returning exact items for borrowed goods:** Shares the Dispatch Plan and other supporting documentation with the Warehouse Manager.

If returning replacement items for borrowed goods, the **Warehouse Manager**:

- ☐ Works with the warehouse staff to pick and pack the return and prepare the Delivery Note (DN) and Packing List.
- ☐ Works with the Logistics Manager to arrange transport of the borrowed to the ship-to location.
- ☐ Informs the Supply Chain Manager when the goods being returned have been dispatched.

Please see below for context-specific callout boxes that also apply.

Returning Borrowed Goods in Insight

After the borrowed goods have been dispatched, the **Warehouse Manager**:

- ☐ Performs an Account Alias Issue with the source code "Borrowed Goods – Issue".
- ☐ Attaches the Dispatch Plan, Delivery Note (DN), Packing List and the approved borrow request to the transaction.

For more information, see the Insight Inventory Reference Guide or the Borrow and Return Job Aid.

PERFORMANCE MONITORING

Below are examples of metrics that can be used to monitor the performance of warehouse and inventory management.



For more information about these metrics and how they can be used for performance monitoring, see the Performance Indicator Reference Sheets (PIRS) section in the Monitoring chapter.

Warehouse monitoring forms (e.g., warehouse inspection forms) are another performance monitoring tool for tracking regularly occurring activities in the storage facility related to the upkeep and maintenance of the facility itself.



Photo by Karl Grobl

Chapter 10: Dispatch

10. DISPATCH

Purpose

This chapter enables staff to plan and implement the downstream movement of goods from a CRS storage location to other CRS storage locations, partners, or service delivery points. The dispatch process includes planning and preparing for a dispatch, picking and packing consignments, loading goods into vehicles, and documenting dispatch activities.

For in-depth guidance on dispatch and distribution planning, see the Planning chapter.

For information on the in-country transportation process from the CRS storage location to the ship-to locations, see the National Transport chapter.

Difference Between Dispatch and Distribution

Dispatch and distribution are often incorrectly used interchangeably, but they are distinct processes.

- **Dispatch** occurs when goods are moved from one location to another, usually warehouses.
- **Distribution** occurs when goods have reached their final destination, usually a program participant, partner, or internal user.

For in-depth guidance on the distribution of goods, see the Distribution chapter.



Difference Between D-Goods and ND-Goods

All goods are categorized as either D-goods or ND-goods.

- **D-goods** are purchased for distribution to program participants (either directly or through partners) and are expensed when a partner or program participant receives them. D-goods appear in inventory valuation accounts as assets until they are dispatched to a partner or distributed to a program participant.
- **ND-goods** are purchased for internal consumption and are expensed immediately upon receipt. Although ND-goods do not appear in inventory valuation accounts as assets, they should be tracked while in inventory and until distributed to the end user.

Issuing ND-goods to an end user, even internally, is considered a final distribution, **not** a dispatch. In this handbook, the term "distributing" means giving D-goods to program participants, while the term "issuing out" means giving ND-goods to end users.

For more information on issuing out ND-goods, see the Issuing Out ND-Goods section in the Distribution chapter.

For information about tracking property after being released from inventory, see the Property Management Policy.



10.1 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

DONOR POLICIES AND REGULATIONS

- Global Fund – Guide to Global Fund Policies on Procurement and Supply Management of Health Products

DONOR OR OTHER GUIDELINES

- Certification in Humanitarian Logistics Learning Materials: Unit 4 - Transport
- Logistics Cluster – Logistics Operational Guide
- USAID|DELIVER – The Logistics Handbook: A Practical Guide for the Supply Chain Management of Health Commodities
- USAID|DELIVER – Guidelines for Warehousing Health Commodities
- USAID|DELIVER and WHO – Guidelines for the Storage of Essential Medicines and Other Health Commodities
- USAID|DELIVER – Transport Management: A Self-Learning Guide for Local Transport Managers of Public Health Services
- USAID|DELIVER – Transport Assessment Tool
- WHO – A Model Quality Assurance System for Procurement Agencies

10.2 OVERVIEW

The goal of dispatch is to make sure that the right goods get to program participants in the right quantities and at the right time, while maintaining the safety and integrity of goods while picking, packing, and loading them into vehicles for transportation.

10.3 ROLES AND RESPONSIBILITIES

DISPATCHING GOODS (EVERYTHING EXCEPT CVA ASSETS)

The figure below lists the functions and activities of seven roles involved in managing the process of dispatching goods.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Function/Activity	Warehouse Manager/ Administrative Manager*	Warehouse Officer/ Administrative Officer/ Administrative Assistant**	Logistics Manager	Supply Chain Manager	Head of Operations	Program Manager/ Chief of Party	CRS Staff
Develops Distribution Plan for D-goods	C		C	C	I	R	
Emails request to release or transfer ND-goods	I						R
Prepares Dispatch Plan based on Distribution Plan	C		R	A	I	C	
Makes sure that requested goods are in stock and shipments are prioritized based on Dispatch Plan	R	I	C	A		I	I
Develops Pick List based on Dispatch Plan (for D-goods) or submitted email (for ND-goods)	R	C		A			
Arranges for the hiring of day laborers and acquisition of packing materials (if needed)	R	C		A			
Before picking begins, prepares the dispatch area and makes available packing materials and dunnage	A	R					
Supervises picking and packing of goods and placement in dispatch/staging area	A	R					
Prepares Delivery Notes (DNs) and Packing Lists	A	R					
When vehicles arrive, inspects the vehicle using the appropriate inspection checklist	R		C	A	C		
Supervises vehicle loading process	A	R	C				
Inspects loaded cargo against Packing List, sign Delivery Notes (DNs), and submit copies to relevant entities	R	C	I	A		I	I
Communicates to ship-to location(s) upcoming arrival of shipment	C		R	A		I	I
Updates bin cards and inventory records	A	R					

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

* For goods that are stored in the office storage location, the Administrative Manager has a similar role as the Warehouse Manager. References to the Warehouse Manager throughout this chapter also refer to the Administrative Manager.

** For goods that are stored in the office storage location, the Administrative Officer or the Administrative Assistant has a similar role as the Warehouse Officer. References to Warehouse Officer throughout this chapter also refer to the Administrative Officer or the Administrative Assistant.

The person in a role designated as accountable or responsible may delegate a task if such delegation is approved by that person's supervisor and there is no conflict of interest.

DISPATCHING CVA ASSETS

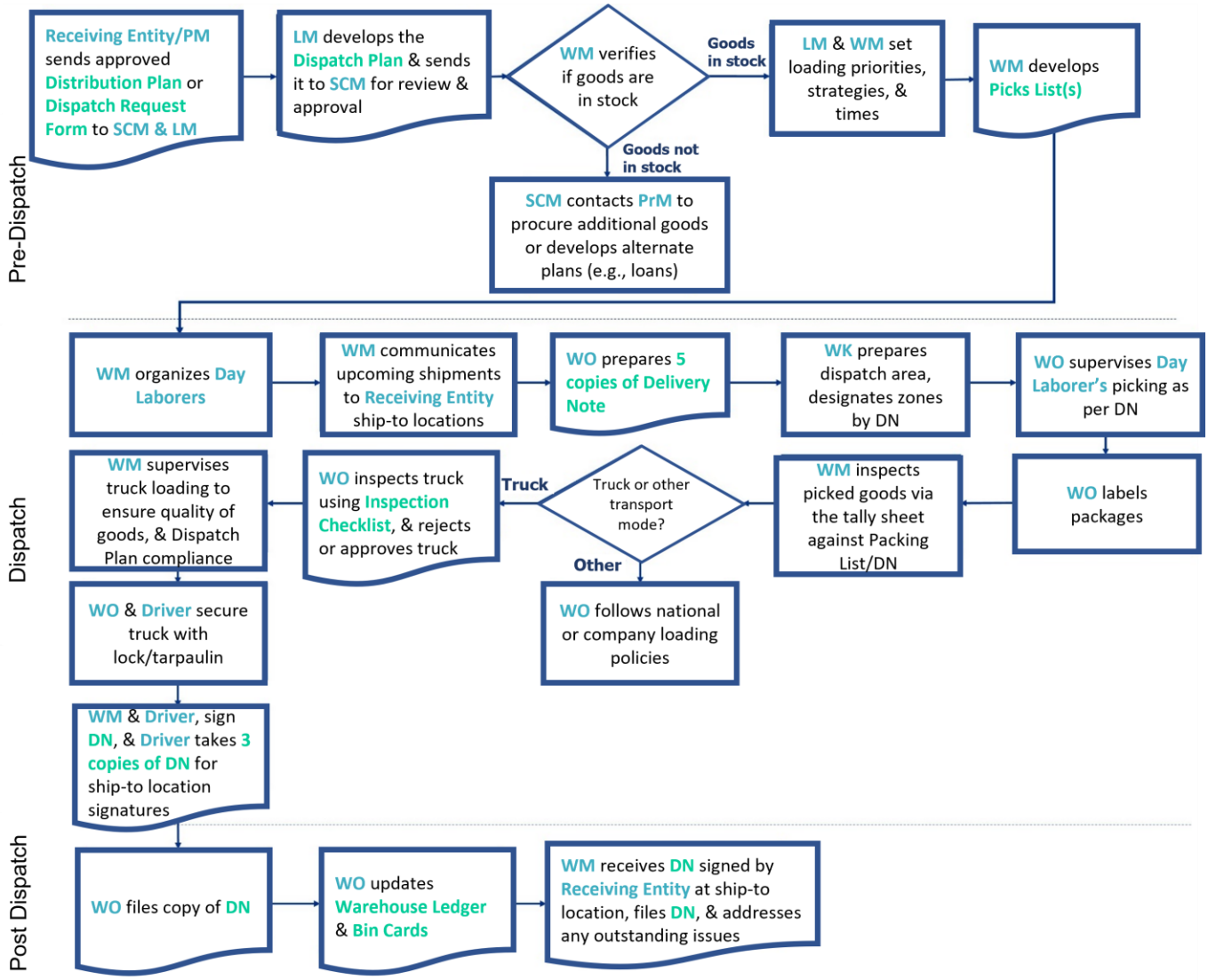
The figure below lists the functions and activities of six roles involved in managing the process of dispatching CVA assets. For more information about each of these roles, see the Roles and Responsibilities chapter.

	Administrative Manager	CVA Asset Custodian/ Administrative Assistant/ Administrative Officer*	Logistics Manager	Supply Chain Manager	Head of Operations	Program Manager/ Chief of Party
Develops the Distribution Plan for D-goods	C		C	C	I	R
Prepares Dispatch Plan based on Distribution Plan	C		R	A	I	C
Makes sure that requested goods are in stock and that shipments are prioritized based on Dispatch Plan	A	R	C	I		I
Picks and packs CVA assets according to Dispatch Plan	A	R				
Prepares Delivery Notes (DNs) and Packing Lists	A	R				
Inspects shipment against Packing List, sign Delivery Notes (DNs), and submits copies to relevant entities	R	C	I	A		I
Communicates to ship-to location(s) of the upcoming arrival of shipment	C		R	A		I
Updates Bin Cards and relevant systems	A	R				

R=Responsible; A=Accountable; C=Consulted; I=Informed

* For CVA assets, the Administrative Assistant or the Administrative Officer may also be designated as the CVA Asset Custodian, who is responsible for managing CVA assets (e.g., voucher booklets and credit/debit cards). CVA assets are generally stored in an office. For more information about the role of the CVA Asset Custodian, see the Receiving chapter. See the Receiving CVA Assets RACI for more details).

10.4 PROCESSES



PRE-DISPATCH

Developing a Dispatch Plan

The Dispatch Plan initiates the dispatch process.



Dispatch plans are not used to release ND-goods to CRS staff or to initiate transfers between CRS storage locations. Instead, the Supply Chain Manager or the Head of Operations emails approval to the manager of the storage location to release ND-goods.

The Dispatch Plan is developed with information from the Distribution Plan. For more information about distribution planning, see the Planning and the Distribution chapters.

A well-made Distribution Plan, with amounts needed per site, per day, can serve as the Dispatch Plan itself to save time in a rapid onset emergency.

Dispatch Plan Development Checklist

CHECKLIST *Dispatch Plan Development*



Once the Distribution Plan has been developed, the **programming team**:

- ☐ Maintains and regularly shares the plan, including the information below, with the Logistics Manager.
  - Types and quantities of goods needed.
  - Number of program participants expected to be served at the location (if being sent to a service delivery point).
  - Destination.
  - Name and contact details of the person receiving the goods.
  - Proposed distribution or delivery dates.
  - Any other details that the programming team and logistics might need to prepare for the distribution.

To develop and maintain the Dispatch Plan, the **Logistics Manager**:

- ☐ Builds it with information in the Distribution Plan.
- ☐ Reviews the following information for the Dispatch Plan, in collaboration with the Warehouse Manager.
  - Inventory-on-hand reports to see what is available in stock.
  - Pipeline analyses to determine any expected issues in the time horizon and review routes for goods to reach their destination.
  - All incoming and outgoing shipments of goods.
  - Any other relevant reports and plans.
- ☐ Includes the following information in the Dispatch Plan.
  - ☐ Project and POET information.
  - ☐ Ship-to location with complete addresses if available and distance to the ship-to location.
  - ☐ Estimated time of arrival (ETA) of goods.
  - ☐ Consignee name and contact information.
  - ☐ Good types and quantities, including any quality assurance or hazardous materials considerations.
  - ☐ Weights and volumes of goods (see the Weight and Volume Calculator tool).
  - ☐ Vehicle arrival and load dates.
  - ☐ Any other details that logistics and warehouse staff might need to prepare and complete dispatch.
- ☐ Continuously updates the new Dispatch Plan with every subsequent update to the Distribution Plan.

Once the Dispatch Plan has been developed, the **Supply Chain Manager**:

- ☐ Reviews the Dispatch Plan and makes sure all relevant information is included.
- ☐ Approves the Dispatch Plan and sends it to the Logistics Manager, Warehouse Manager, and Program Manager/Chief of Party for the project.

Preparing for a Dispatch

Because the receiving and dispatch areas are often in the same location in the warehouse, careful planning and controls should be in place to make sure that receiving and dispatch activities are not occurring at the same time.

Reserving Inventory for Dispatch

After receiving the Dispatch Plan, the Warehouse Manager can create an Inventory Reservation to freeze inventory items and prevent them from being moved for another purpose. An Inventory Reservation also serves as a pick list to be printed out and given to warehouse staff.

Before doing any other transactions with the reserved items (e.g., subinventory or IO transfers), the Warehouse Manager must delete the reservation.

For more information, see the Insight Inventory Reference Guide or the Inventory Reservation and Picks Job Aid.

The Warehouse Manager should have a filing system in place to track received Dispatch Plans, current Pick Lists, and completed Pick Lists. An efficient system makes sure that no transfers are forgotten or delayed. It can be set up as a simple tray system on the Warehouse Manager's desk or using a filing system in OneDrive or SharePoint.



For in-depth guidance on planning for labor and equipment needs, see Planning Resource Requirements in Certification in Humanitarian Logistics Learning Materials - Unit 2.

Preparation for a Dispatch Checklist

CHECKLIST *Preparation for a Dispatch*



After receiving the approved Dispatch Plan, the **Logistics Manager**:

- ☐ Works with the logistics team to develop the Transport Schedule and notify transporters. For more information, see the National Transport chapter.
- ☐ Communicates with the ship-to location to confirm transport dates, reference numbers, and transportation details so staff can arrange for receipt.

After receiving the approved Dispatch Plan, the **Warehouse Manager:**

- ☐ Makes sure that all requested goods are in stock.
- ☐ **If there are not enough goods in stock to meet the Dispatch Plan:** Immediately tells the Supply Chain Manager, requesting department, and procurement team (if the goods are purchased goods) to find a solution.
- ☐ Estimates labor and equipment needed for dispatch activities.
- ☐ **If day laborers are needed:** Works with the procurement team to arrange for day laborers to be available.
- ☐ Plans for the arrival of trucks in collaboration with the logistics team to avoid congestion in the warehouse compound and to increase the efficiency of loading activities.

A few days before the date of vehicle arrival for goods dispatch (or longer depending on the volume being dispatched), the **Warehouse Manager:**

- ☐ Creates and shares the Pick List with the Warehouse Officer and Warehouse Keeper.
- ☐ Makes sure that personal protective equipment (PPE) is available for warehouse staff and day laborers.

After receiving the Pick List, the **Warehouse Officer**, working with the **Warehouse Keeper**:

- ☐ Prepares the dispatch area, cleans any debris, and makes sure that pallets are laid on the floor for proper arrangement of goods.
- ☐ If there are multiple destinations: Assigns zones in the dispatch area for the different destinations and labels them accordingly (e.g., on a floor plan, with a sign on the wall, or with a floor marking).
- ☐ Makes sure the separation of loading areas to reduce confusion during the packing and loading process.

Stock Rotation Methods

In most cases, goods should be dispatched using either the FEFO or the FIFO* method.

- FEFO and best-used-by date (BUBD) prioritize the dispatch of lot-controlled goods with expiration dates, even if the goods arrive later than other goods in stock.
- FIFO reduces the risk of degradation or obsolescence of goods that do not have expiration dates.

In some cases, dispatch may not follow these methods, such as reconditioned goods that should be dispatched first. CRS staff should be familiar with national policies on inventory management and determine if a different stock rotation method should be followed.

* FIFO dispatch should not be confused with FIFO accounting, which is an inventory valuation method (for more information, see the Accounting for Inventory Assets Policy).

DISPATCH

Picking and Packing

The picking process involves the preparation of orders by selecting items in the storage area to make up consignments. These consignments are then taken to the dispatch area of the warehouse where they are packed and consolidated in preparation for loading onto vehicles.

If a single truck delivers goods to multiple destinations, there should be a separate Packing List and Delivery Note (DN) for each ship-to location.

Below are some best practices for picking and packing.

- Goods should be packaged separately according to category (e.g., do not mix medical and non-medical items in the same packages) to make sure the integrity of goods and efficient receiving and put-away at the ship-to location.
- Cold chain items should be assigned to insulated containers.
- Goods should be packed in standard-sized packages to help with estimating the volume of shipments and with the efficient loading of vehicles during dispatch.
- Whenever possible, a package should weigh less than 25 kg to make sure easy and safe handling.

Picking CVA Assets

FIFO methodology applies (e.g., some electronic CVA assets can no longer be used after the supplier makes updates/changes to their systems or software) unless newer goods are in poorer condition than the current goods in stock.

Goods should be staged in the dispatch area in a way that can easily facilitate the loading of vehicles. Warehouse staff should use tape to mark the dimensions of the vehicle or container and should stage goods and pallets within the marked space(s).

Picking and Packing Checklist

CHECKLIST *Picking and Packing*



During the picking process, the **Warehouse Manager**:

- ☐ Monitors the health and safety of staff and day laborers.
- ☐ Makes sure that personal protective equipment (PPE) is available and being used effectively, including:
  - ☐ closed-toed shoes.
  - ☐ reinforced (leather) gloves, especially when handling rough-surfaced or sharp-edged items.
  - ☐ goggles and anti-dust or respirator masks, when handling items that can affect sight or respiration (e.g., flours, timber, cement, sand, packets of insecticide or chlorine).
- ☐ Oversees the proper use of equipment.
- ☐ Trains day laborers as needed in package handling techniques to reduce strain and injury.
- ☐ If goods need to be kitted prior to loading: Inspects kits and signs off on completion of kitting process

During the picking process, the **Warehouse Officer**:

- ☐ Supervises the Warehouse Keeper and day laborers (if hired).
- ☐ Uses a Tally Sheet if needed to help facilitate the picking process, especially for bulk picks.
- ☐ Makes sure that all packages are clearly labeled and provides labels to the picking staff if needed.
- ☐ Prepares Packing Lists and the Delivery Note (DN).
- ☐ Prepares and distributes four copies (the original plus three copies) of the Delivery Note (DN).
  - ☐ One copy remains at the dispatching warehouse.
  - ☐ The original and two copies go with the Driver.
- ☐ If goods need to be kitted prior to loading: Prepares kitting area and kitting supplies, creates or updates bin cards.

During the picking process: the **Warehouse Keeper** and the **day laborers**:

- ☐ Pick items from stock based on the Pick List and place the picked items into the prepared zones within the staging area of the warehouse.
- ☐ If goods need to be kitted prior to loading: Create kits by picking components from inventory and packing items into kit.
- ☐ Arrange goods in unique packages (fine picks) or on pallets (bulk picks).
- ☐ If packages do not have labels: Affix labels to packages placed in the dispatch area (label example below).

CRS
CATHOLIC RELIEF SERVICES

		PACKING LIST #:	
DATE:		TRANSPORTER:	
DESTINATION:		CONTAINER / BOX #:	of
CRS DN / WB #:		EXPIRATION DATE:	

For more in-depth guidance on the kitting process, see the Kitting section in the Warehouse and Inventory Management chapter.

Please see below for context-specific callout boxes that also apply.

Below is some important information about the Delivery Note, which is generated during the Picking and Packing process described above.

Generating Delivery Notes in Insight

To generate the Delivery Note (DN) report, the dispatch must be recorded in Insight before loading occurs and after the goods have been moved by the Warehouse Manager or Warehouse Officer to the external IO using an IO transfer.

Depending on the destination of the dispatch, the goods can be placed in in-transit subinventory for tracking longer transits or can be placed directly into partner or SDP subinventory.

Once the Delivery Note (DN) report has been generated from Insight, one copy stays with the dispatching warehouse and three copies (i.e., the original plus two copies) go with the Driver to the ship-to location. To keep track of the different copies, it is helpful to use different colored paper.

Once the cargo has been offloaded, the Driver and the staff at the ship-to location complete and sign the three Delivery Note (DN) copies. The ship-to location keeps one signed copy. The Driver keeps one signed copy for record-keeping and sends the signed original of the Delivery Note (DN) (attached to the invoice) to the finance team.

For more detailed information, see the Insight Inventory Reference Guide and the Generate a Delivery Note Job Aid.

In emergencies, preprinted carbon copy Delivery Note (DN) booklets are not always readily available. Dispatch staff must make sure that the Delivery Note (DN) and its copies have the same serial number and that all new Delivery Notes (DNs) have a unique serial number from the notes issued previously or subsequently.

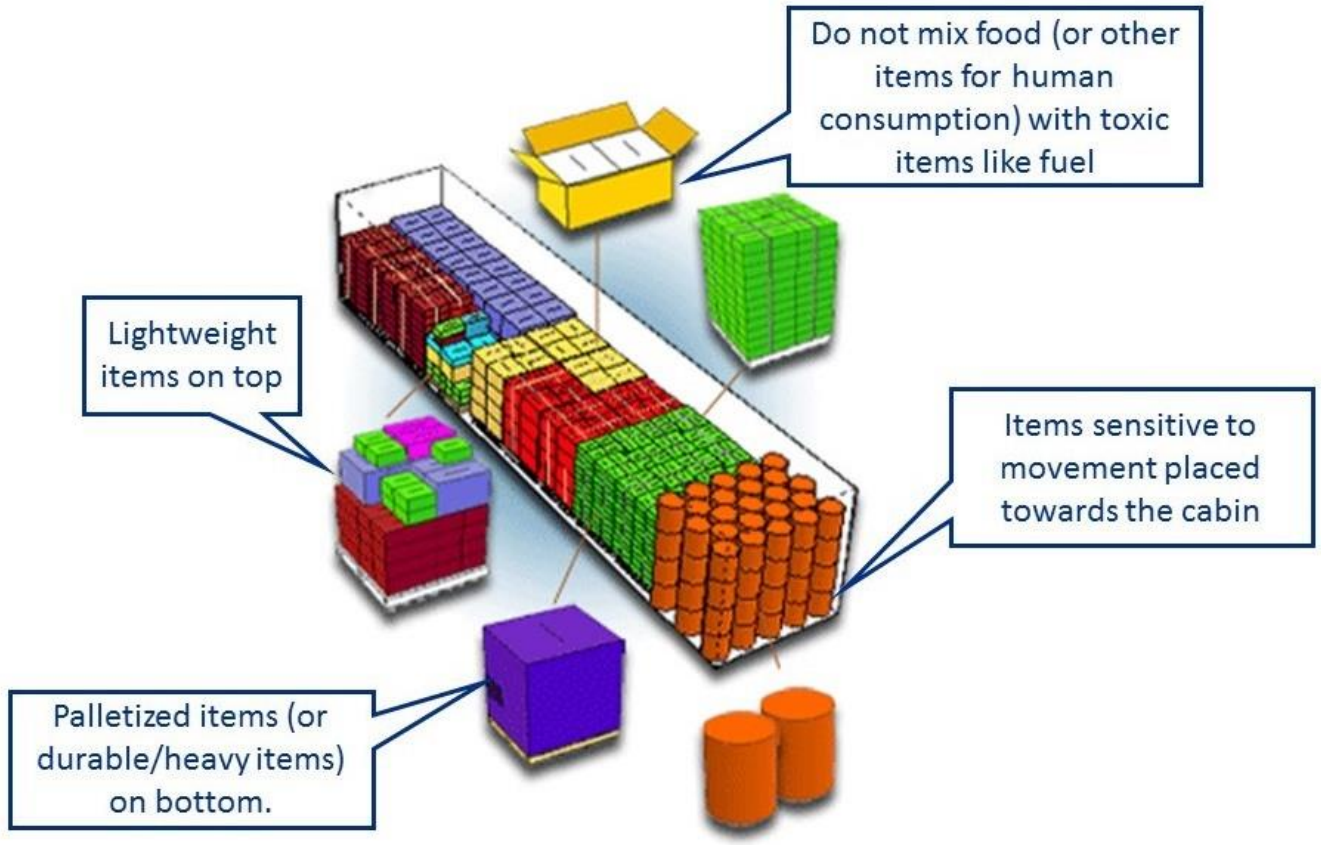
Three copies of the Delivery Note (DN) (the original plus two copies) are sufficient. One copy stays with the dispatching warehouse and two copies (the original plus one copy) go to the ship-to location. The ship-to location keeps one signed copy. The Driver attaches the signed original to the invoice.

A Delivery Note (DN) is required for dispatch of CVA assets. A modified CVA Delivery Note (DN) includes space for tracking serial numbers and may be used in lieu of the standard Delivery Note (DN).

Loading

Below are some best practices for loading vehicles.

- To make the process more efficient, organize goods in a way that allows for quick and easy counting once loaded.
- If two or more destinations are being served by one truck, load cargo for the first destination toward the rear of the truck (away from the cabin).
- Avoid loading heavy goods on the roof rack or above the vehicle's bed wall height, because it reduces vehicle stability and increases physical stress on the roof structure.





Never

- X Put dangerous goods (e.g., fuel canisters) on the roof
- X Place toxic materials (e.g., chlorine) in the cabin of a truck or anywhere else where it could endanger a driver or passenger
- X Place temperature-sensitive goods near the truck's engine or heat-generating goods (e.g., corrugated metal)
- X Mix foods intended for human consumption with dangerous/toxic goods



Always

- ✓ Separate dangerous items from other cargo either with a complete separation or adequate barriers
- ✓ Load items that are sensitive to movement (e.g., generators, refrigerators) or that can cause the truck to become unstable (e.g., fuel barrels or other liquids) on the bed floor and as close to the cabin as possible
- ✓ Load liquids on the lowest layer and separated from other items with a tarp or plastic material, to minimize potential damage from spills
- ✓ Load items and packages on pallets or other dunnage to protect from contaminants and moisture
- ✓ Secure the sides of the truck and tie down all loads
- ✓ Protect cargo from the elements and tie down any roofing or tarp to avoid any infiltration

Vehicle Loading Process Checklist

CHECKLIST *Vehicle Loading Process*



Before loading begins, the **Warehouse Manager**:

- ☐ Uses the Heavy Transport Vehicle Inspection Checklist to verify vehicle's fitness for carrying goods (e.g., assessing cleanliness, ensuring that there is no inappropriate markings, verifying legal registration and insurance).
- ☐ **If a vehicle does not pass inspection**: Immediately informs the Logistics Manager to get an adequate replacement vehicle as soon as possible.

Note: Any vehicle that does not pass inspection must not be loaded with any packages!

If a vehicle does not pass inspection, the **Logistics Manager**:

- ☐ Works with the transporter to provide an adequate vehicle replacement as soon as possible.
- ☐ **If the vehicle continues to not pass inspection:** Works with procurement to communicate performance issues to the transport agency.

During loading, the **Warehouse Manager**:

- ☐ Makes sure that loading follows safety regulations, respects infrastructure limitations, and enables efficient unloading and put-away when the vehicle arrives at the ship-to location.
- ☐ Makes sure that each truck is optimally loaded without exceeding maximum weight or volume load capacities.

During loading, the **Warehouse Officer**:

- ☐ Makes sure that the warehouse floor and walkways from the packing/staging area to the truck are clean and free of obstacles.
- ☐ Supervises the loading team.
- ☐ Watches the loading process to make sure quality assurance guidelines are followed (see previous figures under Loading), including:
  - ☐ Packages are clearly labeled.
  - ☐ Package handling, and thus package damage, is minimized.
  - ☐ Sensitive goods are separated from hazardous goods.
  - ☐ Heavy and non-fragile packages are placed underneath more fragile and/or lighter packages.
- ☐ Tracks the quantity of items being loaded using a tally sheet and cross-checks the quantity against the Packing List and Delivery Note (DN), to account for all packages.

Once the loading is complete, the **Warehouse Manager**:

- ☐ Makes sure that the cargo is well-protected and secured.
- ☐ Oversees the securing of the truck tailgate/door with tamper-proof lock.
- ☐ Signs the Delivery Note(s) (DNs) and gives copies of the Delivery Note (DN) to the Driver for delivery to the ship-to location.
- ☐ Tells the Logistics Manager and the LMIS Officer that the loading process is complete and that the vehicles have left the warehouse compound.

Once loading is complete, the **Warehouse Officer**:

- ☐ Updates the relevant Bin Cards and inventory records.

Please see below for context-specific callout boxes that also apply.

Transporting CVA Assets

CVS assets are often transported between locations by staff. In these cases, the staff takes on both the role of the transporter on the Delivery Note (DN) and responsibility for the CVA assets until they are transferred to the end recipient. CVA assets may also be transported by a certified courier and use their system to document tracking.



Tracking Downstream Movement of Goods

After goods are transferred to the external IO, the LMIS Officer tracks the movement of goods (e.g., receipt of goods) by the partner or at the SDP, transfers between Partners and SDPs, and the final distribution of goods from SDPs, because partners do not have access to Insight. All relevant documents that CRS receives from distribution staff or partners—including the signed Delivery Note (DN)—should be attached in Insight.

For more information on the downstream movements of goods, see the Distribution chapter and the Insight Inventory Reference Guide.





Photo by Terhas Clark

Chapter 11: National Transport

11. NATIONAL TRANSPORT

Purpose

This chapter enables supply chain staff to manage the in-country transportation process with guidance on determining short and long-term transportation requirements, contracting and monitoring the performance of service providers in collaboration with procurement, scheduling transport, tracking the movement and receipt of goods, and making payments to transporters.

In this chapter, references to "vehicles" represent all the modes of transport that can be used for in-country movement of goods. These other modes of transport might include "vessels," "railcars," and others.

11.1 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

CRS POLICIES, PROCEDURES, AND GUIDELINES

- Fleet Manager's Toolkit

DONOR REQUIREMENTS AND REGULATIONS

- Global Fund – Guide to Global Fund Policies on Procurement and Supply Management of Health Products

DONOR OR OTHER GUIDELINES

- Certification in Humanitarian Logistics Learning Materials: Unit 4 - Transport
- Logistics Cluster – Logistics Operational Guide
- USAID - Transport Management: A Self-Learning Guide for Local Transport Managers of Public Health Services
- USAID|DELIVER – The Logistics Handbook: A Practical Guide for the Supply Chain Management of Health Commodities
- USAID|DELIVER – Transport Management: A Self-Learning Guide for Local Transport Managers of Public Health Services
- WHO – A Model Quality Assurance System for Procurement Agencies
- WHO - Good Distribution Practices for Pharmaceutical Products (Annex 5, 2010)

- WHO - Good Storage and Distribution Practices (Annex 7, 2020)

11.2 OVERVIEW

MODES OF TRANSPORT

The process for selecting the mode of transportation is discussed at design and formalized during the start-up and planning phases of the project lifecycle. If the local or international context changes during the project lifecycle, the mode of transportation should be reassessed and analyzed for the best way to transport goods.

For more information about modes of transportation, see the Start-Up chapter and Certification in Humanitarian Logistics Learning Materials: Unit 4 - Transport.

11.3 ROLES AND RESPONSIBILITIES

The figure below lists the functions and activities of seven roles involved in managing the national transportation process.

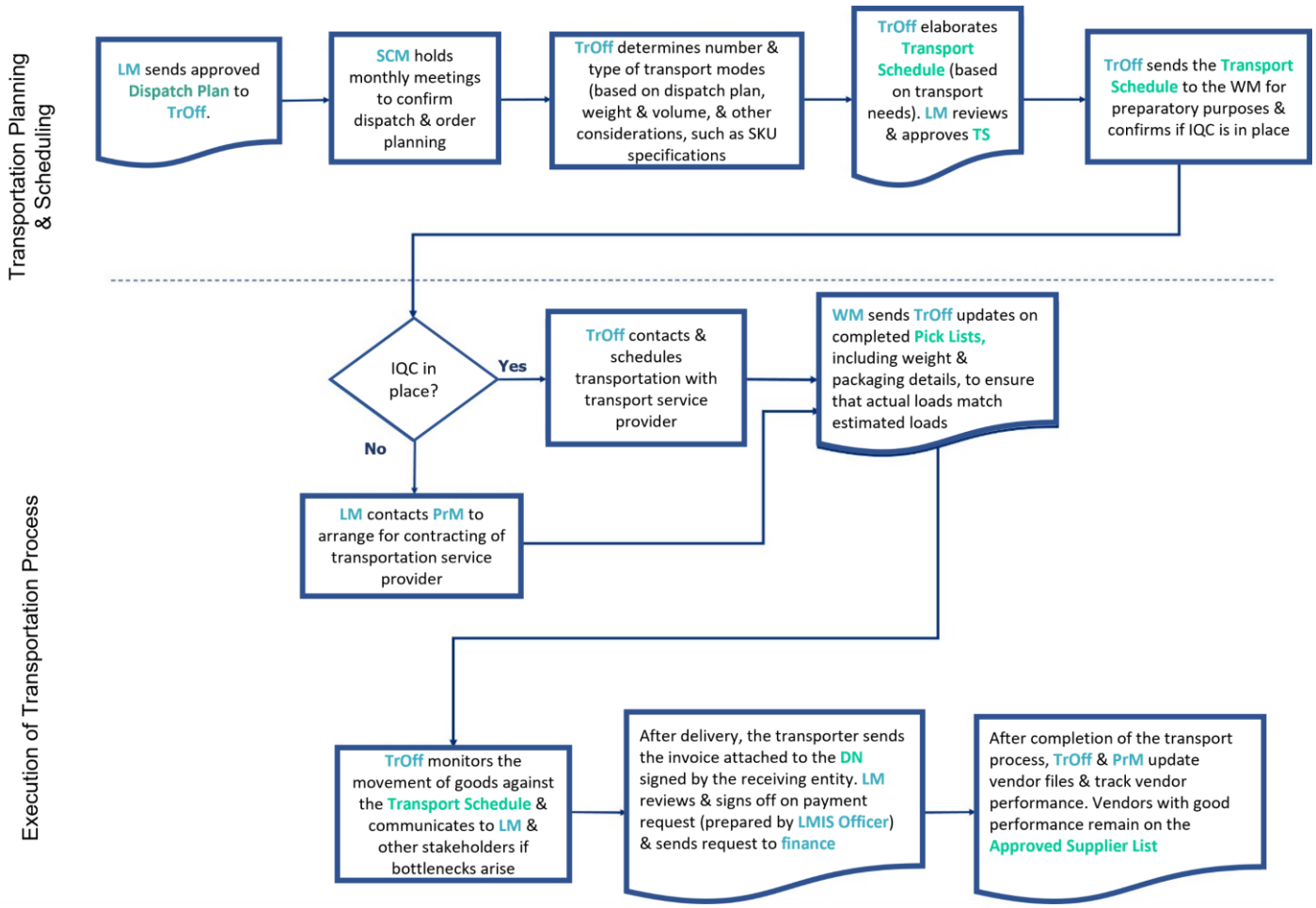
For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Function/Activity	Head of Operations	Supply Chain Manager	Transport Officer/ Logistics Officer	Logistics Manager	Procurement Team	Warehouse Manager	Country Representative
Assesses various transportation mode options; estimates costs and transport time horizons	I	I	R	A	C		
Submits a request to procurement if no contracts are in place for transport providers	I	A	C	R	C		
Processes requisitions, prepares requests for quotes, negotiates terms, and contracts transport service providers	I	C	C	C	R		I
Prepares Dispatch Plans (for more information, see the Dispatch chapter)	I	A	C	R	I	I	
Determines quantity, weight, and volume of goods to be transported; plans for surplus transport capacity		A	C	R	C		
Prepares and updates Transport Schedule based on transportation needs		C	R	A	C	I	

Function/Activity	Head of Operations	Supply Chain Manager	Transport Officer/ Logistics Officer	Logistics Manager	Procurement Team	Warehouse Manager	Country Representative
Coordinates transport service providers or drivers for CRS-owned trucks or vehicles		C	R	A		I	
Prepares Packing Lists (PLs), Delivery Notes (DNs), and other documents required to dispatch goods		A	I	I		R	
Updates status reports on security, road status, weather, and other conditions that impact transport operations	I	I	R	A			
Inspects vehicles; monitors cargo loading and offloading	C	A	A	C		R	
Monitors and regularly reports on the performance of all transport service providers	I	A	C	R	C	C	
Prepares payments to transport service providers and document losses		A	I	R	C		

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

11.4 PROCESSES



Continuous planning for transportation is critical. Although most cargo transport operations will be overland using heavy trucks, supply chain staff should prepare flexible options to move goods and personnel over land, water, and air so that there is a low risk of disruption if the local context changes.

For health programming, the CRS logistics team may work within the national health transport system. Many of the activities described in this section may not happen in the same way if CRS works through these government partners. For more information, see the Health Annex.

PLANNING AND PROCUREMENT

Conduct Market Analysis

Transportation planning should begin with an analysis of the current fair market value/value for money for local transport and, if available, historical data from the country and/or region. The market analysis involves engagement with national transport authorities, national transporters' unions, or the Logistics Cluster (LC) (if activated) to determine and monitor the fair market value of leased assets, fuel, parts, etc.; to determine relevant transport regulations (e.g., maximum payload for trucks and maximum driver hours per day); and to access common services. As appropriate, the market analysis also involves collaboration with sister agencies to share assets and costs.

Develop Dispatch Plan

The Dispatch Plan is based on transport needs. Initial transportation needs should be determined at the start of a project and should be evaluated and updated annually for multi-year programs. Transportation needs should also be re-evaluated following changes in project deliverables or changes to the local context (e.g., disaster or infrastructure changes). For more information on transportation planning at the start of a project, see the Start-Up chapter.

Dispatch Plan Checklist

CHECKLIST *Dispatch Plan*



Once transport needs are determined, the **Supply Chain Manager:**

- ☐ Meets regularly with programming staff to confirm the continuous needs of the project (as documented in the Distribution Plan) to create and maintain Dispatch Plans.

Calculate Vehicle Space Needed to Transport Goods

The logistics team should use the Weight and Volume Calculator to determine the vehicle space needed to meet the Dispatch Plan requirements. For more information on calculating weights and volumes of goods, see the Planning chapter.

Logistics staff should keep a history of the weights and volumes of commonly transported items. This information is useful for estimating the required number of trucks based on the volume and weight of goods.

The logistics team should plan for reasonable surplus transport capacity. Building in buffer capacity helps CRS adhere to dispatch schedules, avoid pipeline breaks, respond to ad hoc transport requests, and make sure there is sufficient resource availability to move staff and cargo within the set deadlines.

Optimizing the use of space/capacity for all modes of transport can lead to reduced climate change impact and freight cost savings. To facilitate more environmentally and economically sustainable supply chain practices, procurement and logistics staff can:

- Require suppliers to **optimize space on a per-load or per shipment basis**.
- Identify opportunities during purchasing to build a full container/truck load.
- Identify opportunities for cargo consolidation with improved planning and consolidation of CRS preferred freight service providers.
- Identify opportunities with packaging to reduce dunnage weight and space demands if such reduction does not compromise cargo integrity during transport and storage.

Assess Transport Route Security and Risks

Transport Route Security & Risk Assessment Checklist

CHECKLIST *Transport Route Security & Risk Assessment*

Once the Dispatch Plan and number of vehicles required to transport goods is determined, the **Logistics Manager:**

- ☐ Works with the logistics team, Head of Operations, security staff, and others familiar with the operating environment and transport infrastructure to assess the risks of the various routes that will be used to transport goods and personnel.

The assessment should include the identification of alternative transport routes to mitigate any potential risks to the safety and security of staff and goods. The Trip Plan & Risk Assessment tool can be used as a risk assessment template.

Identify and Contract Transport Service Providers

It is best to contract the services of transporters at the beginning of a project and communicate scheduled shipments in advance, rather than contract ad hoc transportation services. However, ad hoc transportation might be needed in some situations to move D-goods or ND-goods.

When entering into new contracts, the procurement team leads the negotiations and contracting phase, with input from the logistics team. When procuring transportation services, it is important to consider whether the service providers have the additional capacity (if needed) or if it is necessary to contract additional transport service providers to cover actual and unforeseen needs.

When developing bid criteria for transportation services, procurement staff should consider including minimum volume requirements, costs for the dry season and for the rainy season, the ability to handle rough terrain, geographic areas to be covered, and availability of vehicles. As with any good or service, CRS can contract with multiple service providers at the same time to ensure availability of vehicles, coverage of different geographic areas, etc.

Service providers contracted directly by CRS are considered an extension of CRS and should be selected with utmost care after careful consideration. By using reputable service providers, CRS reduces direct oversight of transport operations and spends more time on planning and system monitoring. Whenever possible, it is best to contract full-service and reputable transport service providers (e.g., carriers) and to request certificates (e.g., WHO's Certificate of Good Distribution Practice).

For more information on the service provider contracting process, see the Start-Up and Procurement chapters.

The Logistics Manager can work with the Logistics Cluster (LC) to identify transport service providers. The Logistics Cluster (LC) can provide information about expected costs and can avoid competition with other international assistance agencies. When activated, the Logistics Cluster (LC) monitors transport markets and possesses data that can provide useful information for finding cost-effective service providers.

To start the process for contracting a transport provider, complete the Requestor Form for Goods and Services and follow the instructions provided in the form. After completion, submit the form to the Requisition Preparer.

Before loading begins at the warehouse, the Warehouse Manager inspects the vehicle(s) using the Heavy Transport Vehicle Inspection Checklist. This inspection should be discussed with the transporter before the contract is signed. The procurement team can provide the acceptable and unacceptable conditions of the transport vehicle within the tender and in the terms and conditions.

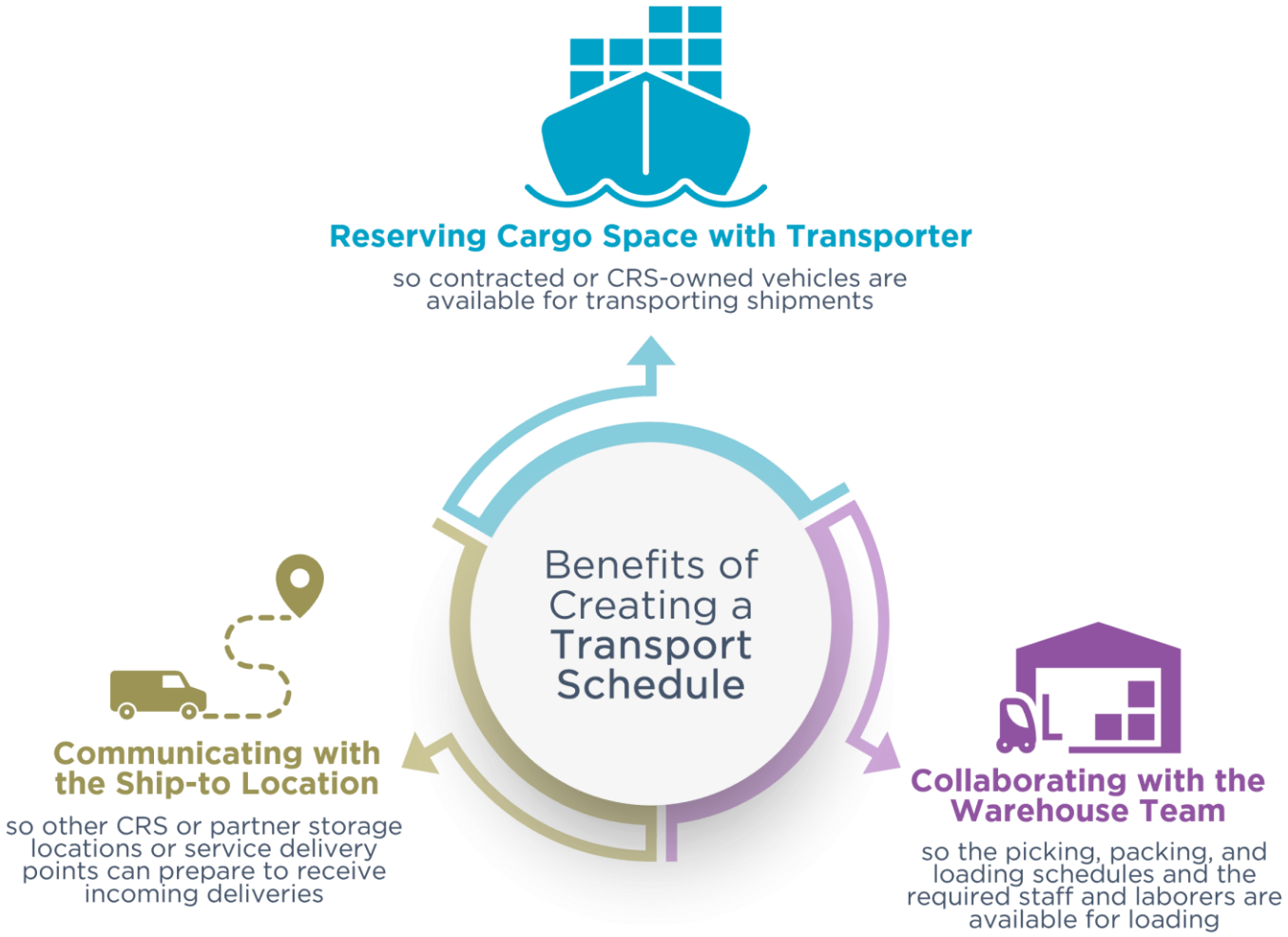
SCHEDULING

Routine movements, or movements that take place regularly, or that correspond with Dispatch Plans, should be scheduled to match program activities and storage capacity along the supply chain. Contingency plans and options for ad hoc movement requests and excess cargo beyond what was forecast must also be in place.

Whenever possible, it is best to transport goods from multiple projects together. This practice reduces costs, increases efficiencies, and decreases environmental emissions.

Create Transport Schedule

There are several benefits to developing, updating, and sharing Transport Schedules regularly, including the benefits illustrated below.



The logistics team typically uses the Dispatch Plan(s) as the foundation for determining transport requirements and schedules (for complete guidance on Dispatch Plans, see Planning and Dispatch chapters).

When developing a Transport Schedule, logistics staff should follow the best practices listed below.



For information about driver safety and driving best practices, see the Fleet Manager's Toolkit.

Creating the Transport Schedule Checklist

CHECKLIST *Creating the Transport Schedule*



To create the Transport Schedule, the **Transport Officer or Logistics Officer** should:

Once the Dispatch Plan is approved:

- ☐ Create an initial Transport Schedule based on the Dispatch Plan requirements.
- ☐ **If CRS has an agreement with a transport provider to meet the Dispatch Plan requirements:** Reserve vehicles/cargo space with the company based on the estimated needs and volume of goods that need to be transported; and contact the selected transporter close to the transport date and confirm that the vehicles are still available or whether other arrangements must be made.
- ☐ **If there is no agreement in place with a transport provider to meet the Dispatch Plan requirements:** Complete and submit the Requestor Form so transport services can be procured.

Once the Transport Schedule is completed:

- ☐ Submit it to the Logistics Manager for review and approval.

Once the Transport Schedule is approved:

- ☐ Send it to the relevant departments (e.g., programming, warehouse(s), ship-to location(s), and procurement).

Whenever supply issues or bottlenecks that might affect the availability of goods are reported:

- ☐ Update the Transport Schedule.

The Transport Schedule may be simple and may be created using Excel or even on a whiteboard in the office (see example below).

Office:					Month:				
Vehicle/ Carrier ID	Vehicle Type	Vehicle Capacity (metric tons, m3)	Driver	Delivery Note (DN) Ref./Cargo Type	Origin/ Destination	Loading Day	Est. Date / Time of Departure	Est. Date / Time of Arrival	Notes / Comments

Maintaining the Transport Schedule Checklist

CHECKLIST *Maintaining the Transport Schedule*



To **make sure that Transport Schedules are maintained**, the following actions should be taken:

The **Logistics Manager:**

- ☐ Holds regular meetings with programming teams to plan and coordinate transport priorities, and to examine the Distribution and Dispatch Plans, as well as any ad hoc dispatch requests. Depending on the level of dispatch and transport activity, meetings can be held more frequently to address changes in priorities or needs.

The **Supply Chain team:**

- ☐ Addresses the Transport Schedule during internal team meetings to make sure that the schedule is followed and to adjust shipment options as needed.

The **Procurement team:**

- ☐ Informs the logistics team, the programming teams, and the ship-to location of any supply issues or bottlenecks that might affect goods availability.

For more in-depth guidance on Transport Scheduling and Planning, see the Certification in Humanitarian Logistics Learning Materials – Unit 4.

Develop Convoy Plan (If Needed)

While developing the Transport Schedule, the Transport Officer or the Logistics Officer works closely with the Security Officer to consider the security situation along the route. When traveling over great distances or through potentially unsafe or dangerous environments, convoy transport might offer benefits. However, it is not always necessary or even recommended to join shipments into convoys, even when they are readily available, because convoys could become targets, especially when schedules and routes are not kept confidential. Also, convoys require enormous effort to organize and coordinate and usually have slow travel times.

A convoy consists of multiple vehicles scheduled to travel together along the same route(s). Two types of convoys are typically used, as described below.

Unescorted Convoy

Preferred option

Not accompanied by armed personnel

Requirements prior to joining a formal, multi-agency unescorted convoy:

1. Coordinate with Logistics Manager, Head of Operations, Supply Chain Manager, Security Officer, and Country Representative to make decision

Escorted Convoy

To be used only as a last option

Accompanied by armed personnel

Typically used in active conflict areas and involves inherent risks

Requirements prior to joining an escorted convoy:

1. CRS Security Officer conducts in-depth security assessment and submits a documented recommendation to Country Representative
2. Country Representative obtains authorization from Regional Director and Executive Vice President of Overseas Operations

For more in-depth guidance on how to plan and manage a convoy, and the roles and responsibilities of convoy participants, see the Fleet Manager's Toolkit.

LOADING GOODS ONTO VEHICLES

Based on the Transport Schedule, the Warehouse Manager and the Logistics Manager prioritize picking, packaging, and kitting activities (for information on these activities, see the Warehouse and Inventory Management chapter).

The Logistics Manager assigns one experienced country program logistics staff member to coordinate air operations in coordination with the procurement team, both for the receiving and offloading of international and national consignments arriving by air to the ship-to location.

The Warehouse Manager sends the Transport Officer and the Logistics Manager frequent updates of completed pick lists, including packaging and weight details, so the Transport Officer can make sure that actual loads correspond to the estimated loads.

Once the vehicle(s) arrives at the storage location, the Warehouse Manager uses the Heavy Transport Vehicle Inspection Checklist to make sure that the vehicle can transport goods safely and securely.

The warehouse staff makes sure that hazardous materials are loaded separately from food, medical supplies and pharmaceuticals, electronic equipment, and other non-hazardous goods (for a list of hazardous materials classes, see the Certification in Humanitarian Logistics Learning Materials – Unit 4.)

The transport service provider should identify hazardous loads with international placards.

The warehouse staff informs drivers/operators of safety procedures and measures to take in case of damage or spillage.

Whenever possible, CRS staff should:

- Make sure that fuels are transported in non-metallic containers, such as plastic jerry cans and drums, stacked on pallets.
- Cover cargo with tarps to avoid direct sunlight.
- Avoid carrying fuel stock on aircraft, whenever possible.

For a detailed explanation of the most appropriate ways to load a vehicle or container, see the Dispatch chapter.

TRACKING AND DOCUMENTING THE MOVEMENT OF GOODS

Once goods are loaded and dispatched, the Transport Officer or the Logistics Officer tracks movements against the Transport Schedule. Tracking involves regular communication with other members of the supply chain team, procurement team, partners, and suppliers.

In **Insight**, when goods are dispatched, the Warehouse Manager creates an IO transfer to move the goods into the external IO. Once in the external IO, the LMIS Officer captures all movements between the external IO subinventories using subinventory transfers and the final distribution using an account alias issue transaction.

For more information on dispatch and distribution transfers, see the Inventory Management Reference Guide and the following job aids: Interorg Transfer and Subinventory Transfer.

The Transport Officer or the Logistics Officer can track the transportation of goods between partners, storage locations, and the SDP by running reports like the Item on Hand Report, which provides details on location and quantity of goods along the supply chain. For more information on running reports in Insight, see the Run A Supply Chain Report Job Aid.

The Transport Officer or Logistics Officer can also see all completed transactions in Insight that can be used for looking up a specific item or transaction.

Required Movement of Goods Documents Checklist

CHECKLIST *Required Movement of Goods Documents*



To document and track the movement of goods, **Warehouse Staff** should provide the **four documents listed below** to the transport provider:

1. Packing List
   - ☐ Details the contents of packages with a clear description, quantities, unit weights, volumes, etc.
   - ☐ Alerts transporters and consignees about any special handling requirements.
   - ☐ Facilitates verification of the contents upon receipt.

2. Delivery Note (DN) (known as a Waybill)
   - ☐ Identifies the transfer of responsibility between parties in case of losses or damages.
   - ☐ Authorizes the dispatch of goods from inventory.
   - ☐ Lists the ship-to location and the consignee who will receive the goods.
   - ☐ Serves as the transporter's proof of delivery once goods are delivered (a copy of the Delivery Note (DN) should be provided with the invoice).

3. Transport orders for drivers (in case of checkpoints)

4. Any other relevant goods-specific documents (e.g., sanitary or fumigation certificates, etc.)

For more in-depth guidance on documentation required to track the movement of goods, see the Dispatch chapter.

Please see below for context-specific callout boxes that also apply.

Staff can print a Delivery Note (DN) from Insight after the IO transfer to the external IO is performed. This Delivery Note (DN) can then be printed, signed, and given to the transport provider. The Packing List, Loss Report and Claim Form, and other documentation will need to be created offline.

RECEIVING GOODS DOWNSTREAM

For in-depth guidance about receiving goods, see the Receiving chapter.

Receiving Goods from the Transporter Checklist

CHECKLIST *Receiving Goods from the Transporter*



Upon receiving goods from the transporter, the **Warehouse Manager** or **CRS partners** (i.e., consignees) should:

- ☐ Confirm that the goods have been received by:
  - ☐ Signing the transport provider's copies of the Delivery Note (DN).
  - ☐ Completing a Goods Received Note (GRN), if required.
- ☐ Inspect the goods and record the inspection results in an Inspection Form.
- ☐ Document any losses or damages using a Loss Report and Claim Form to:
  - ☐ Justify the recovery of any value from the transport provider through reduced payment of the invoice amount.
  - ☐ Support the pursuit of any legal claim to be filed against the transport provider.
  - ☐ Create a record of such losses or damages for CRS and donors.
- ☐ Communicate the receipt to the supplier, supply chain/operations, procurement, finance, and programming.

PAYING THE TRANSPORTER

Payment to the transport service provider depends on the terms and conditions of the contract. After the goods have been delivered, the transporter sends an invoice to CRS with the original Delivery Note (DN) attached.

For more information on transporter payment, refer to the Paying the Transporter section in the International Transport chapter.

MONITORING PERFORMANCE

Monitoring Transport Performance

Below are examples of metrics that can be used to monitor overall transport performance. For more information about these metrics and how they can be used for performance monitoring, see the Performance Indicator Reference Sheets (PIRS) section in the Monitoring chapter.



Monitoring Transport Service Providers

Together, the Logistics Manager and the Procurement Manager monitor KPIs and maintain a performance monitoring system that tracks the alignment of service providers' performance with the Transport Schedule and other factors specified in the service contract. Vendors with good performance remain on the Global Approved Supplier List. For more information on monitoring service providers, see the Procurement chapter.



Photo by Dominique Guinot

Chapter 12: Distribution

12. DISTRIBUTION

Purpose

This chapter enables supply chain and programming staff to distribute goods, CVA assets, and services to program participants or partners effectively and efficiently by planning, managing, monitoring, and reporting on distribution events.

The distribution process starts before goods arrive at the service delivery point or services are rendered.

For more information about distribution planning, see Design, Start-Up, and Planning.

For more information about the movements of goods upstream from the service delivery point, see the Receiving, Warehouse and Inventory Management, Dispatch, and National Transport chapters.



CRS staff distributing health commodities (e.g., medicines and health products) should refer to the Health Annex for specific information on distributions of health and medical supplies and pharmaceuticals.



In the international assistance sector, the term "distribution" refers to the delivery of D-goods—including CVA assets—and services to partners or program participants, or the delivery of ND-goods to programming staff or partners. This chapter focuses exclusively on the distribution of D-Goods.

For information about issuing out ND-goods to end users (i.e., CRS staff or partners), see the Issuing Out ND-goods section at the end of this chapter.

In this handbook, the word "distributing" means giving D-goods to partners or program participants, while the phrase "issuing out" means giving ND-goods to CRS staff or partners.

12.1 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

CRS POLICIES AND PROCEDURES

- Accountability Measures for Distributions/CVA during Covid 19
- Accounting for Non-USG In-Kind Resources (PRO-FIN-IKD-019.02)
- Accounting for USG In-Kind Commodities for Distribution (PRO-FIN-IKD-019.01)
- Finance Documentation Matrix (Cash Voucher Assistance tab) (POL-FIN-DOC-008)
- Monitoring, Evaluation, Accountability and Learning Policies & Procedures (POL-OOD-PRG-008)
- Minimum and Preferred Protection Standards (PRO-OOD-PIQA-001-A2)
- Policy on Protection from Abuse and Exploitation (POL-HRD-GEN-0026)
- Protection Policy Rollout to Partners (PRO-OOD-PIQA-001-A1)

CRS GUIDELINES

- EFOM Guidance on Selecting Service Providers for Cash Delivery
- EFOM Operations Guidance for Cash-Based Programming

DONOR POLICIES AND REGULATIONS

- 22 CFR Parts 211 (Regulation 11) – Code of Federal Regulations USAID – Transfer of Food Commodities for Food Use in Disaster Relief, Economic Development and Other Assistance
- WHO - Annex 7: Good Storage and Distribution Practices for Medical Products

DONOR OR OTHER GUIDELINES

- IFRC Distribution Safety Guidance
- Logistics Cluster – Logistics Operational Guide (LOG)
- UNHCR Commodity Distribution Manual

Emergencies

- WFP - Emergency Field Operations Pocketbook

Food Assistance

- TOPS Commodity Management Handbook
- TOPS Commodity Management Toolkit

Health

- Alliance for Malaria Prevention Toolkit
- MSF – Essential Drugs Part 2: Organization and management of a Pharmacy and Drug Quality and Storage
- MSF – Management of a Cholera Epidemic Chapter 6: Setting up Cholera Treatment Facilities
- MSF – Management of a Measles Epidemic Chapter 6: Mass Vaccination Campaign
- USAID|DELIVER – The Logistics Handbook: A Practical Guide for the Supply Chain Management of Health Commodities
- USAID|DELIVER – Using Last Mile Distribution to Increase Access to Health Commodities
- World Health Organization (WHO) – A Model Quality Assurance System for Procurement Agencies: Recommendations for Quality Assurance Systems Focusing on Prequalification of Products and Manufacturers, Purchasing, Storage and Distribution of Pharmaceutical Products
- World Health Organization (WHO) – Good Distribution Practices for Pharmaceutical Products

12.2 OVERVIEW

The guidance provided in this chapter only applies to CRS-managed distributions, which may be managed by CRS directly or indirectly through a third party, including local partners and governments. The guidance in this chapter might not apply to all circumstances and should be adapted as needed to fit the specific context of a distribution event. Partners may also adapt the guidance provided in this chapter to fit their distribution guidelines and local context.

D-Goods and ND-Goods

Difference Between D-Goods and ND-Goods

All goods are categorized as either D-goods or ND-goods.

- **D-goods** are purchased for distribution to program participants, either directly or through partners, and are expensed when a partner or program participant receives them. D-goods appear in inventory valuation accounts as assets until they are distributed to a partner or program participant.
- **ND-goods** are purchased for internal consumption and are expensed immediately upon receipt. Although ND-goods do not appear in inventory valuation accounts as assets, they should be tracked while in inventory and until distributed to the end user.

Issuing out ND-goods to an end user, even internally, is considered a final distribution, **not** a dispatch.

Distribution and Dispatch

Difference Between Distribution and Dispatch

Distribution and dispatch are often (and incorrectly) used interchangeably, but they are distinctly different processes.

- **Distribution** occurs when goods have reached their final destination, usually a program participant or internal user.
- **Dispatch** occurs when goods are moved from one location to another, usually warehouses.

For in-depth guidance on the downstream movement of goods from a CRS storage location to other CRS storage locations, partners, or service delivery points, see the Dispatch chapter.

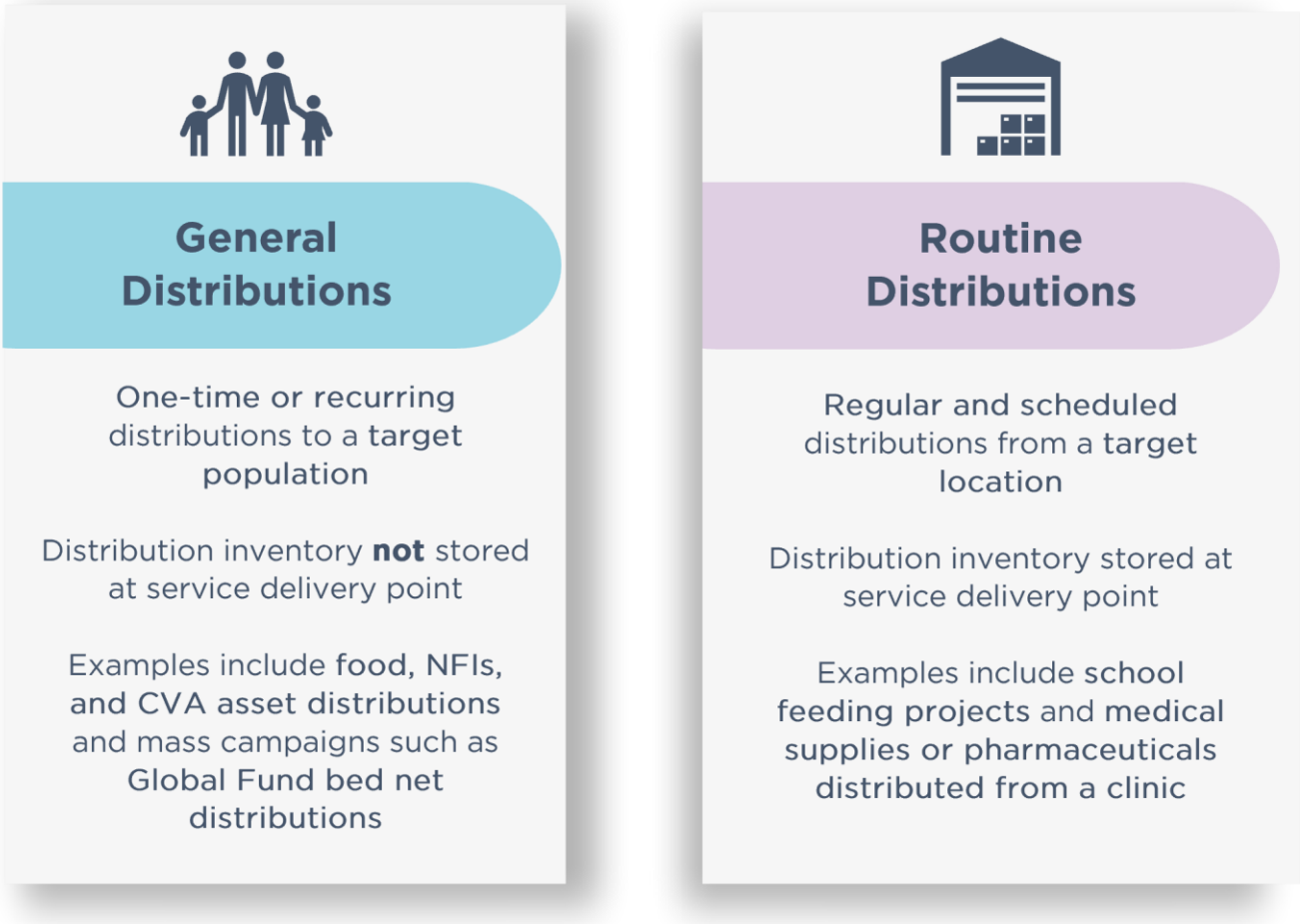
For information about tracking property after being released from inventory, see the Property Management Policy.

Service Delivery Point

The term service delivery point means the final physical location from which CRS or a partner distributes goods or support services to program participants (e.g., fairs, stores, clinics, and schools). This term is abbreviated and tracked in Insight as SDP.

Distributions: General Versus Routine

This chapter focuses primarily on the two categories of distributions summarized below.



One-time distributions that cover large populations and/or large geographical areas are often called Mass Distribution Campaigns (or Mass Campaigns). A bed net distribution is a common example of a mass campaign.

BEST PRACTICES

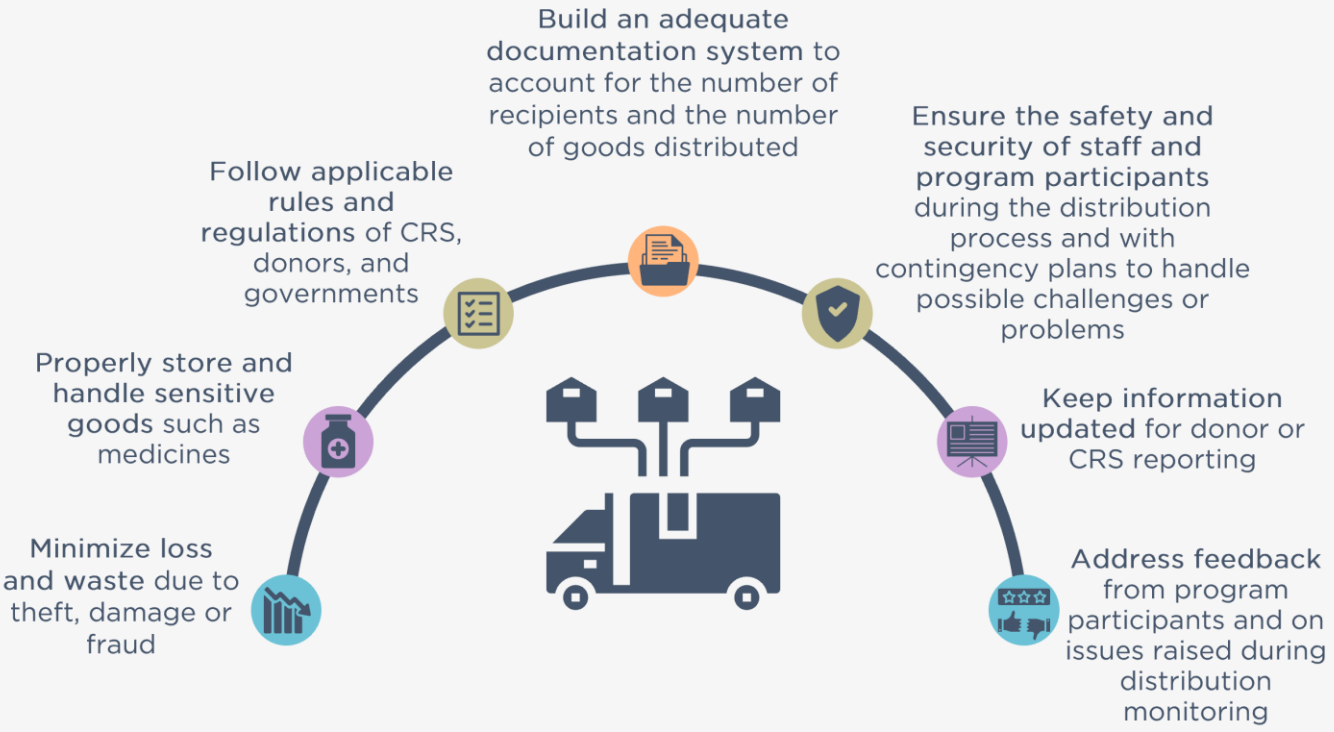
Distribution Requirements During COVID-19

CRS Accountability Measures for Distributions/CVA during COVID-19 describes accommodations that must be made for distributions during the COVID pandemic. Beyond COVID, there should be a contingency plan that can be activated for distributions to make sure the safety of program participants and staff.

Distribution requires good coordination and communication between supply chain and programming teams to successfully design, prepare, and execute distribution events. Although supply chain staff are not always directly involved in the stage of distribution where goods are given to program participants, they still must understand the distribution process so they can respond to feedback from programming staff, partners, or program participants and make changes to supply chain plans and processes as needed.

The figure below shows ways supply chain staff can support and guide programming staff or partners who might be responsible for distribution.

Distribution Guidance For Supply Chain Staff, Programming Staff, and Partners



Increasingly, ICT4D (e.g., smartphones) is used by programming and operations staff to facilitate distributions. For information about the potential role of ICT4D in CRS supply chain operations and CRS programming, see the ICT4D Hub on SharePoint.

12.3 ROLES AND RESPONSIBILITIES

Partners are often responsible for distributions. When CRS is directly responsible for distributing goods during general distributions to program participants, the programming team typically assigns individuals to the distribution team.

For General Distributions/Mass Campaigns

The figure below lists the functions and activities of seven roles involved in CRS-managed general distributions, including mass distribution campaigns.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Function/Activity	Program Manager/ Chief of Party	Supply Chain Manager	Distribution Team Lead*	MEAL Team	Supply Chain Monitoring Officer	Warehouse Manager	LMIS Officer
Assigns staff to the distribution team (for staff not already assigned at start-up)	R		I	I	I		
Designs the site plan and distribution process for service delivery point (if not already developed at start-up)	R	C	C	C	C		
Develops the safety and security plan (if not already developed at start-up)	R	C	C	I	I		
Holds a pre-distribution meeting to review the site plan, safety and security plan, and any other applicable plans	R	C	I	I	I		
Meets with local government or community leaders	A		R	C	C		
Prepares the distribution event site based on the site plan	A	C	R		C		
Receives goods and CVA assets at the service delivery point and completes the Delivery Note (DN) and (if needed)	C		R		I		
Conducts on-site briefings with program participants before the distribution begins	A		R		I		
Maintains safety and security during the distribution event	A	I	R		I		
Verifies registration cards of program participants and escort program participants through the service delivery point	A		R		I		
Monitors the distribution event to make sure compliance with policy, procedure, and distribution best practices	I	A	C	I	R		
Returns excess or damaged goods to the storage location that dispatched the goods	A	I	R		C	C[1]	C[2]
Prepares and submits distribution reports	R	C	C	C	C		
Conducts post-distribution monitoring (PDM) with program participants	C		C	R	C		
Captures the distribution event details after receiving the distribution reports from the distribution team	C		C			R[1]	R[2]

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

[1] For internal service delivery point

[2] For external service delivery point

* The role of Distribution Team Lead may be a temporary task performed by the Program Manager or the Logistics Manager.

For Mass Campaign Distributions

The following information describes the roles and responsibilities of distribution team members during a mass campaign distribution. These roles might have different names depending on the context. **Often, programming staff will be assigned these roles, but supply chain staff may also be assigned one of these roles.**

Distribution Team Leader

The Distribution Team Leader:

- Coordinates with community leaders and the distribution committee before the distribution event.
- Makes sure that the service delivery point is properly set up and secured according to the planned layout.
- Signs off on the receipt of goods at the service delivery point.
- Oversees the distribution team and the distribution process during the distribution event.
- Makes sure that clear and adequate information about the distribution is provided to program participants and that a feedback and response mechanism is in place (also settles any disputes during the distribution event).
- **After the distribution event ends:** Prepares distribution reports and returns remaining goods to the storage location that dispatched the goods.

Distribution Assistant

The Distribution Assistant oversees site setup and distribution operations (e.g., goods storage area, distribution points, and reception process), as directed by the Distribution Team Leader.

Security Guards

Security guards are positioned at entry and exit points, around the perimeter, and at the truck offloading site to make sure that unauthorized individuals do not enter the distribution area and that the program participants are flowing well through the service delivery point.

Reception Table Staff

These are staff placed at the reception table to receive and verify registration cards/vouchers. They group households and call groups into the distribution zone.

Guides

Guides accompany groups of program participants from the reception table through the distribution area and out to the redistribution/repackaging area.

Distributors

Distributors manage the handover of goods to program participants and oversee the status and restocking of goods at their stations. Heavier goods (e.g., 50 kg sacks of food) should be handled by two distributors at the station, while lighter goods (e.g., blankets and jerry cans) might only require one distributor per station.

Stock Manager

The Stock Manager oversees the discharge of trucks, the counting and stacking of the goods, and the movement of goods into the distribution zones. This role also assists the distributors with restocking needs.

Exit Monitor

The Exit Monitor marks the group's household voucher, registration card/voucher, and other documents to confirm the completed distribution for each program participant's household. This role also updates and maintains the program participant sign-off form for the goods received and program participant feedback.

Monitoring Officer

The Monitoring Officer documents the distribution with pictures, videos, and written observations. This role makes sure that the distribution event meets the objectives of the distribution plan. The Supply Chain Monitoring Officer or staff from the MEAL team may fill this role.

For Routine Distributions

The figure below lists the functions and activities of six roles involved in CRS-managed routine distributions from a clinic or store.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Function/Activity	Program Manager/ Chief of Party	Supply Chain Manager	LMIS Officer	Store or Clinic Manager	MEAL Team	Monitoring Officer
Receives goods at the service delivery point and completes the Delivery Note (DN) and Goods Received Note (GRN) (if needed)	C			R		
Maintains good storage practices at the service delivery point *				R		
Accounts for goods that are distributed from the service delivery point	A	C		R	I	
Returns excess or damaged goods to the storage location that dispatched the goods	A	I		R		I
Prepares and submits distribution reports	R	C		C	C	A

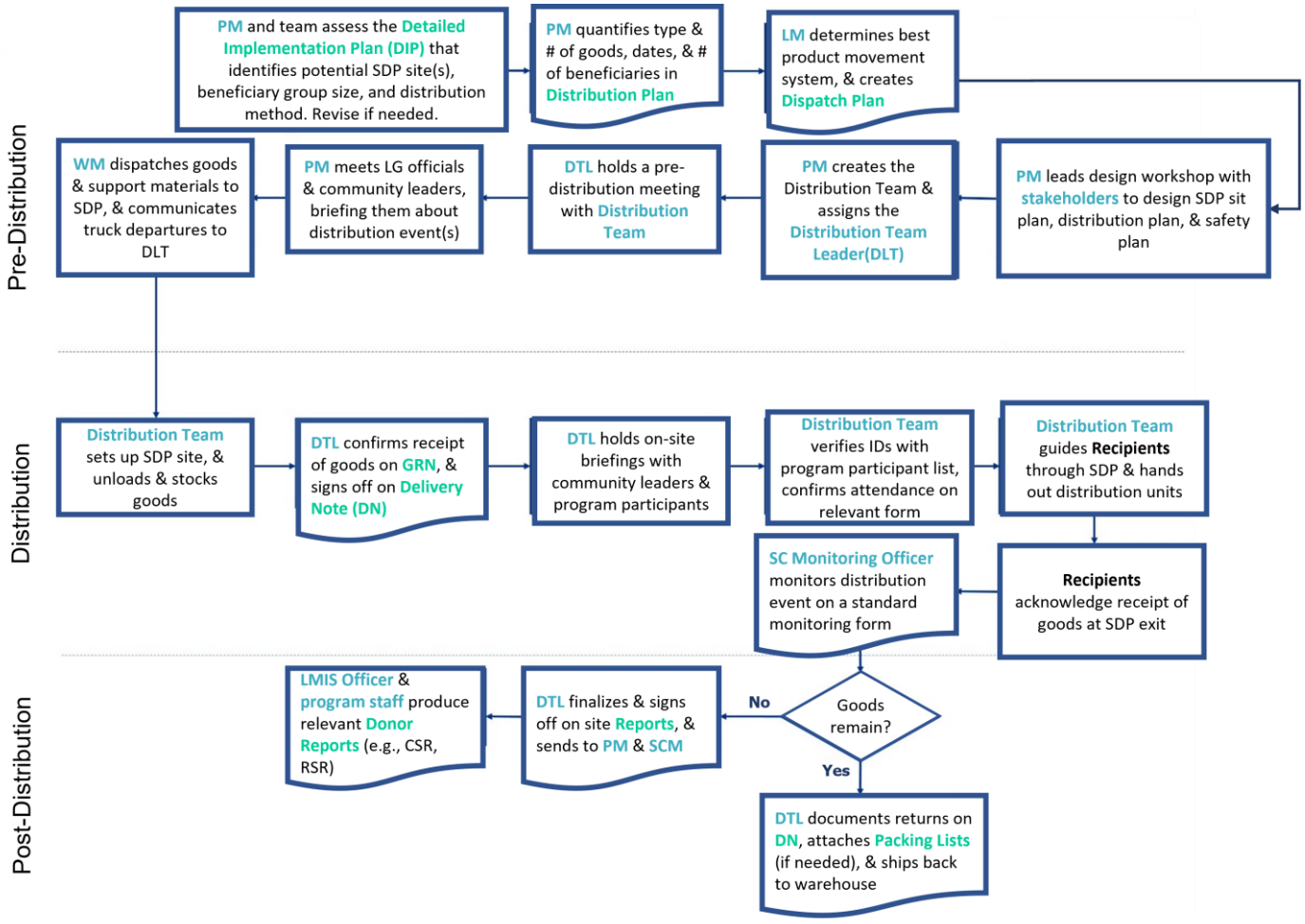
R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

*For in-depth guidance on storage best practices, see the Warehouse and Inventory Management chapter.

12.4 PROCESSES

The figure below shows the process for D-goods.

For information about issuing out ND-goods, see the Issuing Out ND-Goods section at the end of this chapter.



When designing and implementing a distribution event, supply chain staff should always be aware of a specific policy or donor requirements that must be followed.

PRE-DISTRIBUTION

Distribution Planning

The Distribution Plan is a living document that is continuously reviewed, updated, and shared throughout the project lifecycle to align project needs with supply chain activities.

Planning for distribution first begins during the project design stage. If there is a distribution component in the design of the project, the proposal lead should make sure that the Supply Chain Manager is involved in design workshops when developing the distribution event proposal (see Design).

During start-up, the Distribution Plan is drafted by the Program Manager or Chief of Party using the Detailed Implementation Plan (DIP). The Supply Chain team uses the distribution plan to inform their supply chain activities (see Start-Up).

The Distribution Plan should be reviewed throughout the project implementation cycle and updated, as necessary. All updates should be communicated to the Supply Chain team.

DISTRIBUTION

General Distributions/Mass Campaigns

Distribution of CVA Assets

Supply chain staff are only involved in CVA distributions in which CVA assets are distributed to program participants. The term "CVA assets" refers to physical items that represent or store the value of the CVA transfer including (but not limited to) paper vouchers, e-vouchers, e-cards, and smart cards.

For programs that use **paper vouchers or single-use e-cards**, a "distribution" occurs each time cash or voucher values are transferred to program participants. Supply chain staff executes the financial transactions to reflect these one-time distributions.

For programs that use **multi-use e-vouchers and e-cards**, "top-ups" can be added electronically to the previously distributed vouchers or cards. Programming and finance staff execute the financial transactions to reflect these recurring distributions.

The processes and guidance in this chapter for general distributions also applies to distributions of CVA assets, except as described below.

- Several process steps are **not applicable to CVA** (receiving goods from the transporter, managing day laborers, unloading, and stocking goods at the service delivery point).
- **Additional CVA-specific process steps or guidance** will be highlighted in this chapter after each step in the distribution process.

For in-depth guidance on implementing fairs as distribution events, see the Agricultural Fair and Voucher Manual.

Prepare for the Event (One to Five Days Before the Distribution)

Any changes to the event (e.g., the type of goods to be distributed, the method of verifying registration or registration card/vouchers) **must be communicated in advance** through the local leadership or direct communication with program participants (e.g., posted announcements and SMS), **not during the event.**

Preparing for a Distribution Event Checklist

CHECKLIST *Preparing for a Distribution Event*



Starting one to five days before the distribution event happens, the **Distribution Team Lead:**

- ☐ Works with the country program security focal point, the Program Manager/Chief of Party, and others to review the service delivery point conditions and decide if contingency plans should be activated.
- ☐ Receives preliminary security clearance from the country program security focal point.
- ☐ Communicates with the Logistics Manager about the status of incoming goods.
- ☐ Informs the local community leadership about the distribution date and time (makes sure that the local community leadership is aware of their responsibility to inform program participants about the distribution).*
- ☐ Gets sign-in sheets, distribution lists, and other distribution materials ready.
- ☐ Sets up complaint/feedback mechanisms.
- ☐ Holds a team meeting with the distribution team (see meeting topics below).

Distribution Team Meeting Topics



Review of the service delivery point and the safety and security plan



Testing of equipment to be used at the distribution event such as smartphones, megaphones, scales, etc.



Assignment of roles and responsibilities to each team member for the distribution event (e.g., who sits at the reception desk, who collects recipient comments/ complaints, etc.)



Discussion of team member roles and responsibilities at the distribution event, with training as needed

*Recipients should be informed about the planned distribution event details, the selection criteria, registration processes, the assistance they will receive, and any documentation or conditions that are required before receiving assistance.

☐ **Please see below for context-specific callout boxes that also apply.**

The **Program Manager**, supported by the **programming team**:

- ☐ Asks the finance team to transfer funds to the Financial Service Provider(s) (FSPs) or mobile money provider(s) (should not do this more than five days before an event).
- ☐ Prepares forms (either paper or electronic) that program participants will fill out as receipt of CVA assets at the event.
- ☐ Works with procurement staff to prepare registration forms for participating vendors in fairs.
- ☐ Sends the Financial Service Provider(s) (FSPs) the approved list of program participants and value of funds to be transferred.
- ☐ Loads, assigns, registers, and activates e-cards (if not doing this during the distribution event).

Usually, e-cards are transported to the service delivery point after they have been loaded. Cards should be activated **during distribution or as close to the distribution event as possible** because the actual value and financial risk of e-cards increase after activation.

If loading funds on cards will take:	**The Program Manager:**
One day or less	Can activate cards after they are all loaded
Multiple days	Must return all loaded cards to the CVA Assets Custodian at the end of each day for safekeeping (to be kept separate from cards that have not been loaded) Should not activate any cards until they are all loaded

The **Distribution Team Lead** (often the Project Officer), supported by the **distribution team**:

- ☐ Makes sure that equipment for the event (phones, scanners) is fully charged and tested and that staff know how to use all equipment.
- ☐ Posts information about the distribution in vendor shops and public locations to inform program participants about the event and vendor locations.

The **Procurement Manager:**

- ☐ Tells vendors the date and time of the fair, the redemption period for the vouchers, and the estimated number of program participants.
- ☐ Discusses with vendors the required documentation and process for payments.



Set Up Service Delivery Point

To prevent stockouts, safety stock (about 5 to 10% extra goods) must be available in case there are damages during transit or unforeseen demand during the event.

Setting Up the Service Delivery Point Checklist

CHECKLIST *Setting up the Service Delivery Point*



Set up must be completed before the start time accepted by community leaders or required by CRS policy or donor regulations.

Before the distribution begins, the **distribution team:**

- ☐ If there is minimal shade at the service delivery point: Puts up tents or provides shade nets to protect the goods from damage and to protect staff and program participants from the elements.
- ☐ Places the goods and equipment at designated stations, as listed below:
  - ☐ Scales that verify the weight of distribution units (e.g., hanging 100 kg scales).
  - ☐ For measurable distribution units such as food: Durable scoops that hold the designated quantity, volume, and weight of distribution units to be distributed per person or per household.
  - ☐ Spare containers that are empty.

Tents can also serve as a barrier from the service delivery point or as an office, shelter, or storage area for electronic equipment and personal items belonging to staff.

Once the vehicles loaded with the goods arrive at the service delivery point, the **Distribution Team Leader:**

- ☐ Makes sure that adequate equipment and safety supplies (e.g., first aid kits) are available.
- ☐ Marks the Goods Received Note (GRN) with the quantity and quality of the goods received and signs the Delivery Note (DN).
  Oversees and assists the distribution team with offloading and stocking goods in a secured area.

Once the vehicles loaded with the goods arrive at the service delivery point, the **distribution team** and **day laborers:**

- ☐ Offload and stack goods in a secured area on plastic tarps, pallets, or other dunnage (whenever possible).
- ☐ Place tarps or other dunnage on the ground in the distribution area where goods will be given to program participants.
- ☐ Set up barriers (e.g., wooden posts with fencing, construction fencing, rope, or other material) to mark the intended flow of program participants, restrict re-entry or entry by non-program participants, and protect goods.
- ☐ Put up signs, posters, and banners around the service delivery point (in local languages) to give program participants key information about the distribution (always check donor branding requirements).
- ☐ Set up supplies and equipment (e.g., tables and chairs, loudspeakers, umbrellas, crowd control stations, food, and water).

Please see below for context-specific callout boxes that also apply.

Before the distribution begins, the **distribution team**:

- ☐ Organizes the CVA assets at the service delivery point either alphabetically or numerically by the names or identification numbers of participants for easy look-up and distribution during the event.



Receiving Goods at the SDP in Insight

Distribution staff cannot enter the receipt of goods directly in Insight, but they may use either of the methods below to communicate the receipt of the goods to a CRS office.

- ☐ ICT4D application (e.g., CommCare).
- ☐ email or SMS to the LMIS Officer.

Once the CRS office has been informed that goods are received, the **LMIS Officer**:

- ☐ Performs a subinventory transfer of the goods from the In-Transit or Partner subinventory into the SDP subinventory.
- ☐ Enters in the "Additional Information" section the estimated number of program participants to be served and the estimated quantity of goods to be distributed.

For more information on these steps in Insight, see the Insight Inventory Reference Guide and the Subinventory Transfer Job Aid.



Do Pre-Event Checks (One Hour before the Distribution) Checklist

CHECKLIST *Doing Pre-Distribution Event Checks*



Starting one hour before the event begins, the **Distribution Team Lead:**

- ☐ Makes sure that:
  - ☐ All distribution team members are clearly identified as staff by their badges or uniform clothing (e.g., shirts or vests).
  - ☐ All staff are at their assigned stations.
  - ☐ All lists and forms are at the reception area (e.g., program participant lists, Registration Card/CVA Asset Receipt Sheets, ICT4D technology).
- ☐ Works with local community leaders to brief program participants on the distribution process, including:
  - ☐ The goods and quantities that they will receive.
  - ☐ The sequence and flow of their movement through the service delivery point to receive goods.
  - ☐ The mechanism that they can use to give feedback on the process.

☐ **Please see below for context-specific callout boxes that also apply**.

Starting one hour before the event begins, the **Distribution Team Lead,** working with local community leaders, tells program participants:

- ☐ How to exchange their CVA assets for cash, goods, or services.
- ☐ Which vendors or Financial Service Providers (FSPs) can exchange their CVA assets for cash, goods, or services.
- ☐ When and how their CVA assets will be collected at the end of the activity or project (if they are to be collected).



Inventory Management of Electronic CVA Assets

When a project wants to collect electronic CVA assets at the end of the project or activity for future reuse, program participants should be told during the distribution when and how their CVA assets will be collected.

CVA assets that are **collected from program participants** at the end of a distribution event (e.g., fair) **should not be issued out** of the inventory management system. For more information on this process, see Issuing out CVA Assets in Insight.

CVA assets that **leave the service delivery point with program participants** at the end of the event must **be issued out of the inventory management system after their distribution and issued into the inventory management system after their recovery**. For more information, see Returning CVA Assets to CRS in Insight.



Run the Event

If commodities appear to be damaged, they must be removed from the distribution event and returned to the dispatching warehouse for loss handling.

Running a Distribution Event Checklist

CHECKLIST *Running a Distribution Event*



During the distribution event, the **Distribution Team Leader**:

- ☐ Oversees the distribution process.
- ☐ Makes sure that distribution staff remain calm and have all the supplies that they need.
- ☐ Makes sure all stations are filled during the distribution.

Before program participants start collecting their goods, the **distribution team**:

- ☐ Assigns program participants to groups that will enter the distribution area together.
- ☐ Escorts program participant groups into the distribution area to collect their goods.

When it is time for program participants to start collecting their goods, the **distribution team**:

- ☐ Calls program participants to the reception table to show their program participant cards.
- ☐ Verifies the registration card of each person (or household) against the program participant list.
- ☐ Verifies the attendance of each person (or household) at the event, either electronically (e.g., tablet) or manually (i.e., on the registration card or program participant list).
- ☐ Seeks help from community leaders to verify the identities of program participants.
- ☐ Follows contingency plan protocols.

After program participants have collected their goods, the **distribution team**:

- ☐ Escorts program participants to the exit.
- ☐ Helps program participants acknowledge receipt of goods electronically or manually with a signature, thumbprint, etc.
- ☐ Keeps the site clean and free from debris and other obstacles.
- ☐ Replenishes goods at each station as needed.

☐ **Please see below for context-specific callout boxes that also apply.**

During the distribution event, the **Program Manager**:

- ☐ Loads, assigns, registers, and activates e-cards (if not doing this before the distribution event).
- ☐ Tracks CVA assets using printed serial numbers or data embedded electronically.

For electronic CVA assets and paper vouchers with tracking devices (e.g., barcodes or QR codes), the **distribution team**:

- ☐ Scans the program participant's identification and distributed CVA asset(s) to link the CVA asset to the person.

For uncoded paper vouchers, the **distribution team**:

- ☐ Records the serial number(s) of the vouchers on the form signed by the program participants.



Monitoring the Distribution Event Checklist

CHECKLIST *Monitoring the Distribution Event*



During the distribution, the **Supply Chain Monitoring Officer**:

- ☐ Checks 5% of program participants as they are leaving the event to make sure that they are properly registered, received their goods, and acknowledged receipt of their goods.
- ☐ Makes sure that the feedback and response mechanisms are in a private location to safeguard the privacy and safety of program participants and the distributed goods that they received.
- ☐ Monitors the storage practices at the service delivery point to make sure that the integrity of goods is kept safe.
- ☐ Monitors documentation practices to make sure that all goods are accounted for.
- ☐ Monitors any division and repackaging by groups of program participants outside the distribution area of distributed goods that they received.

The Supply Chain Monitoring Officer may answer questions from the program participants but should not interfere with the distribution event or any distribution processes.

Routine Distributions

The processes for receiving and distributing goods in Insight is the same for general distributions and routine distributions (see Receiving Goods in Insight and Issuing Out Goods in Insight).

Routine distributions are conducted at fixed locations such as schools, clinics, pharmacies, and stores. Goods for routine distributions are stored at these service delivery points, and someone at the service delivery point is assigned the role of receiving, managing, and dispensing or dispatching goods from the service delivery point. For stores, the role is called Store Manager. For clinics and pharmacies, the role is called Dispenser. Regardless of the stated job title, the person in this role must follow all storage and inventory management practices closely (for in-depth guidance, see the Warehouse and Inventory Management chapter). The figure below uses the term "Store Manager" but applies to anyone in the role of receiving, managing, and dispensing or dispatching goods from the service delivery point.

For routine distributions, supply chain staff need to know the current stock balance and anticipated demand of products at each service delivery point to make sure there are enough products available to meet program participant needs at each site.

All CRS and partner staff must be aware of a specific policy or donor requirements that must be followed in a routine distribution.

Managing Inventory for Routine Distributions Checklist

CHECKLIST *Managing Inventory for Routine Distributions*



When a shipment of goods arrives at the service delivery point, the **Store Manager:**

- ☐ Follows the processes described in the Receiving chapter to receive the goods.
- ☐ Tells the LMIS Officer or other designee that the goods have been received.
- ☐ Follows the processes described in the Warehouse and Inventory Management chapter to oversee the storage area and store goods at the service delivery point.
- ☐ Keeps an inventory record system (can be as simple as a ledger) to follow stock balances, stock movements, stock movements, losses, and final distributions.

If losses occur while goods are stored at the service delivery point, the **Store Manager:**

- ☐ Moves the goods to a quarantine area and waits for instructions on reconditioning or disposal of the goods*
  - ☐ Pharmaceuticals and food items may need to undergo sampling and testing at an official laboratory before proceeding with next steps.
  - ☐ Some goods may need to be sent back to the dispatching storage location or a primary storage location for disposal.
- ☐ Fills out the Loss Report for any loss and submits for approval.
- ☐ Tells the LMIS Officer or designee about the loss and shares the approved Loss Report.
- ☐ Supports the disposal process and associated documentation.

*For more information on quarantining, reconditioning, and loss handling of goods, see the Warehouse and Inventory Management chapter.

For documentation and reporting purposes, the **Store Manager:**

- ☐ Keeps a program participant list with the date of each distribution, the number of program participants served, and the amount distributed.
- ☐ Talks about distribution events with the LMIS Officer or designee on a regular schedule (e.g., daily, weekly, etc.).
- ☐ Prepares reports on status or other requests/requirements with opening and closing balances of all items, quantities distributed, quantity and value of losses, total program participants served, etc.
- ☐ Gives reports to the Supply Chain Manager and other relevant stakeholders.

☐ **Please see below context-specific callout boxes that also apply.**

At a clinic or pharmacy, the **Dispenser** is assigned the role of **receiving and overseeing** the storage of health supplies and dispensing health products to program participants.

The Dispenser:

- ☐ Gives a medication or health product to the program participant as prescribed in the correct form, dose, quantity, and duration.
- ☐ Looks for and corrects obvious or potential errors made at the time the prescription is given to the program participant).
- ☐ Communicates clearly in a language understood by the program participant.
- ☐ Makes sure that the patient:
    - Fully completes the prescribed treatment (e.g., a course of antibiotics must be completed even if the symptoms subside quickly).
    - Properly handles and uses the products (e.g., keeps medication out of heat or direct sunlight).

At any health service delivery point, the safeguards listed below must be in place.

- The clinic or pharmacy should have a supply of latex gloves and a good disposal system in place.
- For proper preparation of the medicines:
    - The preparation room should have a large counter or table that is clean and easily washable, a source of clean water, and a sink (if possible).
    - The preparation room must be equipped with supplies such as pill counter trays with spatulas, clean spoons, a small scale, latex gloves, disposable surgical masks, etc.
    - The Dispenser must use latex gloves to handle packages and their contents and must never handle health products with bare hands.
- The facility should have a secure area in which all inventory and patient documents are filed.



The callout box below summarizes the process for routine distributions of medication from a pharmacy or clinic.

Routine Distributions from Pharmacies or Clinics

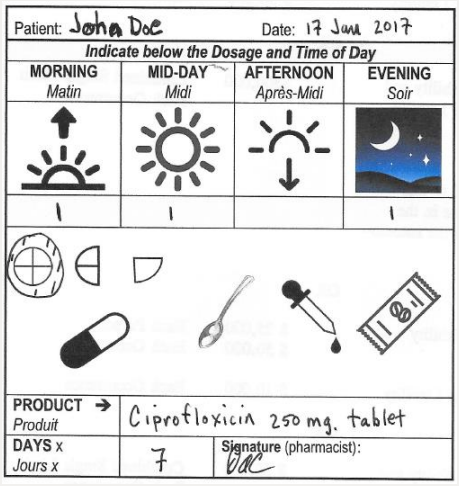
When preparing medication for program participants, the **Dispenser**:

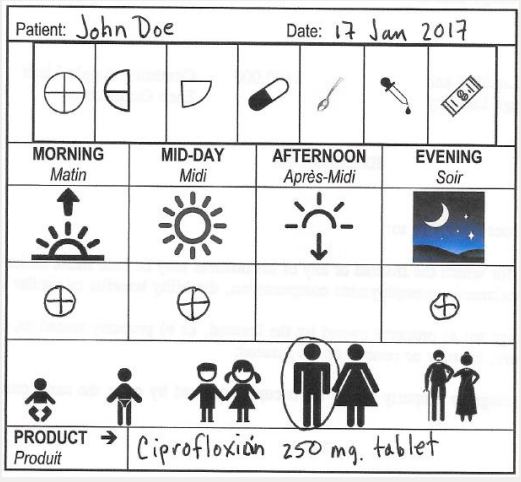
- ☐ Packages the medicine (if not already pre-packaged) in compliance with donor, international, and national preparation protocols.
  - Medicines pre-packed in blisters should **not** be unpacked.
- ☐ Writes instructions for consumption on the package according to good specifications and other regulations.
- ☐ Cleans the tablet counting tray and spatula (or spoon) and table surface after preparing each package to prevent any cross-contamination.
- ☐ Registers the quantities dispensed on a Daily Distribution Report (for an example, see the Pharmacy Report Forms (Health) workbook).

When dispensing medication to program participants, the **Dispenser**:

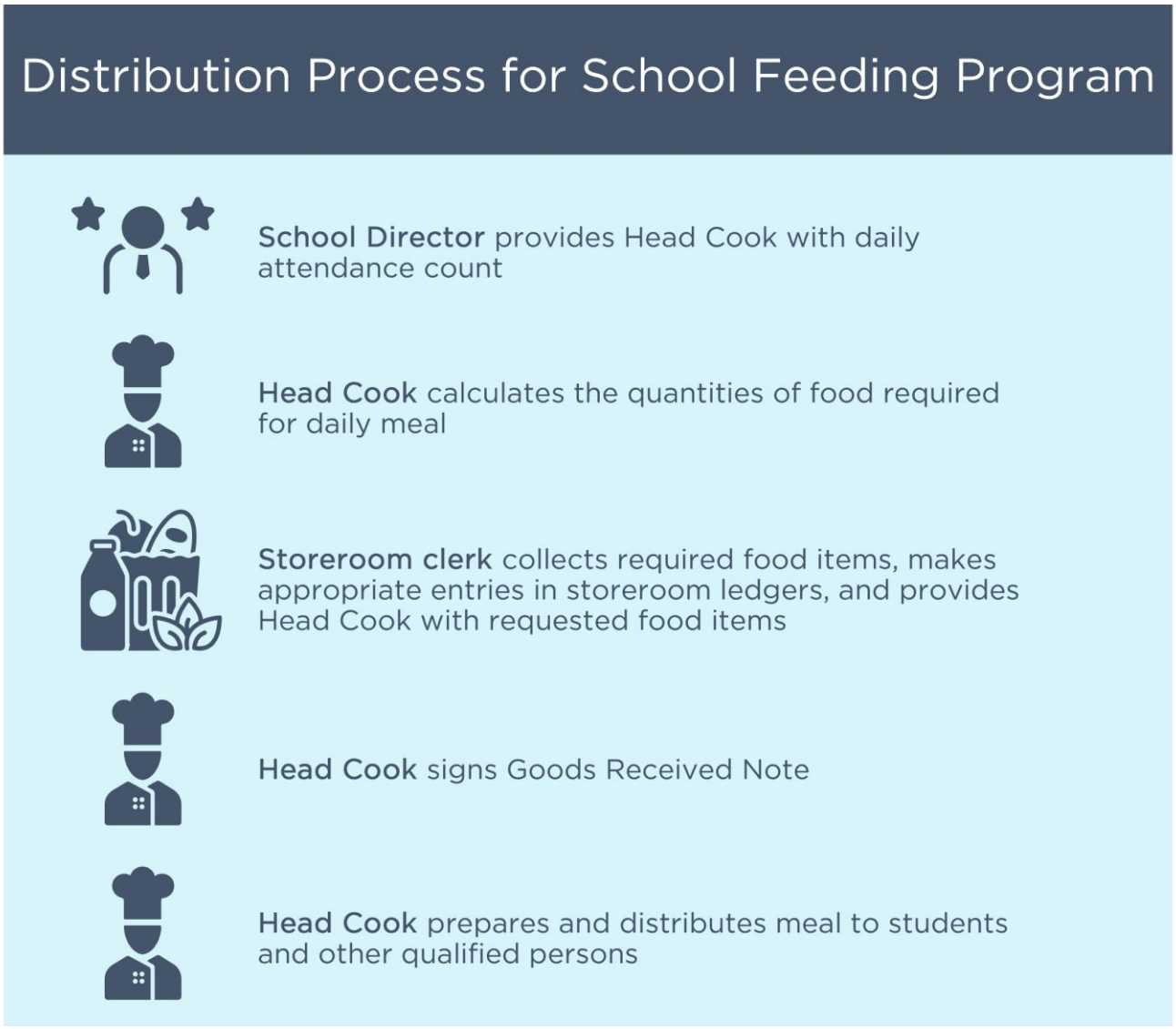
- ☐ Makes sure that patients understand when and how to take their medicines.

Patients should be able to accurately repeat the Dispenser's instructions. In low-literacy areas, pictograms attached to packaging can help program participants understand dosage and use (see examples below).





The figure below summarizes the process for routine distributions of meals from a school feeding program (e.g., the McGovern-Dole Food for Education [FFE] program).



POST-DISTRIBUTION

Post-Distribution Process Checklist

CHECKLIST *Post-Distribution Process*



After all program participants at the service delivery point have received their goods, the **Distribution Team Lead:**

- ☐ Checks on the remaining stock of goods (remaining goods and CVA assets will need to be returned using the Reverse Logistics processes discussed later in this section).
- ☐ Reviews the distribution lists and matches the lists against the remaining stock.
- ☐ Tells local community leaders whether there are program participants that did not receive their goods at the service delivery point.

☐ ■ **Please see below for context-specific callout boxes that also apply**.

Before program participants leave a distribution event, the **distribution team**:

- ☐ May collect CVA assets from the participants (e.g., at the end of a fair or at close-out of the activity or project).
- ☐ If CVA **assets are collected from participants:** Gives all recovered CVA assets to the Distribution Team Lead.

The Distribution Team Lead:

- ☐ Gives undistributed, malfunctioning and recovered CVA assets to the CVA Asset Custodian.

The CVA Asset Custodian:

- ☐ Performs transactions for put away or quarantine and updates the ledger and bin cards.



Issuing Out Goods in Insight

Issuing Out Goods from the SDP in Insight

The following items must be issued out for final distribution from the SDP subinventory in Insight.

- All goods distributed to program participants at a distribution event
- CVA assets that are **not** collected from participants at the end of a distribution event or e-voucher fair (see callout box below for explanation of e-voucher fairs and the distribution process for CVA assets in Insight)

After receiving the distribution reports from the distribution team, **the Warehouse Manager** (for distributions that come directly from a CRS warehouse) **or the LMIS Officer** (for distributions that come through partners or other SDP sites):

- ☐ Performs an Account Alias Issue from the SDP subinventory using the source code "Final Distributions – Issue"
- ☐ Enters distribution data found in the reports in the Additional Information section (this information populates the Insight distribution reports, future MEAL4SCM dashboards, and can be used for KPIs)
- ☐ Attaches the distribution reports and all other supporting documentation

For more information about these steps, see the Insight Inventory Reference Guide and the Account Alias Issue Job Aid.

Issuing Out CVA Assets in Insight

Issuing Out CVA Assets from the SDP in Insight

CVA assets that are collected at the end of e-voucher fairs for re-use at future fairs must be distributed from the SDP in Insight (a project can choose not to collect e-vouchers for re-use).

"E-voucher fairs" are usually one-day distribution events where e-vouchers are distributed to participants at the beginning of the day for use at the fair, then collected at the end of the day for reuse at future fairs.

To distribute recovered and reusable CVA assets at e-voucher fairs, the **LMIS Officer**:

- ☐ Performs a subinventory transfer of the CVA assets from the In-Transit or Partner subinventory into the SDP subinventory (or performs an IO transfer from D-Stores directly to Partner or SDP subinventory)
- ☐ **In the Additional Information section:** Enters the estimated number of program participants to be served and the estimated quantity of CVA assets to be distributed (usually one CVA asset per program participant)

Once the recovered CVA assets are received at the storage location, the **LMIS Officer**:

- ☐ Performs a subinventory transfer from the SDP to the D-Stores or Partner subinventory where the CVA assets were received
- ☐ Attaches the distribution reports and all other supporting documentation

After the LMIS Officer completes the above distribution transactions for CVA assets, the **CVA Asset Custodian**:

- ☐ Performs transactions for put away and quarantine and coordinates with the Program Manager to erase and deactivate the CVA assets, as needed

For more information about these steps in Insight, see the Insight Inventory Reference Guide and the Account Alias Issue Job Aid.

Returning Undistributed Goods to Storage Location (Reverse Logistics)

All unclaimed, damaged, and extra goods and recovered CVA assets must be returned to a storage location after the distribution event is over. The return process is called "reverse logistics." When possible, there should be a vehicle at the distribution event ready to return undistributed goods to the appropriate storage location (warehouse or another storage facility).

Staff on the programming and distribution teams should not keep unclaimed, damaged, and extra goods or recovered CVA assets for use at a future distribution. If these goods are not returned to a storage location after a distribution event, there is an increased risk of theft, loss due to mishandling, and inaccurate reporting to donors.

For more information on reverse logistics, receiving goods, and managing inventory, see the Receiving and Warehouse and Inventory Management chapters.

Returning Undistributed Goods to a Warehouse Checklist

CHECKLIST *Returning Undistributed Goods to a Warehouse*

When returning undistributed goods to a warehouse, the **Distribution Team Leader** with the support from the **distribution team:**

- ☐ Prepares goods for loading by placing goods on dunnage and repacking goods as needed.
- ☐ Manages the vehicle loading process to maintain the quality of goods.
- ☐ Secures the goods with a lock or tarpaulin.
- ☐ Prepares a Delivery Note (DN) with the reason for the return and one or more Packing Lists that details the contents of package (keeps one copy and gives the original and two copies to the Driver).
- ☐ Tells the Warehouse Manager, Administrative Manager, or CVA asset custodian to expect the return.

If the return delivery arrives without a Delivery Note (DN), the staff receiving the goods must prepare a Goods Received Note (GRN) that lists every good received at the storage location, the condition of the packaging, and the general status of the item. This may be paper-based or documented in Insight depending on who needs to have a copy of the Goods Received Note (GRN).

Please see below for context-specific callout boxes that also apply.

The Program Manager should deactivate electronic CVA assets as soon as possible to reduce the risk that the CVA assets will be used by someone other than the intended program participant.

Returning Goods to CRS in Insight

Returning Goods to CRS from the SDP

Distribution staff cannot enter the return of goods directly in Insight, but they may use either of the methods below to communicate the return of the goods to a CRS office.

- ICT4D application (e.g., CommCare)
- email or SMS (e.g., SMS) to the LMIS Officer

After receiving the information about the return, the LMIS Officer:

- ☐ Performs subinventory transfers as the goods move back upstream

After the returned goods are received at the storage location, the LMIS Officer:

- ☐ Performs an IO transfer from the external IO to the internal IO where the goods were received

From here, the Warehouse Manager:

- ☐ Performs transactions for put away and quarantine as needed

For more information on these steps in Insight, see the Insight Inventory Reference Guide, the Subinventory Transfer Job Aid and the Interorg Transfer Job Aid.

Returning CVA Assets to CRS in Insight

Returning CVA Assets to CRS from the SDP

After the recovered CVA assets are received at the storage location, the LMIS Officer:

For CVA assets that were undistributed or were distributed and collected in the context of a fair

- ☐ Performs an Interorg transfer from the external IO to the internal IO where the goods were received.

For CVA assets that were recovered from program participants after being issued out

- ☐ Performs an Account Alias Receipt (Source Code: Returns fr Partner/SDP-Rct).
- ☐ Chooses No for Use Current Cost.
- ☐ Enters a cost of 0 USD for the recovered CVA assets.

After the LMIS Officer completes the above return transactions for CVA assets, the **CVA Asset Custodian**:

- ☐ Performs transactions for put away and quarantine and coordinates with the Program Manager to erase and deactivate the CVA assets, as needed.

For more information on these steps in Insight, see the Insight Inventory Reference Guide, the Subinventory Transfer Job Aid, and the Interorg Transfer Job Aid.

Reporting Distribution Data

Running Distribution Reports in Insight

The Supply Chain Manager, the Logistics Manager, the LMIS Officer, and any person assigned the Logistics Manager persona can generate distribution reports in Insight.

For more information about these steps, see the Insight Inventory Reference Guide, Summary of SCM Reports guide, and the Running a Supply Chain Report Job Aid.

Reporting Distributions after an Event Checklist

CHECKLIST *Reporting Distributions after an Event*



Within one business day after the distribution is completed, the **Distribution Team Leader:**

- ☐ Prepares the distribution report with the information listed below (for examples of report formats, see Report - Distribution – Example x2):
  - ☐ The date and time of the distribution event.
  - ☐ The event duration.
  - ☐ The number of program participants served at the distribution event.
  - ☐ The number of program participants that had to be turned away from the distribution event.
  - ☐ The quantity of goods distributed at the event.
  - ☐ Any other distribution details required by CRS policy and/or donor requirements.
- ☐ Scans and submits the documents listed below to the Program Manager/Chief of Party, LMIS Officer, data entry team, and all other relevant stakeholders:
  - ☐ The distribution report.
  - ☐ Distribution lists.
  - ☐ Delegation forms.
  - ☐ Delivery Notes (DNs).
  - ☐ Goods Received Notes (GRNs).
  - ☐ Packing Lists.
  - ☐ Photographs taken during the distribution event.
  - ☐ Any other supporting documents.
- ☐ If a video was taken during the distribution: Uploads and shares video within two working days.
- ☐ For cash transfers: Gives the finance team the original distribution lists.

CONTINUED *Reporting Distributions after an Event*



Within one business day after the distribution is completed-

The **Distribution Monitoring Officer** (if present at the distribution):

- ☐ Writes and submits the monitoring evaluation report to the Program Manager/Chief of Party, Monitoring Evaluation Accountability Learning Manager, and Supply Chain Manager.

The **Program Manager/Chief of Party**, working with the **LMIS Officer**:

- ☐ Uses the distribution reports and monitoring report to produce relevant donor reports as required by the reporting schedule (e.g., the Commodity Status Report or Recipient Status Report for USG food assistance projects).

Within the project-specified period of time after the distribution event,

Members from the **monitoring, evaluation, accountability and learning team:**

- ☐ Conduct post-distribution monitoring (PDM).
- ☐ Share the post-distribution monitoring (PDM) reports with the Program Manager/Chief of Party, Supply Chain Manager, and any other relevant stakeholder(s).

Please see below for context-specific callout boxes that also apply.

Understanding CVA Distribution Data in Different Platforms

Cash and Asset Transfer (CAT) Platform

The Program Manager manages CVA transactions in the Cash and Asset Transfer (CAT) platform or other electronic transfer platforms. These platforms track **the value of assistance transferred to program participants** and indicators such as **the dates and locations that CVA transfers were used by program participants** and, in some cases, **how the transfers were spent** (e-vouchers).

LMIS Database

In countries that have LMIS and/or use an electronic platform to manager CVA transfers, the Supply Chain Manager makes sure that distribution data is entered in the LMIS database.

This distribution data captures **the value of CVA assets** that were:

- Distributed at a distribution event or e-voucher fair but were not collected from program participants at the end of the event or fair.
- Collected from program participants at the end of e-voucher fairs for re-use at future fairs.

Supply chain staff should be aware this distribution data gives an **incomplete picture of total CVA distributions**, as noted below.

- It **does not capture the value of funds transferred to program participants** through the CVA assets.
- It **does not capture "top-ups"** to recovered CVA assets (the electronic transfer of funds to previously distributed CVA assets).
- It **does not capture the value of funds delivered to program participants using other mechanisms** (i.e., not CVA assets) such as bank transfers, over-the-counter transfers through Financial Service Providers (FSPs), or cash-in-envelopes.

Insight – Finance Module

Programming, procurement, and finance staff must be careful to enter the correct CVA expenditure type codes in Insight. These codes are tied to the Global Results Indicator 2.1 in the Insight finance module to capture **the total value of cash and vouchers transferred to program participants**. For more information on this indicator, see the Global Results User Portal.

For more information, see the Monitoring chapter.



Comparing Health Commodity Distribution Data Entered in Different Platforms

In countries that have LMIS and/or use another service delivery database to manage the distribution and logistics data for health commodities, the Supply Chain Manager and the Distribution Team Leader work together to compare LMIS and service delivery data for health commodities.

Who?

- ☐ The **Supply Chain Manager** makes sure that the logistics data is entered in the LMIS database (if available for the health commodity that was distributed).
- ☐ The **Distribution Team Leader** makes sure that the distribution data is entered in the service delivery database (if available for the program).

Why?

Comparing LMIS and Service delivery data immediately after distribution can help identify data discrepancies while still close in time and place to the distribution event, allowing staff to reference source documents to verify and validate data before reporting.

When?

The comparison of LMIS and service delivery data should be done as soon as possible after the distribution event and should be done for each service delivery point (rather than aggregated by district or state).



Tools, Templates, and Examples

Most donors have specific reporting requirements. Supply chain staff should be aware of these requirements and should establish systems that support programs staff in complying with them. Below is a list of tools, templates, and examples that can be used for reporting.

- Tool - Distribution Group Ration Size Calculator
- Tool – Distribution Supply Checklist
- Template - Registration Card/Voucher Coding Sheets
- Template - Goods Received Note (GRN)
- Example – Household Registration Form
- Example – Household Registration Card/Voucher
- Example - Pharmacy Report Forms (Health)
- Example - Distribution Reports

Monitoring Distribution Performance

Below are examples of metrics that can be used to monitor distribution performance. For more information about these metrics and how they can be used for performance monitoring, see the Performance Indicator Reference Sheets (PIRS) section in the Monitoring chapter.



ISSUING OUT ND-GOODS

ND-goods do not need a dispatch or distribution plan to be issued out from inventory. A request for the release of goods from the office store or other storage location may be communicated from the requestor to the Administrative Manager or Warehouse Manager by email. The Administrative Manager or Warehouse Manager than works with their team to pick the items from inventory.

If the requested goods are not in stock, the Administrative Manager or the Warehouse Manager contacts the requestor and the procurement team.

Upon receipt of the requested items, the requestor should do a quick visual inspection of the goods to make they have received the correct goods.

After the requestor receives the requested items, the Warehouse or Administrative teams then update all relevant bin cards and inventory records.

To issue out ND-goods to staff, the Warehouse Manager or the Administrative Manager assigned the Warehouse Manager persona should perform an Account Alias Issue using “ND Goods – Issue” as the source code. For more information, see the Insight Inventory Reference Guide and Account Alias Issue Job Aid.



Photo by Sara A. Fajardo

Chapter 13: Records Management

13. RECORDS MANAGEMENT

Purpose

> This chapter enables supply chain staff to set up, secure, use, and maintain a supply chain records management system following the applicable requirements of CRS, donors, and the local, regional, and national governments where CRS operates.

13.1 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

Supply chain staff must comply with U.S. regulations and laws and donor regulations as well as regional, state, and local record retention and data privacy laws in the jurisdictions where CRS operates.

At the country program level, the Country Representatives, Heads of Operations, and Heads of Programming must annually review non-U.S. government donor awards and regulations governing records management and retention requirements to fully comply with those regulations.

CRS POLICIES AND PROCEDURES

- CRS Records Retention Policy, Procedures, and Schedules
- CRS FFATA Reporting Procedure
- CRS Financial Transaction Documentation Policy (POL-FIN-DOC-008) and Documentation Matrix
- CRS MEAL Policy 9: Responsible Data
- CRS Supply Chain Records Management Policy

CRS GUIDELINES

- CRS Cash and Asset Transfer (CAT) User Portal
- CRS Data Classification Guideline
- CRS Field Office Manual – Records Management Procedures and Guidelines
- CRS ICT4D Data Privacy and Protection Guidelines
- CRS Managing Electronic Records at the Desktop Level: A User's Guide
- CRS Records Management Resource Guide and Handbook
- CRS Responsible Data Guidelines
- CRS The Overseas Offices Records Management – Policies and Procedures Manual

DONOR POLICIES AND REGULATIONS

- 2 CFR Part 200.334 – Code of Federal Regulations – U.S. Agency for International Development – Retention Requirements for Records
- African Union Convention on Cyber Security and Personal Data Protection
- DLA Piper, Data Protection Laws of the World
- General Data Protection Regulation (GDPR) of the European Union (EU)
- Harrison Law Group Record Retention Requirements under Federal, State, and District of Columbia Law, Jan. 20, 2014
- 2015 International Compendium of Data Privacy Laws
- National Council of Nonprofits: Document retention policies for nonprofits
- WHO - Annex 5: Guidance on Good Data and Record Management Practices

DONOR AND OTHER GUIDELINES

- The Global Fund: Article 7

13.2 OVERVIEW

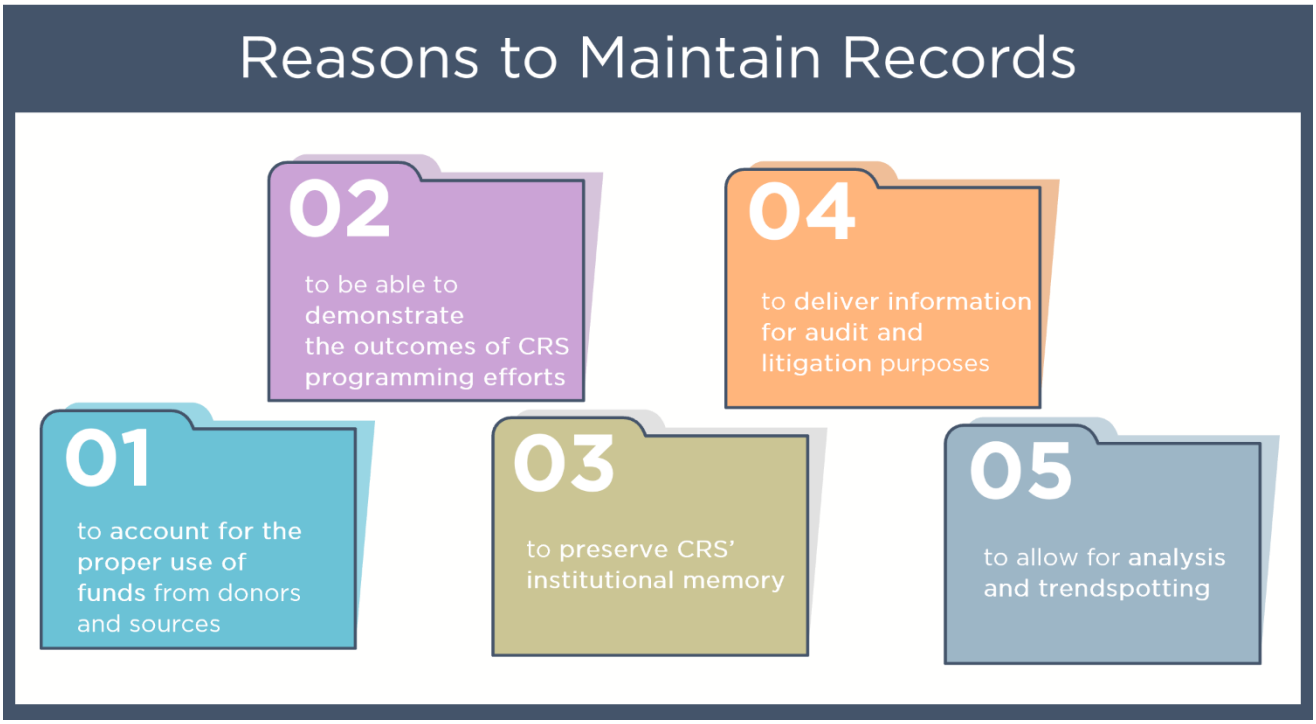
The sections below provide general guidance on supply chain records management, which includes record storage, security, maintenance, and disposal/destruction.

New CRS staff must be familiar with all supply chain data and records management requirements in this chapter. For support, contact the Supply Chain Manager or Head of Operations.

REASONS FOR RECORD MAINTENANCE

Proper supply chain recordkeeping is necessary for compliance with CRS, donor requirements, and local, regional, and national government regulations. Maintaining records is a valuable tool for accomplishing the CRS mission by ensuring efficient operations and managing project risks.

CRS maintains records for many reasons, including those listed below.



BEST PRACTICES FOR RECORDS MANAGEMENT

The CRS Records Retention Policy, Procedures, and Schedules details requirements for managing supply chain data and records. The records management lifecycle includes the storage, retention, and disposal/destruction of such records.

Supply chain staff must comply with the CRS Supply Chain Records Management Policy. This policy lists which records should be maintained in which file and to which transaction a record should be attached. The policy also lists who is responsible for maintaining the file or attaching the record to the system of record.

For questions about the policy, contact the Supply Chain Manager, Head of Operations, SCM Regional Technical Advisor, or the Deputy Regional Director/Operations.

Data Security

All supply chain records must be stored in a secure, easy-to-access physical or electronic location. Records with sensitive information about CRS employees or program participants—such as addresses or medical histories—must be stored properly and securely to maintain integrity and uphold confidentiality. The Country Representative and Head of Operations for each country program office define specific security protocols and contingency plans for the storage of supply chain records with sensitive and confidential data (e.g., a safe to lock paper records with program participant information).

For more information about personal information and data security, see the MEAL Policy no. 9 on Responsible Data, CRS Responsible Data Guidelines, Data Classification Guideline, the ICT4D Data Privacy and Protection Guideline, the 2015 International Compendium of Data Privacy Laws, or contact the CRS/Global Data Security Team or CRS/Global MEAL team directly.

Storage

Supply chain records are maintained in the system of record, which varies by country program. Systems of record typically include Insight, SharePoint, or OneDrive. Insight is the system of record for country programs that are live in Insight, although SharePoint and/or OneDrive may be used to supplement. A physical ledger is the most basic system of record used by a country program office without Insight. For documents that must be captured within the system of record, see the CRS Supply Chain Records Management Policy.

Most supply chain records may be stored and retained in electronic and/or physical formats. For details about requirements for financial records, see the Financial Transaction Documentation Policy's Documentation Matrix.

Storing Electronic Records

Filing System for Electronic Records Checklist

CHECKLIST *Filing System for Electronic Records*



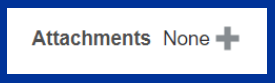
To create a filing system for electronic records, supply chain staff must:

- ☐ Name files logically and consistently so they are easily accessible to all staff.
- ☐ Follow any standards set by the IT department for adding metadata (if using metadata) or using a folder structure for every file.
- ☐ Save every file to the appropriate folder.
- ☐ Store files that contain sensitive or confidential data in a document library with secure and limited access.
- ☐ Inform staff with access to a secure library about the sensitive and confidential nature of records stored in such library.

Please see below for context-specific callout boxes that also apply.

Attaching Records in Insight

For most transactions, attach the documents that are listed in the Supply Chain Records Management Policy. Add attachments using the attachments function in Insight:



For procurement transactions that require approval, the approver will review to make sure that all the required documents are attached.

Contact IT staff for information or support on: (a) ICT systems and electronic record storage that is being implemented in the country program; and (b) file naming, folder structures, and the use of metadata in the complementary systems to find documents quickly and easily when needed.

Storing Active Paper Records

Filing System for Active Paper Records Checklist

CHECKLIST *Filing System for Active Paper Records*



To create a filing system for paper records, supply chain staff must:

- ☐ Clearly label file folders, folio binders, binder sections, file cabinet drawers, and file drawer dividers for easy identification of contents.
- ☐ Clearly distinguish all headings in the file location.
- ☐ Arrange file folders and folio binders alphabetically by subject, chronologically, or numerically.
- ☐ Maintain a master file list and place it in a central location.
- ☐ Update file lists at least once a year.
- ☐ Store files with sensitive or confidential data securely in a locked cabinet.

Paper records must not be removed without documentation and approval. Individuals that remove records from the filing system should insert a sticky note or piece of paper containing their name, the title of the record(s), and the date the record was removed.

Filing System for Inactive Paper Records Checklist

CHECKLIST *Filing System for Inactive Paper Records*



For paper records that are no longer used for reference but have not reached the end of their retention period, supply chain staff may transfer the records to temporary or permanent storage, as follows:

- ☐ Arrange file folders and folio binders inside a cardboard box alphabetically by subject, chronologically, or numerically.
- ☐ Only store related documents in a single box (e.g., warehouse documents should only be stored with other warehouse documents).
- ☐ Label all boxes for quick identification of contents when in storage.
- ☐ Include a Records Transfer Form and a File Packing List in each box. A hard copy of these documents will be kept in a central office location or stored electronically.

The Head of Operations or Supply Chain Manager reviews all Records Transfer Forms and File Packing Lists and signs each to authorize that the records are ready to be transferred to the archive storage area.

Retention

Supply chain records must be retained for a minimum of 10 years in accordance with the CRS Records Retention Policy, Procedures, and Schedules and the approved country program records retention schedule, and for as long as required by regional, national, and local laws. Specific records management processes are defined at the discretion of the Country Representative and the Head of Operations for each country program office.

Every year, staff must purge records that are no longer needed for CRS operations (including audits, litigation holds, or otherwise) following the approved country program records retention schedule.

Disposal

To safeguard against the unauthorized removal, loss, or destruction of records, supply chain records should be disposed of only in accordance with the approved country program records retention schedule.

Destruction

Records should only be destroyed when they have reached the end of their retention period.

Destroying Paper Records Checklist

CHECKLIST *Destroying Paper Records*



When paper records have reached the end of their retention period and can be destroyed, the supply chain staff responsible for actual destruction must:

- ☐ Destroy paper documents by shredding the records or by another method that would make it impossible to reconstitute the record.
- ☐ Document in a file on SharePoint or OneDrive the title of the record(s) destroyed as well as the manner and time of record destruction.

☐ **Please see below for context-specific callout boxes that also apply.**

Deleting Electronic Records Checklist

CHECKLIST *Deleting Electronic Records*



When electronic records have reached the end of their retention period and can be deleted, the supply chain staff responsible for actual deletion must:

- ☐ Delete the electronic record(s) from the server, including files that are in the recycling bin of SharePoint or OneDrive.
- ☐ Document in a file on SharePoint or OneDrive the title of the record(s) deleted.

☐ **Please see below for context-specific callout boxes that also apply.**

USG Food Assistance Partner-Managed Records

When a partner-operated service delivery point closes, CRS must request that all food distribution records be sent to the CRS main country office to retain the files in a secure location. These files should include all program participant and distribution records.

13.3 ROLES AND RESPONSIBILITIES

All supply chain staff are responsible for the proper management and maintenance of supply chain records that are produced in their functional area, with support from the Head of Operations and the Country Representative.

The supply chain team leads oversee records management for their teams.

The Supply Chain Manager oversees records management for the entire supply chain to ensure alignment with the approved country program records retention schedule and compliance with policy and laws and regulations in collaboration with the Head of Operations. The country program records retention schedule is set by the Country Representative/Country Manager and the Head of Operations.

The table below lists the functions and activities of seven roles involved in supply chain record management. For more information on roles and responsibilities, see the Roles and Responsibilities chapter.

Function/Activity	Supply Chain Manager	Supply Chain Team Leads***	Supply Chain Staff	Head of Operations	Country Representative	Regional Technical Advisor/ Regional Implementation Advisor	Regional Director/ Deputy Regional Director/Operations
Creates and advises on regional procedures for records retention							R
Oversees office records filing or storage system and maintains country program-level records retention and disposal schedule	C	I	I	R	A		A
Oversees the collection, storage, and proper filing/attachment of supply chain records	R	C	C	A		C	
Manages the supply chain records management processes for their teams	A	R	I	C	I	C	
Maintains documentation in Insight and for supply chain transactions	A	R	R	I	I		
Performs spot checks on transactions in Insight to ensure that all records are being attached according to the Supply Chain Records Management Policy	R	I	I	A		R	
Coordinates the collection of requested supply chain records for audit or litigation purposes	R	C	C	C	I		I
Disposes supply chain records in line with the record retention schedule	A	R	R	C	I	C	

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

*** This role Includes Procurement Manager, Warehouse Manager, and Logistics Manager.



Photo courtesy of Hermann Köhler/Caritas international

Chapter 14: Quality Management

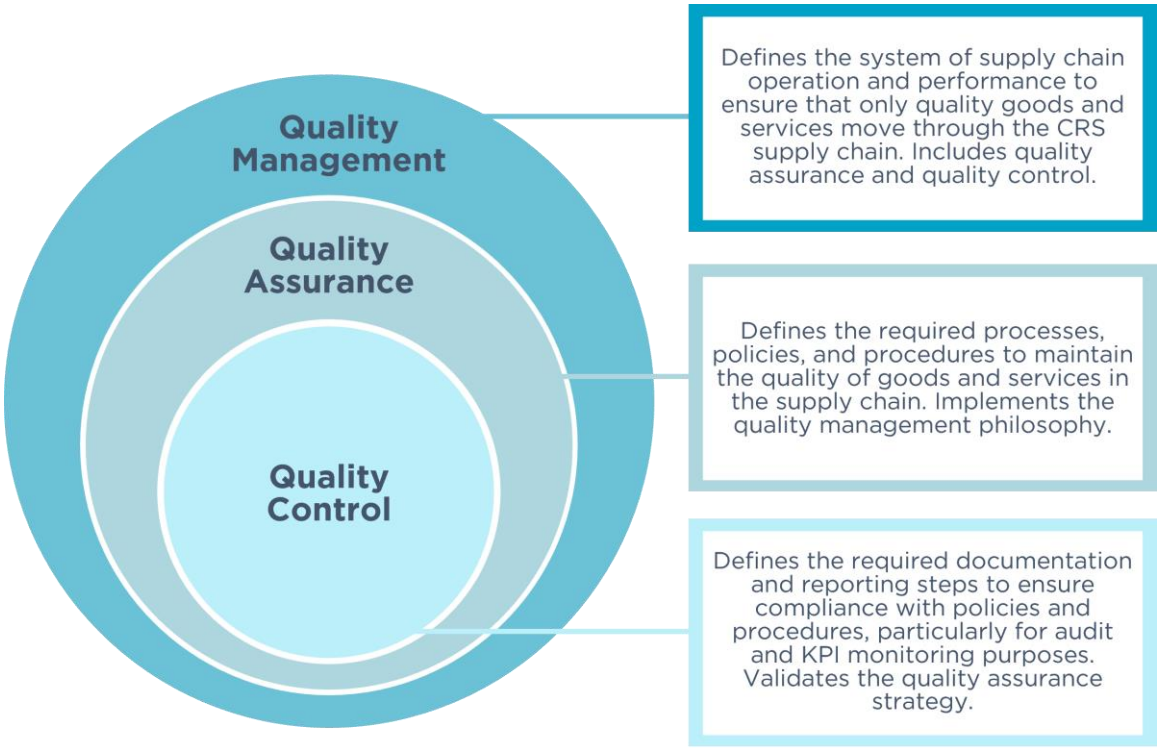
14. QUALITY MANAGEMENT

Purpose

This chapter enables supply chain staff to understand how quality management concepts and terms relate to the global CRS supply chain and to properly manage quality within their assigned role and responsibilities. This chapter defines important terms related to quality management that are referenced throughout this handbook.

14.1 OVERVIEW

Quality management is key to the operation and performance of the CRS supply chain to fulfill the mission of CRS. Quality management ensures that goods and services moving through the CRS supply chain meet CRS, donor, and national and local requirements. Quality management includes quality assurance and quality control and is also called Total Quality Management. The figure below defines and shows the relationship between quality management, quality assurance, and quality control.



Three indicators of a successful quality management system include:

1) When CRS only purchases goods and services that are of sufficient quality to meet program needs.

2) When low-quality goods or services are detected and removed from the supply chain before they are distributed to program participants, partners, CRS staff, or other end users.

3) When program participants, partners, CRS staff, or other end users are satisfied with the goods or services they have received.

Feedback and response mechanisms can provide information about how satisfied program participants are with the goods or services they have received. For more information about feedback and response mechanisms, see the Monitoring chapter and MEAL Policy 6 – Accountability to Program Participants.



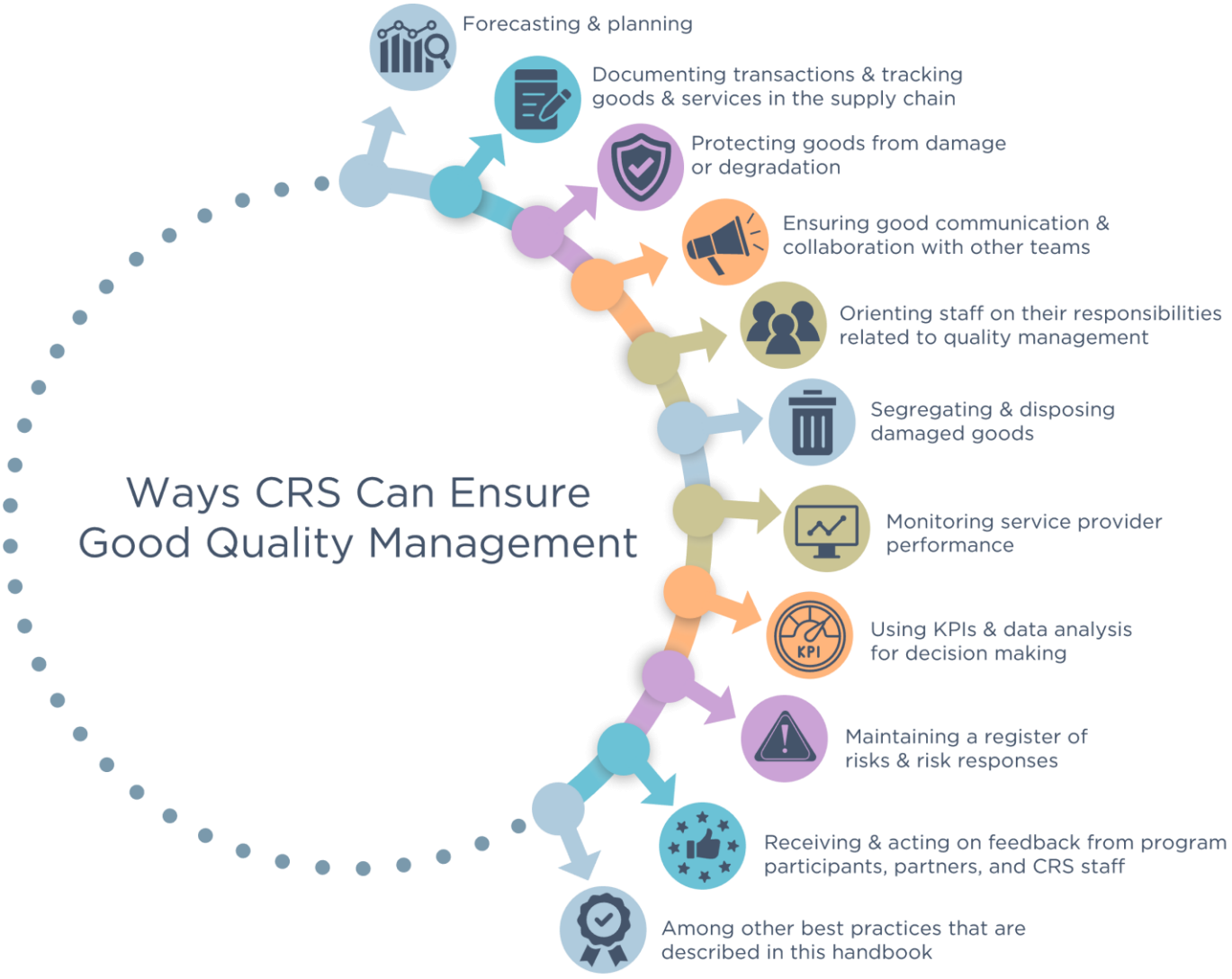
In emergency situations, the quality of goods might be different, and some "desirable" specifications may be sacrificed in favor of timeliness or local market availability.



14.2 TOOLS AND PROCESSES

This handbook provides guidance with tools and processes to help CRS maintain quality goods and services. To proactively identify and mitigate risks, supply chain staff must follow donor regulations and CRS policies and procedures that define quality assurance requirements. To ensure compliance with quality assurance requirements, supply chain staff must design and use quality control tools and processes.

Below are some ways that CRS can ensure quality management.



The below table provides some examples of quality assurance and quality control tools and processes in different functional areas. This is not an exhaustive list.

Functional Area	Quality Assurance (requirements)	Quality Control (adherence / compliance)
Procurement / Sourcing	• Procure only goods and services that meet CRS specifications and—depending on the product or service—meet ISO or certificate requirements • Do business only with approved or pre-qualified suppliers • **For health and LRP food commodities**: Require independent sampling and testing in contracts before goods are dispatched	• Include detailed specifications and scopes of work with the requisition • Include requests for ISO or other certifications in tendering documents • Procure from the WHO Essential Medicines List • Procure from suppliers on the USAID/OFDA Prequalified Pharmaceutical Wholesalers list • Conduct supplier due diligence • Conduct supplier performance monitoring • Ensure satisfactory results of independent sampling and testing before goods are dispatched See Procurement for more information
National Transport	• Use only vehicles that are suitable for maintaining the safety and security of goods and personnel	• Use transport vehicle inspection checklists • Conduct daily vehicle inspection of CRS vehicle assets • Keep the vehicle maintenance schedule for CRS vehicle assets See National Transport for more information
International transport	• Procure service providers that comply with good transportation practices • Procure service providers that have the experience and capabilities to transport goods, especially goods that require special handling • Use only vessels and other transport assets that are suitable for maintaining the safety of goods • Always have a CRS agent at the port of destination during discharge/unloading	• Conduct supplier due diligence • Include requests for ISO or other certifications in tendering documents • Conduct bid analysis • Segregate and dispose of damaged goods • Review survey reports • Conduct shipping pre-inspection • Survey cargo at the point of origin and point of destination See International Transport for more information
Inventory Management	• Inspect goods at receipt before they are put away into inventory • Use only warehouses that are suitable for maintaining the safety and security of goods. • Follow storage and handling practices to maintain product quality and minimize losses	• Sample and test goods • Maintain temperature and humidity control log sheets • Conduct inventory counting • Follow daily warehouse inspection and cleaning schedule • Maintain warehouse documentation (e.g., bin cards)

Functional Area	Quality Assurance (requirements)	Quality Control (adherence / compliance)
	• Segregate goods that are damaged, expired, defective, or suspect in any other way, for investigation and disposal if determined unfit	• Maintain warehouse security (e.g., guards, locks, visitor sign-in) See Warehouse and Inventory Management or the Health Annex for more information

SPECIAL CONSIDERATIONS FOR FOOD AND MEDICINES

Common threats and considerations that are specific to food and medicines are discussed below. Every action in these processes must comply with local laws, donor regulations, and CRS policies and procedures.

For food, quality control procedures range from simple phytosanitary testing in a local laboratory to the identification of infestations, to mitigation of infestation including fumigation.

For medicines, quality control procedures range from regular random sampling and testing in local laboratories to the performance of simple chemical tests that identify the composition and amount of active ingredients in medicines and the presence and amount of foreign substance, to more complicated pharmacopeial monographs.

At the warehouse, quality control procedures are done both before goods arrive and after goods are received, inspected, and put away. Regular inventory and warehouse inspection activities often identify potential issues such as infestation or expiration of goods that must be addressed quickly.

For infestations in the warehouse inventory, once evidence of infestation is identified, fumigation is scheduled for specific bins or the entire warehouse. Once fumigation is completed, the bins are examined again, and any suspect goods are pulled from the bins, quarantined, and reconditioned. Reconditioned goods are always prioritized for dispatch and distribution. Before quarantined goods can be fully declared and documented as a loss and disposed of, or before they are declared fit and can be transferred back into inventory, they must be tested in a laboratory and officially confirmed unfit or fit. At that point, CRS may arrange for disposal of the unfit goods, remove them from inventory and write them off financially, or transfer them back into inventory and make them available for use.

For consumable goods in the warehouse inventory, the Warehouse Manager is responsible for monitoring the expiration dates and best-used-by dates (BUBDs). The distinctions between these dates are shown below.

Best-Used-By Dates (BUBDs)

- Typically used for **food**
- Indicates how long the product will retain the best flavor and quality
- Is not a safety date and is only intended as a quality assurance/quality control guideline

Expiration Dates

- Typically used for **medicines**
- Indicates how long the medicine will retain its efficacy and safety
- Is a safety date after which the medicine can no longer be used

As expiration and best-used-by dates (BUBDs) approach, dispatch and distribution become more urgent. Consumable goods deteriorate at different rates and for different reasons: simple aging, microbiological decay, chemical and physical degradation, loss of potency, texture, color changes, etc. Deterioration types and rates are affected by many factors, both intrinsic (of or within the product) and extrinsic (environmental or outside the product). Monitoring and controlling the processing, packaging, handling, and storing of the product slows, but does not prevent, the deterioration of food and medicines.

Once the best-used-by-date (BUBD) has passed, the food commodity should be sampled and lab-tested to ensure ongoing safety and quality.

Once the expiration period has passed, the medicine must be quarantined and disposed of in strict accordance with local and national regulations governing the use of medicines, as well as other laws, donor regulations, and CRS policies and procedures. Each country program must be aware of and abide by these requirements.

For medical supplies in the warehouse inventory, the Supply Chain Manager, in collaboration with health program staff, determines the cut-off dates after which the medical supplies cannot be dispatched to service delivery points for distribution. Cut-off dates for medicines are generally 60-90 days before their expiration dates. Once goods reach their cut-off dates, they may be redirected to an alternative use such as donation to a local medical facility; loan or donation to another humanitarian agency; or exchange for alternative goods with another humanitarian agency.

14.3 ROLES AND RESPONSIBILITIES

Supply chain teams are responsible collectively for ensuring that all goods and services sourced for internal use or distribution by CRS are of the quality required for their intended use or purpose and that everyone takes all steps to maintain quality and minimize loss and waste.

Function/Activity	Supply Chain Manager	Head of Operations	Warehouse Manager	Procurement Manager
Oversees all quality management requirements, including staying updated on donor, national, and local regulations and CRS policies and procedures	R	R		C
Monitors the expiration dates and best-used-by-dates (BUBDs) of consumable goods in the warehouse inventory			R	
Determines appropriate cut-off dates for medical supplies after which they cannot be dispatched to service delivery points for distribution, in collaboration with health programming staff	R			

R=Responsible; A=Accountable; C=Consulted; I=Informed

Quality management practices and requirements may vary by sector. In general, the health sector requires very robust quality assurance requirements (e.g., ongoing random sampling and testing of medicines). For more information, see the Health Annex.





Photo by Jomari Guillermo

Chapter 15: Monitoring

15. MONITORING

Purpose

This chapter enables supply chain staff to understand and use supply chain indicators, so goods and services arrive for program participants and staff at the right time, place, cost, quantity, and quality. This chapter also enables staff to monitor critical data for early detection and quick mitigation of supply chain disruptions and for timely decision-making and continuous improvement of the overall supply chain.

CRS POLICIES AND PROCEDURES

- CRS Monitoring, Evaluation, Accountability and Learning (MEAL) Policies & Procedures (POL-OOD-PRG-008)

CRS GUIDELINES

- Compass Standard 11 (all key actions)
- Compass Standard 12 Key Action 2
- Responsible Data Values and Principles
- SMILER+ Guide to MEAL System Development

DONOR POLICIES AND REGULATIONS

- 2015 International Compendium of Data Privacy Laws
- Global Fund – Grant Regulations
- USAID Evaluation Policy

DONOR OR OTHER GUIDELINES

- BHA Technical Guidance for Monitoring, Evaluation, and Reporting of Emergency Activities (2022)
- Certification in Humanitarian Supply Chain Learning Materials: Unit 4 – Implementation & Coordination
- Logistics Cluster – Logistics Operational Guide (LOG)
- The Global Fund – Monitoring and Evaluation Indicators Guidance
- USAID|DELIVER – The Logistics Handbook: A Practical Guide for the Supply Chain Management of Health Commodities
- USAID – Measuring Supply Chain Performance: Guide to Key Performance Indicators for Public Health Managers
- USAID – ADS 201 Disaggregating Monitoring Indicators

15.1 OVERVIEW

Supply chain monitoring uses sets of data, indicators, and processes to gather critical information that informs timely decision-making and continuous improvement of the supply chain for goods and services.

Supply chain monitoring is critical to ensure that goods and services arrive at the right time, the right cost, the right quality, the right quantity, and in the right place.

Supply chain staff generally participate in two different types of supply chain monitoring: project-level KPI monitoring and supply chain performance KPI monitoring. Some indicators apply to both types of supply chain monitoring.

15.2 ROLES AND RESPONSIBILITIES

PROJECT-LEVEL MEAL

The figure below lists CRS staff involved in the process of designing, implementing, and using MEAL systems for projects.

Function/Activity	Supply Chain Manager	LMIS Officer	MEAL Staff*	MEAL Manager	Proposal Team	Head of Programming	Programming Manager/ Chief of Party	Country Representative
Selects supply chain-related indicators to include in the project ProFrame	C		I	C	R	A		
Creates MEAL system including designing data collection tools, data mapping, learning plans, etc.	C	C	I	R		A	C	
Collects data per the MEAL system requirements and data flow map	I	I	R	A		I	I	
Analyzes indicators against project objectives and develops reports	A	R	C	C		I	I	I
Determines priority actions based on indicator results	R					A	R	I

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

* MEAL staff also includes distribution team members who collect data at a service delivery point.

SUPPLY CHAIN PERFORMANCE MONITORING

The table below lists CRS staff involved in supply chain performance monitoring processes.

Function/Activity	Supply Chain Manager	LMIS Officer	Procurement Manager	Logistics Manager	Warehouse Manager	Head of Operations	Program Manager/ Chief of Party	Country Representative
Monitors Insight system usage	A	R	I	I	I	I		
Reviews Power BI dashboard and reports	R	R						
Prepares reports	A	R	C	C	C	I		
Shares reports with the team and other departments	R	I	C	C	C	I	I	I
Determines priority actions based on indicator results	R	C	C	C	C	A	C	I

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

15.3 TOOLS

MEAL4SCM INDICATORS COMPENDIUM

The MEAL4SCM indicators are useful tools for measuring supply chain performance and generating supply chain data for CRS reporting requirements. As a tool, MEAL4SCM strengthens the supply chain's strategic approaches and core competencies per the CRS Vision 2030 Strategy.



Vision 2030 MEAL4SCM Strategic Approaches

Catalyze Humanitarian and Development Outcomes at Scale. Monitoring high-quality data drives more timely decision-making and more efficient GSCM processes as strategic change platforms are implemented.



Expand and Diversify Resource Mobilization. Making decisions with high-quality, timely data improves program quality, strengthens program accountability, highlights CRS' visibility in the sector, and increases business development opportunities.



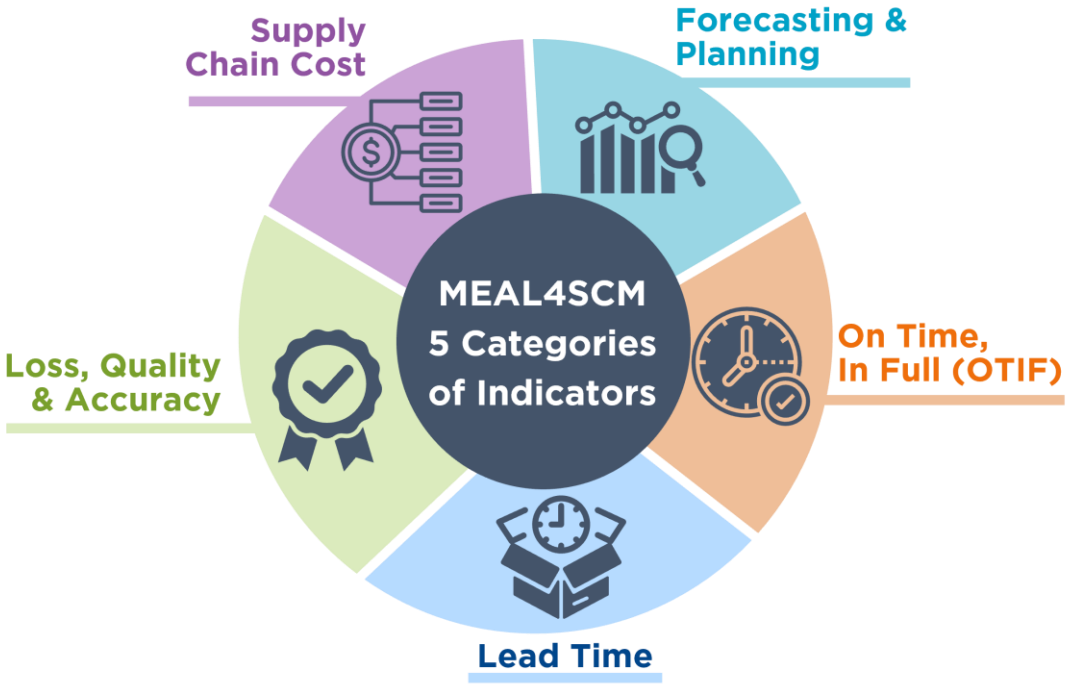
Vision 2030 MEAL4SCM Core Competencies

Monitoring, Evaluation, Accountability, and Learning. Using a sound MEAL approach improves program performance, quality assurance, and accountability.

Digital Technologies. Using a sound set of data and indicators enhances the quality and efficiency of data management.

Operational Excellence. Using a sound set of processes and resources for GSCM activities enhances program outcomes and supports stewardship.

The MEAL4SCM Indicator Compendium has five categories of indicators: Forecasting and Planning; On Time, In Full; Lead Time; Loss, Quality, and Accuracy; and Supply Chain Cost.



These indicators assist teams in continuously assessing and optimizing their supply chain systems. For more information about each of these indicators, see the Performance Indicator Reference Sheets (PIRS) section in this chapter.

On time, in full (OTIF) indicators measure whether items ordered have been delivered on time, with the right specifications, and in the right quantity without any loss, damage, or defects.

Lead time is the amount of time required to initiate and complete a process. From a logistics perspective, lead time starts upon recognition of the need for an item and ends upon receipt of that item by a program participant, partner, or CRS office.

Data Indicators

Below is a list of the data indicators currently available in the supply chain indicator compendium. The indicators marked with a symbol do not require data collection because the information for these indicators comes directly from transactions entered in Insight.

Indicator	Category	Supply Chain Activity
Quantity of goods distributed	Forecasting and Planning	Distribution
Average Distribution accuracy - goods	Forecasting and Planning	Distribution
Average Distribution accuracy - recipients	Forecasting and Planning	Distribution
Percentage of strategic procurements	Forecasting and Planning	Procurement
Inventory turnover rate	Forecasting and Planning	Inventory
Supplier delivery performance	On Time, In Full	Receiving
CRS delivery performance	On Time, In Full	Dispatch and Transport
Average lead time	Lead Time	Procurement
Average procurement cycle time	Lead Time	Procurement
Average supplier lead time	Lead Time	Procurement
Average CRS lead time	Lead Time	Dispatch and Transport
Frequency of loss events	Loss, Quality, and Accuracy	All
Average quantity of unit loss	Loss, Quality, and Accuracy	All
Average value of unit loss	Loss, Quality, and Accuracy	All
Cycle count accuracy	Loss, Quality, and Accuracy	Inventory
PIC accuracy	Loss, Quality, and Accuracy	Inventory
Percentage of POs with higher-than-average unit price	Supply Chain Cost	Procurement

The MEAL4SCM indicators are not a complete list of indicators that a country program may want to use. For support in determining other indicators to implement, contact the Supply Chain Regional Technical Advisor. Before adding other indicators, consider the best balance between the benefits of having good information for decision-making and the time and labor required for collecting and analyzing data.

The MEAL4SCM indicators measure project outputs— not project outcomes or project impacts. The figure below summarizes the differences among output, outcome, and impact indicators.

	Output	Outcome	Impact
Measures	Immediate results	Intermediate results	Project effectiveness
Tracks	Planned versus actual delivery of goods and services	Results or effects caused by the project or program	Positive or negative changes produced by an intervention
Example	% of bed nets delivered on time and in full	% of households using bed nets properly	% decrease in the prevalence of malaria in the targeted community

Different teams and departments share the same MEAL4SCM indicators. At the beginning of a project, programming and supply chain teams should select shared indicators that are measurable and provide the most useful information (e.g., distribution indicators) to monitor supply chain/operational activities. These indicators should be incorporated into the project's ProFrame and MEAL Plan.

For more information, see MEAL System Development and the SMILER+ Guide.

Data Collection

The MEAL4SCM indicators use the data that is already available in Insight. After staff enters data into Insight, the data will then flow from the system into a standard Power BI report that will be accessible to supply chain staff and country program leadership. Staff may use the report to analyze the indicators according to their context and data needs.

For country programs, staff does **not** need to collect data for these indicators or create reports and dashboards. LMIS Officers and Supply Chain Managers have access to a Power BI file where information can be filtered and visualized as needed.

Indicators being tracked that are not in the compendium will require a plan for data collection, data entry, validation, and analysis. For distribution indicators, supply chain, MEAL, and programming should work together to develop shared data collection templates and reports. For more information, see the SMILER+ Guide.

When staff needs to collect data by making direct in-person contact with program participants, follow the protocols developed by the CRS Humanitarian Response Department (HRD) and GSCM in Accountability Measures for Distributions/CVA during COVID-19.

For MEAL COVID-19 Guidance, see MEAL COVID Resources and the MEAL COVID Resources Library.

Data Security and Responsible Data Principles

CRS has developed guidance called Responsible Data Values and Principles to secure and protect any data collected by CRS staff and to protect the rights of program participants, employees, partners, and other individuals to the privacy and authorized use of their data.

To mitigate data privacy and protection risks, staff must practice the principles below when collecting and sharing GSCM data. For more information about these principles, see MEAL Policy 9.

- **Data Minimization.** When starting research and evaluation activities, only collect the data that is strictly necessary for programming or analytical purposes. Any additional data collection might pose a privacy risk or unnecessary extra programming workload.
- **Consent/Assent.** When collecting data for research or evaluation activities, always obtain consent or assent from respondents, for privacy protection and ethics.
- **De-identification.** When sharing data with individuals or entities (internal or external), always mask personal identifiable information (PII) in the dataset from Excel, Access, SQL database, etc. to de-identify individuals. For more information, see Guidelines for De-identifying Data.

All data that contain personal identifiable information (PII) about program participants (such as addresses or medical history) are considered confidential and require extra caution and protection when managing. For more information about data security practices, see the Data Classification Guideline, the ICT4D Data Privacy and Protection Guidelines, and the International Compendium for Data Privacy Laws.

Data Analysis

MEAL4SCM indicators provide valuable information for programming, such as showing program progress toward meeting targets and objectives and identifying issues or areas for performance improvement. The figure below explains how the MEAL4SCM indicators are useful for different CRS teams.

Level	Functional Areas				
	Supply Chain	Programming	Finance	Audit	Leadership
Projects	Evaluates planned versus actual activities Ensures supply chain plans are accurate Increases efficiencies in the supply chain Tracks potential risks, issues, or disruptions	Obtains information for donor reporting Tracks potential risks or issues Analyzes progress against the Detailed Implementation Plan (DIP) and other project plans Ensures programming plans are based on current lead times	Monitors financial accountability	Analyzes distribution information (Distribution Verification Monitoring, or DVM) Determines areas of risk or opportunities for project-level performance improvement	Identifies and tracks project-level risks Monitors project-level losses Evaluates project-level assumptions
Country Programs	Identifies risks or opportunities for efficiencies and performance improvement Ensures that supply chains are optimally designed to meet programming and CRS needs Identifies opportunities to provide capacity-strengthening support to staff and partners	Uses indicator dashboards for all projects to assess output levels	Monitors financial accountability Determines areas for increased cost-effectiveness	Provides important information for focusing audits on particular functions or areas Identifies country program-level risks or opportunities for improvement	Identifies country program-level risks Monitor country program-level losses Uses information available to improve decision-making (budget and resource planning)

Level	Functional Areas				
	Supply Chain	Programming	Finance	Audit	Leadership
Regional Offices	Analyzes regional supply chain trends Identifies opportunities to train or provide TDY and capacity strengthening support to country programs Uses available supply chain data for proposal development	Uses indicator dashboards to analyze the regional project portfolios and assess progress toward regional and global goals	Monitors financial accountability Determines areas for increased cost-effectiveness	Observes regional risks and trends	Uses output level indicators to assess regional trends Identifies targeted performance improvement and capacity strengthening opportunities
Global	Analyzes global supply chain trends Benchmarks indicator results with other organizations Identifies opportunities for global level guidance, training, and communications	N/A	Monitors financial accountability	Observes global risks and trends	Uses output level indicators to assess global-level supply chain trends Obtains supporting information for Agency-level indicators and monitors Agency-level strategy progress

Data Disaggregation

Data disaggregation allows analysts to better observe trends, make comparisons across subgroups, and ensure CRS is accountable to all donors and program participants.

Indicator data in the MEAL4SCM Indicators Compendium might have more than one associated disaggregate. Data for many of the indicators can be used for multiple analytical and reporting purposes, as long as all relevant information for disaggregating the indicator is collected with the data collected for the indicator itself.

What is Disaggregation?

The process of **separating indicator data into subgroups** to better meet analytical needs (see USAID's Disaggregating Monitoring Indicators guidance).



For the indicators currently in the compendium, the data to be disaggregated will come directly from Insight transactions and can be analyzed and filtered using the Power BI reports and dashboards provided to the supply chain.

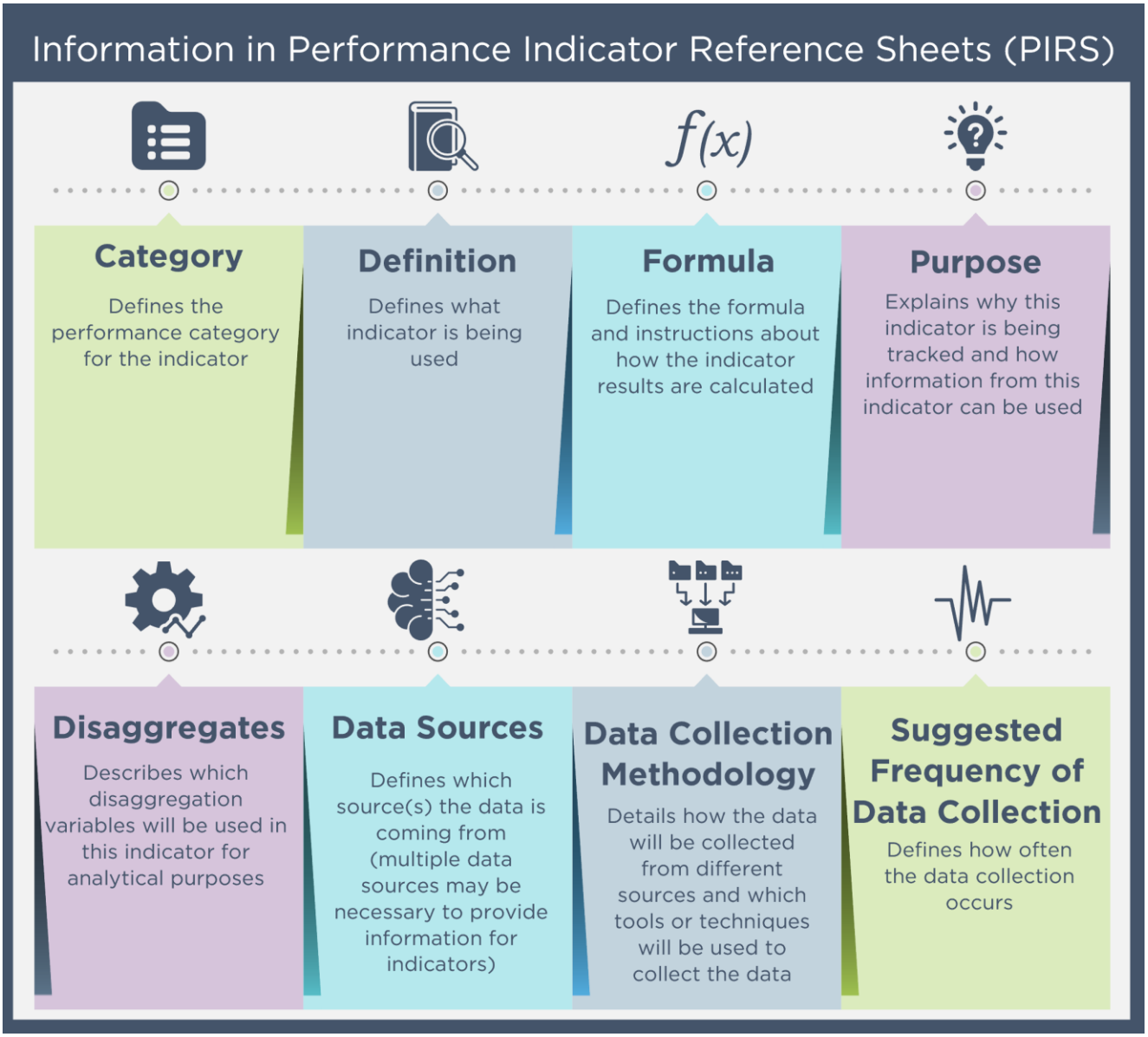
Indicator Support

Support Need	Support Mechanism
For questions about Indicators or Power BI reports or dashboards	Send questions to gscmkml@crs.org
For requests to access Insight or Insight reports	Fill out the Insight System Access Form
For requests to access Power BI	Send a request to servicedesk@crs.org

GKIM has created a User Guide for requesting Insight Access. It can be accessed here.

Performance Indicator Reference Sheets (PIRS)

The Performance Indicator Reference Sheet (PIRS) is a tool used to define an indicator and provide more information about the indicator's purpose, manner of indicator collection, and ways the indicator can be analyzed. Each indicator in the MEAL4SCM Indicator Compendium is accompanied by a Performance Indicator Reference Sheet (PIRS) that contains the information shown in the figure below.



Teams may the adapt Performance Indicator Reference Sheets (PIRS) for MEAL4SCM indicators to meet local needs and local context. For other indicators that are not part of the compendium, teams should develop and maintain a Performance Indicator Reference Sheet for each indicator, for reference. The Performance Indicator Reference Sheet (PIRS) ensures that stakeholders have a shared understanding of each indicator.

Quantity of Goods Distributed

Category

Forecasting and Planning

Definition

This indicator measures the quantity of D-goods by item type delivered to program participants.

D-goods are the inventory items that CRS or its partners issue to program participants through project-level distribution.

Formula

Cumulative quantity of goods by item type distributed to program participants

Purpose

This indicator is used for monitoring other indicators and providing donor reports. For analyzing potential improvements, this indicator should always be chosen with other indicators from the indicator compendium, such as **Average Distribution Accuracy - Goods**.

Disaggregates

- SDP
- Program Participant Group
- Partner
- Timeframe

Data Sources

Miscellaneous Transaction Form (Insight)

Fields:

- Date (**disaggregate**: time period)
- Item (**data point**: goods by item type)
- Locator (**disaggregate**: partner, SDP)
- Transaction Quantity (**data point**: quantity of goods distributed)

Additional information:

  - Program Participant Group (**disaggregate**: program participant group)

Relevant Reports:

- Distribution Analysis Report (Insight)
- Item Status Report (Insight, a.k.a., Commodity Status Report)
- Recipient Status Report (Insight)

Data Collection Methodology

The distribution team enters the quantity of goods distributed in the Distribution Summary Report. This information is submitted to the LMIS Officer or Warehouse Manager, who enters the data in the Miscellaneous Transaction Form (Account Alias Issue) in Insight. The data entered in Insight populates the Distribution Analysis Report and the Item Status Report.

Suggested Frequency of Data Collection

Per distribution

Average Distribution Accuracy - Goods

Category

Forecasting and Planning

Definition

This indicator measures the distribution accuracy between the planned quantity and the actual quantity distributed to program participants.

D-goods are the inventory items that CRS or its partners issue to program participants through project-level distribution.

Formula

Formula A measures the distribution accuracy for one distribution event.

Formula A:

$$\frac{\text{actual quantity}^{\dagger} \text{ distributed at X distribution event}}{\text{planned quantity}^{\dagger} \text{ to be distributed at X distribution event}}$$

Formula B averages the distribution accuracy for all distribution events to measure performance across all distributions.

Formula B:

$$\frac{\text{sum of formula A for all distribution events}}{\text{total number of distribution events}}$$

†The quantity should be calculated with the generic "unit" to be able to compare across different UOM (e.g., 500kg will be calculated as 500 units; 10L as 10 units).

Purpose

This indicator is useful for accurate planning and good stewardship of resources. This indicator informs staff whether projects are procuring and distributing adequate quantities of each item, thereby reducing the likelihood of waste and shortages while increasing the likelihood of meeting program participants' needs. Ideally, this indicator should be equal to or as close to 100% as possible.

If there are particularly wide discrepancies between planned quantities and actual quantities distributed, CRS may adjust assumptions in the distribution plan, increase or decrease the number of SDPs or distribution events, adjust replenishment rates, and/or dispatch more or fewer items to the SDP.

Disaggregates

- SDP
- Partner
- Program Participant group
- Item
- Timeframe

Data Sources

Miscellaneous Transaction Form (Insight)

Fields:

- Date (**data point**: total number of distribution events [dependent on locator and source fields]; **disaggregate**: time period)
- Source (**data point**: total number of distribution events [dependent on date and locator fields])
- Item (**disaggregate**: item)
- Transaction Quantity (**data point**: actual quantity)
- Locator (**data point**: total number of distribution events [dependent on date and source fields]; **disaggregate**: SDP; partner)

Additional Information:

- Estimated Quantity (**data point**: planned quantity)
- Actual Quantity (**data point**: actual quantity)
- Program Participant Group (**disaggregate**: program participant group)

Relevant Reports:

- Distribution Analysis Report (Insight)
- Item Status Report (Insight, a.k.a., Commodity Status Report)
- Recipient Status Report (Insight)

Data Collection Methodology

Data should be collected and entered immediately after each distribution event.

The distribution team enters the quantity distributed in Distribution Summary Reports or in CommCare. This information is submitted to the LMIS Officer or Warehouse Manager, who enters the data in the Miscellaneous Transaction Form (Account Alias Issue) in Insight. The LMIS Officer also receives the distribution plans to compare the planned quantity with the actual quantity distributed. The data entered in Insight populates the Distribution Analysis Report.

Suggested Frequency of Data Collection

Per distribution

Average Distribution Accuracy - Recipients

Category

Forecasting and Planning

Definition

This indicator measures the distribution accuracy between the planned number of recipients and the actual number of recipients served at distribution events.

Recipients means individuals who receive D-goods at the SDP on behalf of their household. Note that this indicator is measured at the recipient level, not the program participant level. Depending on the project design, the distributed goods that recipients receive may go to targeted individuals within the household (e.g., children under five, pregnant and lactating women, etc.) or all members of the household.

Formula

Formula A below measures the distribution accuracy for one distribution event.

Formula A:

$$\frac{\text{actual recipients served at X distribution event}}{\text{planned recipients to be served at X distribution event}}$$

Formula B averages the distribution accuracy for all distribution events to measure performance across all distributions.

Formula B:

$$\frac{\text{sum of formula A for all distribution events}}{\text{total number of distribution events}}$$

Purpose

This indicator is useful for accurate planning, good stewardship of resources, and forecasting to ensure that CRS or partners are meeting the needs of program participants. Ideally, this indicator should be equal to or as close to 100% as possible.

If there are particularly wide discrepancies between the planned recipients and actual recipients, CRS may adjust assumptions in the distribution plan, the Detailed Implementation Plan (DIP), increase or decrease the number of SDPs or distribution events, adjust replenishment rates, and/or dispatch more or fewer items to the SDP.

Disaggregates

- SDP
- Partner
- Program Participant Group
- Timeframe

Data Sources

Miscellaneous Transaction Form (Insight)

Fields:

- Date (**data point**: total number of distribution events [dependent on locator and source fields]; **disaggregate**: time period)
- Source (**data point**: total number of distribution events [dependent on date and locator fields])
- Locator (**data point**: total number of distribution events [dependent on date and source fields]; **disaggregate**: SDP; partner)

Additional Information:

- Estimated Program Participants (**data point**: planned recipients)
- Number of Program Participants Present at SDP (**data point**: actual recipients)
- Program Participant Group (**disaggregate**: program participant group)

Relevant Reports:

- Distribution Analysis Report (Insight)
- Item Status Report (Insight, a.k.a., Commodity Status Report)
- Recipient Status Report (Insight)

Data Collection Methodology

Data should be collected and entered immediately after each distribution event.

The distribution team enters the quantity distributed in Distribution Summary Reports or in CommCare. This information is submitted to the LMIS Officer or Warehouse Manager, who enters the data into the Miscellaneous Transaction Form (Account Alias Issue) in Insight. The LMIS Officer also receives the distribution plans to compare the planned quantity with the actual quantity distributed. Data entered in Insight populates the distribution reports.

Suggested Frequency of Data Collection

Per distribution

Percentage of Strategic Procurements

Category

Forecasting and Planning

Definition

This indicator measures the percentage of POs that are connected to a Blanket Purchase Agreement (BPA) or a Contract Purchase Agreement (CPA).

PO means the document created by CRS and presented to a supplier for a one-time purchase of items or services. A PO is created when the details of the goods or services are known, along with estimated costs, quantities, delivery schedules, and POET details.

Contract Purchase Agreement (CPA) means an agreement between CRS and a supplier for the acquisition of services. This agreement includes terms and conditions, the committed amount, and effective expiration date.

Blanket Purchase Agreement (BPA) means an agreement between CRS and a supplier for the acquisition of goods. This agreement may be used to set negotiated prices of specified items over an agreed-upon time period before purchases are made.

Formula

$$\frac{\text{number of POs tied to either a Blanket Purchase Agreement (BPA) or a Contract Purchase Agreement (CPA)}}{\text{total number of POs}}$$

Purpose

This indicator monitors the efficiency and cost-effectiveness of procurement transactions by measuring the percentage of purchase agreements as part of the overall volume of POs. Purchase agreements help CRS save time and resources by reducing procurement lead times and administrative costs. When there is a low percentage of POs tied to a purchase agreement, the procurement team has an opportunity to negotiate longer-term agreements with suppliers. Purchase agreements also help suppliers anticipate demand, leading to better planning, availability of supplies, and prices.

This indicator can be analyzed along with **procurement cycle time** and **average supplier lead time** to determine whether there is any correlation between the total lead time of procurement processes and the use of purchase agreements.

Disaggregates

- Purchasing category (item or service category)
- Supplier
- Agreement type (Contract Purchase Agreement, or CPA, or Blanket Purchase Agreement, or BPA)
- Timeframe

Data Sources

PO Form

Fields:

- Source Agreement (**data point**: POs tied to Blanket Purchase Agreement (BPA) or Contract Purchase Agreement (CPA); **disaggregate**: agreement type)
- Supplier (**disaggregate**: supplier)
- Creation Date (**disaggregate**: time)
- Category Name (**disaggregate**: purchasing category)

Relevant Reports:

- Manage Orders Report (Insight)

Data Collection Methodology

The Procurement Manager or Procurement Officer sets up a purchase agreement in Insight (either a Blanket Purchase Agreement (BPA) or a Contract Purchase Agreement (CPA) with terms agreed upon by the supplier and CRS. For every agreement, Insight generates a unique agreement number. Once the purchase agreement is set up in Insight, the Insight-generated agreement numbers can then be entered into the PO Form to associate that PO with a specific agreement.

Suggested Frequency of Data Collection

Per PO

Inventory Turnover Rate

Category

Forecasting and Planning

Definition

This indicator measures the number of inventory turnovers in a defined time period, usually one fiscal year.

The total value of items dispatched during the defined time period is divided by the average value of working stock during that same time period. The average value of working stock is calculated using the month-end value for each month of the time period.

Formula

Formula A:

$$\frac{\text{sum value (in USD) of all stock-on hand at month-end close for each of the X number of months}}{\text{X number of months}}$$

Formula B:

$$\frac{\text{Total value of all items (in USD) dispatched over the X number of months}}{\text{Results from Formula A}}$$

Purpose

This indicator monitors the number of times inventory is replaced during a defined time period so the Head of Operations and the Supply Chain Manager can determine the most appropriate inventory holding strategy that best matches local conditions. The defined time period is usually one fiscal year, but that time period might be shorter for larger warehouses.

Balancing working stock and inventory turnovers helps reduce inventory holding costs. Low inventory turnover can indicate that the warehouse is overstocked. High inventory turnover can indicate an increased risk of stockouts due to limited stock. The turnover rate of efficient storage facilities in one year is typically six to 12 inventory turnovers. At larger warehouses, particularly primary warehouses, the turnover rate may be lower to ensure stock availability, particularly in countries that have wide variability in supply availability or in warehouses that are storing prepositioned emergency supplies.

Disaggregates

- IO
- Item
- Timeframe

Data Sources

IO Transfer Form (for dispatches to the external IO)

Fields:

- Date (**disaggregate**: time)
- Item (**disaggregate**: item)
- Source IO (**disaggregate**: IO)

Subinventory Transfer Form (for dispatches to the internal IO SDP subinventory)

Fields:

- Date (**disaggregate**: time)
- Item (**disaggregate**: item)

Reports:

- Project Inventory Commitment Tracking Report (Insight)
- Global Item On-Hand by Location and Grant Report (Insight)

Data Collection Methodology

Insight maintains real-time information on inventory value, capturing value changes from inventory ins and outs from the IO. Dispatch information and the transaction value are captured when the Warehouse Manager or the Warehouse Officer creates an IO transfer (to the external IO) or a subinventory transfer (to the SDP subinventory).

Suggested Frequency of Data Collection

Per dispatch

On Time, In Full (OTIF) Indicators

Supplier Delivery Performance

Category

On time, in full (OTIF)

Definition

This indicator measures the percentage of line items that suppliers deliver in full and on time to the defined ship-to location, as listed in the PO.

Line item means any one line on a PO, bill of lading, waybill, and/or packing list. There might be multiple lines in each PO.

On time means the items are delivered by the requested delivery date listed in the PO.

In full means the correct quantities, conditions, and specifications of items listed in the requisition and/or the PO.

Ship-to location means the physical address listed in the PO where the supplier should deliver the items (e.g., CRS warehouse, partner, or SDP).

Formula

$$\frac{\text{number of line items received on time and in full}}{\text{total number of PO line items}}$$

Purpose

This indicator monitors whether items ordered from suppliers are being received within the agreed timeframe, in the right quantity and condition, and with the correct specifications consistent with the PO. Ideally, this indicator should be as close to 100% as possible.

Late deliveries might cause stockouts, not just at the ship-to location but for other downstream storage locations and transit points.

This indicator is also useful for monitoring supplier compliance and evaluating the delivery performance across all suppliers. Disaggregating by the supplier can provide information about the delivery performance of a specific supplier. Supplier disaggregation can also be paired with one or more of the other disaggregates to understand where supplier performance might be improved.

This indicator can be combined with other indicators, such as the **Average time between PO approval and receipt of goods at the CRS ship-to location** to get a more accurate picture of supplier performance.

Disaggregates

- Ship-to location
- Item
- Supplier
- Timeframe
- On time
- In full

Data Sources

PO Form

Fields:

- Supplier (**disaggregate**: supplier)
- Requested delivery date (**data point**: on time [comparison with Receiving Lines])
- Item (**disaggregate**: item)
- Quantity (**data point**: in full [comparison with Receiving Lines])
- Ship-to location (**disaggregate** ship-to location)
- Description (**data point**: in full)
- Line (**data point**: number of line items received on time and in full, the total number of PO line items)

Received Lines Form

Fields:

- Quantity (**data point**: in full [comparison with PO])
- Receipt Date (**data point**: on time [comparison with PO]; disaggregate: time)
- Inspection Quality (**data point**: in full)

Relevant Reports:

- PO Processing Lead Time Report (Insight)
- Manage Orders Report (Insight)

Data Collection Methodology

The Procurement Officer or the Procurement Manager enters the order information in the PO Form. The PO is then made available to the Warehouse Manager or Warehouse Officer in advance of the delivery date. Once the delivery occurs, the Warehouse Manager or Warehouse Officer enters the receipt details into the Received Lines Form and inspection details into the Inspect Lines Form. The information entered in the receiving forms can then be compared to the information contained in the PO.

Suggested Frequency of Data Collection

Per receipt

CRS Delivery Performance

Category

On time, in full (OTIF)

Definition

This indicator measures the percentage of items that are delivered in full and on time from a CRS storage location to the ship-to location (either partners or SDPs), as listed in the Delivery Note (DN).

Line item is one line in the Delivery Note (DN). There might be multiple lines in each Delivery Note (DN).

On time means the items are delivered by the expected date listed in the Delivery Note (DN).

In full means the correct quantities, conditions, and specifications of items listed in the Delivery Note (DN).

CRS storage location means the CRS location where items are received, stored, and eventually dispatched.

Ship-to location means the physical address listed in the Delivery Note (DN) to which CRS dispatches the items.

Formula

$$\frac{\text{number of line items received on time and in full}}{\text{total number of line items received}}$$

Purpose

This indicator is useful to evaluate internal CRS delivery performance. If the indicator indicates that CRS is not performing well, steps can be taken to make improvements and to evaluate where in the supply chain efforts should be directed.

Late deliveries might indicate transportation problems, such as difficult terrain, condition of vehicles, or driver performance issues. Late deliveries might also indicate that CRS did not dispatch the items on time. Incomplete orders might indicate an issue with loading or unloading processes, mishandled products, exposure to natural elements, theft during transport, etc.

This indicator can be paired with other indicators such as the **Average time between dispatch from CRS storage location to receipt at the ship-to location** to get a more accurate picture of CRS performance.

Disaggregates

- IO
- Ship-to location
- Transporter
- Item
- Timeframe
- On Time
- In Full

Data Sources

IO Transfer Form

Fields:

- Date (**disaggregate**: time)
- Expected Receipt Date (**data point**: on time [comparison with subinventory transfer form])
- Carrier (**disaggregate**: transporter)
- Item (**disaggregate**: item)
- Source IO (**disaggregate**: IO)
- Destination Locator (**data point**: ship-to location)
- Transaction Quantity (**data point**: in full [comparison with subinventory transfer form])

Subinventory Transfer Form

Fields:

- Date (**data point**: on time [comparison with IO transfer form]; **disaggregate**: time)
- Item (**disaggregate**: item)
- Transaction Quantity (**data point**: in full [comparison with IO transfer form])
- Line (**data point**: number of line items received, the total number of lines received)

Relevant Reports:

N/A

Data Collection Methodology

The distribution team or partner communicates in CommCare or by email, returned forms, or another mode of communication that items have been received. This information is submitted to the LMIS Officer, who enters transaction details including the date and quantity received and attaches documentation in Insight.

Suggested Frequency of Data Collection

Per receipt

Lead Time Indicators

Average Lead Time

Category

Lead Time

Definition

This indicator measures the average number of days it takes from the creation of the requisition to the receipt of the order at the ship-to location. The indicator includes the number of days for a request for goods to be made, approved, processed by the procurement team, converted into a PO, shipped, and eventually received at the CRS or external ship-to location where goods were requested to be delivered.

Ship-to location means the physical address listed in the PO where the supplier should deliver the items (e.g., CRS warehouse, partner, or SDP).

In this indicator, **Goods** only refers to purchased goods. The supplier lead time for GIK goods is tracked outside of Insight. For data on lead time for GIK goods, contact Global International Transportation.

Formula

$$\frac{\text{sum of the number of days from requisition creation to receipt of goods at ship-to location}}{\text{total number of requisitions}}$$

Purpose

This indicator monitors the combined lead time of CRS procurement processes and supplier delivery processes for request fulfillment. Maintaining a good request fulfillment lead time ensures that goods arrive on time to fulfill CRS and project needs and prevents stockouts of critical items or stock excesses or shortages of goods.

This indicator can be combined with other lead time indicators to measure lead time from requisition creation to receipt at the final ship-to location (partners or SDP) to determine where most of the processing time is taking place and identify where improvements can be made in the pipeline.

Disaggregates

- Ship-to location
- Supplier
- Item
- Timeframe

Data Sources

Requisition Form

Fields:

- Item (**disaggregate**: item)
- Creation date (**data point**: requisition creation [comparison with receipt date time stamp])

PO Form

Fields:

- Supplier (**disaggregate**: supplier)
- Ship-to location (**disaggregate**: ship-to location)

Received Lines Form

Fields:

- Receipt Date (**data point**: receipt at ship-to location [comparison with requisition creation date stamp])

Relevant Reports:

- PO Lead Time Report (Insight)
- Managing Orders Report (Insight)

Data Collection Methodology

Insight captures time stamps of the dates when the PO is approved and the PO lines are received. The Warehouse Manager or Warehouse Officer enters the receipt details in the Received Lines Form in Insight. The purchase form fields provide the information for the disaggregates.

Suggested Frequency of Data Collection

Per receipt

Average Procurement Cycle Time

Category

Lead Time

Definition

This indicator measures the average number of days it takes from the approval of the requisition to the approval of the PO.

Formula

$$\frac{\text{sum of the number of days from requisition approval to PO approval}}{\text{total number of requisitions}}$$

Purpose

This indicator monitors the efficiency of the procurement cycle and determines the amount of lead time needed for requisition processing, tendering, supplier selection and negotiation, and PO approval. Improving lead time and maintaining good procurement cycle time ensures that goods arrive on time to fulfill CRS and project needs and prevents stockouts of critical items or stock excesses or shortages of items.

This indicator can be combined with other lead time indicators to measure lead time from requisition creation to receipt at the final ship-to location (partners or SDP) to determine where most of the processing time is taking place and identify where improvements might be made in the pipeline.

Disaggregates

- Purchase category (item or service category)
- PO value
- Timeframe

Data Sources

Requisition Approval

Fields: N/A

PO Form

Fields:

- Category Name (**disaggregate**: purchase category)
- Total (**disaggregate**: PO value)

PO Approval

Fields: N/A

Relevant Reports:

- PO Processing Lead Time Report (Insight)

Data Collection Methodology

Insight captures time stamps of the dates when the requisition or PO is approved. The requisition or purchase form fields provide the information for the disaggregates.

Suggested Frequency of Data Collection

Per PO

Average Supplier Lead Time

Category

Lead Time

Definition

This indicator measures the average number of days it takes from the approval of the PO to the receipt of goods at the ship-to location.

Ship-to location means the physical address listed in the PO where the supplier should deliver the goods (e.g., CRS warehouse, partner, or SDP).

In this indicator, **Goods** only refers to purchased goods. The supplier lead time for GIK goods is tracked outside of Insight. For data on lead time for GIK goods, contact Global International Transportation.

Formula

$$\frac{\text{sum of the number of days from PO approval to receipt at ship-to location}}{\text{total number of POs}}$$

Purpose

This indicator monitors the supplier's production and/or delivery lead time. Maintaining good supplier lead time ensures that goods arrive on time to fulfill CRS and project needs and prevents stockouts of critical items or stock excesses or shortages of goods.

This indicator can be combined with other lead time indicators to measure lead time from requisition creation to receipt at the final ship-to location (partners or SDP) to determine where most of the processing time is taking place and identify where improvements can be made in the pipeline.

Disaggregates

- Ship-to location
- Item
- Supplier
- Timeframe

Data Sources

PO Form

Fields:

- Supplier (**disaggregate**: supplier)
- Item (**disaggregate**: item)
- Ship-to location (**disaggregate**: ship-to location)

PO Approval

Fields:

N/A

Received Lines Form

Fields:

- Receipt Date (**data point**: receipt at ship-to location [comparison with PO Approval time stamp])

Relevant reports:

- Manage Orders Report (Insight)
- PO Processing Lead Time Report (Insight)

Data Collection Methodology

Insight captures time stamps of the dates when the PO is approved and the PO lines are received. The Warehouse Manager or Warehouse Officer enters the receipt details in the Received Lines Form in Insight. The requisition or purchase form fields provide the information for the disaggregates.

Suggested Frequency of Data Collection

Per receipt

Average CRS Lead Time

Category

Lead Time

Definition

This indicator measures the average number of days it takes from the dispatch of goods from a CRS storage location to the receipt of goods at the ship-to location.

CRS storage location means the CRS location where items are received, stored, and eventually dispatched.

Ship-to location means the physical address listed in the Delivery Note (DN) to which CRS dispatches the items.

Formula

$$\frac{\text{sum of the number of days from dispatch from CRS storage location to receipt at ship-to location}}{\text{total number of line items}}$$

Purpose

This indicator monitors CRS' dispatch efficiency and lead time when transferring items from a CRS storage location to a ship-to location. Maintaining a good delivery lead time ensures that goods arrive on time to fulfill CRS and project needs and prevents stockouts of critical items or stock excesses or shortages of goods.

This indicator is also useful for determining more accurate delivery date commitments to our partners. Improvements in CRS delivery lead time might generate the corresponding improvement in the **CRS Delivery Performance** indicator.

This indicator can be combined with other lead time indicators to measure lead time from requisition creation to receipt at the final ship-to location (partners or SDP) to determine where most of the processing time is taking place and identify where improvements can be made in the pipeline.

Disaggregates

- IO
- Ship-to Location
- Transporter
- Item
- Timeframe

Data Sources

IO Transfer Form

Fields:

- Date (**data point**: date of dispatch from CRS storage location [comparison with date of receipt])
- Carrier (**disaggregate**: transporter)
- Item (**disaggregate**: item)
- Source IO (**disaggregate**: IO)
- Destination Locator (**data point**: ship-to location)

Subinventory Transfer Form

Fields:

- Date (**data point**: date of receipt at ship-to location [comparison with IO transfer form]; **disaggregate**: time)
- Item (**disaggregate**: item)
- Line (**data point**: total number of lines received)

Relevant Reports:

N/A

Data Collection Methodology

The distribution team or partner communicates in CommCare or by email, returned forms, or another mode of communication that items have been received. This information is submitted to the LMIS Officer, who enters transaction details and attaches documentation in Insight.

Suggested Frequency of Data Collection

Per receipt

Frequency of Loss Events

Category

Loss, Quality, and Accuracy

Definition

This indicator measures the frequency of loss events in a defined time period.

Loss events means every occurrence of loss captured in Insight.

Loss might occur anywhere along the supply chain, from the issuing supplier to a distribution event for program participants. Loss might occur for several reasons: 1) damage or contamination to goods during storage or transport, beyond recovery; 2) expiration of goods; 3) defective goods that cannot be returned to the supplier; 4) spillage of goods; 5) theft of goods; or 6) any other event that prevents goods from being used for their intended purpose.

Formula

Cumulative number of loss events

Purpose

This indicator monitors the frequency of loss (low, medium, or high) to ensure good stewardship of CRS and donor resources. This information is useful to identify causes of loss and determine where improvements might be made to decrease the frequency of losses and ensure that program participants receive quality products. Loss events should be tracked with a reason code to determine what types of losses occur most often.

This indicator should be combined with the other indicators related to loss (**Average quantity of unit loss** and **Average value of unit loss**) to provide a robust understanding of the scale of loss over the defined time period.

Disaggregates

- IO
- Loss source code
- Loss reason code
- Locator
- Timeframe

Data Sources

Account Alias Issue Miscellaneous Transaction Form

Fields:

- Date (**disaggregate**: time)
- Loss source code (**disaggregate**: loss source code)
- Number of lines with loss reason codes (**data point**: cumulative number of loss events)
- IO (**disaggregate**: IO)
- Locator (**disaggregate**: locator)
- Reason (**disaggregate**: loss reason code)

Relevant Reports:

- Item Loss Report (Insight)
- Item Status Report (Insight)

Data Collection Methodology

The Warehouse Manager is responsible for data related to internal losses, while the LMIS Officer is responsible for data related to external losses. When losses are discovered, the Warehouse Manage or LMIS Officer transfers all relevant stock to the quarantine locator in Insight. After disposal and loss approval, the Warehouse Manager or LMIS Officer enters the loss details in the Account Alias Issue Miscellaneous Transaction Form.

Suggested Frequency of Data Collection

Per loss event

Average Quantity of Unit Loss

Category

Loss, Quality, and Accuracy

Definition

This indicator measures the average quantity of loss for all loss events in a defined time period.

Loss events means every occurrence of loss captured in Insight.

Loss might occur anywhere along the supply chain, from the issuing supplier to a distribution event for program participants. Loss might occur for several reasons: 1) damage or contamination to goods during storage or transport, beyond recovery; 2) expiration of goods; 3) defective goods that cannot be returned to the supplier; 4) spillage of goods; 5) theft of goods; or 6) any other event that prevents goods from being used for their intended purpose.

Formula

$$\frac{\text{total quantity of unit loss}}{\text{total number of loss events}}$$

Purpose

This indicator builds on the indicator **Frequency of loss events** to monitor the scale of loss over the defined time period and ensure good stewardship of CRS and donor resources. This information is useful to identify causes of loss and determine where improvements can be made to decrease both the frequency and quantity of loss, prevent stockouts, and ensure that program participants receive quality products.

Disaggregates

- IO
- Loss source code
- Loss reason code
- Locator
- Item
- Timeframe

Data Sources

Account Alias Issue Miscellaneous Transaction Form

Fields:

- IO (**disaggregate**: IO)
- Date (**disaggregate**: time)
- Source Code (**disaggregate**: loss source code)
- Item (**disaggregate**: item)
- Locator (**disaggregate**: locator)
- Quantity (**data point**: total quantity of unit loss)
- Reason (**disaggregate**: loss reason code)
- Number of lines with loss reason codes (**data point**: total number of loss events)

Relevant Reports:

- Item Loss Report (Insight)
- Item Status Report (Insight)

Data Collection Methodology

The Warehouse Manager is responsible for data related to internal losses, while the LMIS Officer is responsible for data related to external losses. When losses are discovered, the Warehouse Manage or LMIS Officer transfers all relevant stock to the quarantine locator in Insight. After disposal and loss approval, the Warehouse Manager or LMIS Officer enters the loss details in the Account Alias Issue Miscellaneous Transaction Form.

Suggested Frequency of Data Collection

Per loss event

Average Value of Unit Loss

Category

Loss, Quality, and Accuracy

Definition

This indicator measures the average value (in USD) of goods lost for all loss events in a defined time period.

Loss events means every occurrence of loss captured in Insight.

Loss might occur anywhere along the supply chain, from the issuing supplier to a distribution event for program participants. Loss might occur for several reasons: 1) damage or contamination to goods during storage or transport, beyond recovery; 2) expiration of goods; 3) defective goods that cannot be returned to the supplier; 4) spillage of goods; 5) theft of goods; or 6) any other event that prevents goods from being used for their intended purpose.

Formula

$$\frac{\text{total value of unit loss}}{\text{total number of loss events}}$$

Purpose

This indicator builds on the indicator **Frequency of loss events** to monitor the scale of loss financially over the defined time period and ensure good stewardship of CRS and donor resources. This information is useful to identify causes of loss and determine where improvements can be made to decrease both the frequency and financial impact of loss.

Disaggregates

- IO
- Source reason code
- Loss reason code
- Locator
- Item
- Time (month, quarter, year, etc.)

Data Sources

Account Alias Issue Miscellaneous Transaction Form

Fields:

- IO (**disaggregate**: IO)
- Date (**disaggregate**: time)
- Source Code (**disaggregate**: loss source code)
- Item (**disaggregate**: item)
- Locator (**disaggregate**: locator)
- Use Current Item Cost (**data point**: value)
- Reason (**disaggregate**: loss reason code)
- Number of lines with loss reason codes (**data point**: total number of loss events)

Relevant Reports:

- Item Loss Report (Insight)
- Period Inventory Valuation Report (Insight)

Data Collection Methodology

The Warehouse Manager is responsible for data related to internal losses, while the LMIS Officer is responsible for data related to external losses. When losses are discovered, the Warehouse Manage or LMIS Officer transfers all relevant stock to the quarantine locator in Insight. After disposal and loss approval, the Warehouse Manager or LMIS Officer enters the loss details in the Account Alias Issue Miscellaneous Transaction Form.

Suggested Frequency of Data Collection

Per loss event

Calculating the Actual Value of CVA Assets

The LMIS database only tracks the quantities and values of the CVA assets that were distributed or lost. If used alone, LMIS data will provide an incomplete picture of the value of CVA assets because it does **not** track the following information.

- The value of funds transferred to program participants through the CVA assets.
- The value of CVA assets themselves.
- The value of CVA transfers that do not involve CVA assets (e.g., over-the-counter transfers through Financial Service Providers (FSPs), electronic top-ups, cash-in-envelopes, etc.).

Cycle Count Accuracy

Category

Loss, Quality, and Accuracy

Definition

This indicator measures the percentage of cycle count line quantities that have been recorded in Insight without discrepancies.

Cycle count means counting part of the inventory to confirm the quantity of items on hand throughout the year.

Cycle count lines means the items that must be counted according to the schedule that Insight generates each week.

Discrepancies means the quantity of the physical items in the warehouse differs from the quantity of items in the system record.

Formula

$$\frac{\text{number of count lines without discrepancies}}{\text{total number of count lines}}$$

Purpose

This indicator monitors inventory accuracy and inventory quality to prevent the risk of stockouts, overstocking, inaccurate replenishment, and inaccurate reporting, and to identify potential problems for further investigation. Ideally, this indicator should show 95-100% accuracy. Larger inaccuracies can indicate a theft issue. Smaller inaccuracies can indicate quality or process problems during put-away, picking and dispatch, recording inventory movements in Insight, or other processes.

Disaggregates

- IO
- Item
- Timeframe

Data Sources

Record Count Sequences/Approve Count Sequences

Fields:

- Item (**disaggregate**: item)
- Count Quantity (**data point**: discrepancies)
- Count Sequence (**data point**: count lines)
- IO (**disaggregate**: IO)
- Count Date (**disaggregate**: timeframe)

Reports:

- Cycle Count Listing Report (Insight)

Data Collection Methodology

The Supply Chain Manager sets up the cycle count in Insight and generates the count schedule every week. The Warehouse Manager or Warehouse Officer prints the Cycle Count Listing Report to conduct the weekly count. When the count is completed, the Warehouse Manager or Warehouse Officer records the count results in Insight. After the results are recorded, the Supply Chain Manager or Head of Operations reviews the count lines and investigates and takes action on any lines that have discrepancies.

When there are discrepancies, the Supply Chain Manager or Head of Operations requests a recount. The Warehouse Manager or Warehouse Officer conducts the recount and records the recount details. If there are still discrepancies after a recount, the Supply Chain Manager or Head of Operations approves the discrepancies, and the Warehouse Manager or Warehouse Officer performs an Account Alias Receipt or Issue to adjust the stock-on-hand record.

Suggested Frequency of Data Collection

Per cycle count

PIC Accuracy

Category

Loss, Quality, and Accuracy

Definition

This indicator measures the percentage of count lines that are entered in Insight without discrepancies.

PIC involves counting and inspecting the quality of every item in inventory by its UOM. PICs only occur once a year and are performed to evaluate and confirm both the quality and quantities of items in each storage location.

Discrepancies means the quantity of the physical items in the warehouse differs from the quantity of items in the system record.

Formula

$$\frac{\text{number of count lines without discrepancies}}{\text{total number of count lines}}$$

Purpose

This indicator monitors inventory accuracy and confirms the financial ledger for the end of the fiscal year to prevent the risk of stockouts, overstocking, inaccurate replenishment, inaccurate general ledger records, and inaccurate end-of-year reporting, and to identify potential problems for further investigation. Ideally, this indicator should show 95-100% accuracy. Larger inaccuracies can indicate a theft issue. Smaller inaccuracies may indicate quality or process problems during put-away, picking and dispatch, recording inventory movements in Insight, or other processes.

Disaggregates

- IO
- Item
- Timeframe

Data Sources

IO Transfer Form (for dispatches to the external IO)

Fields:

- Item (**disaggregate**: item)
- Count Quantity (**data point**: discrepancies)
- Tag (**data point**: count lines)
- IO (**disaggregate**: IO)
- Count Date (**disaggregate**: timeframe)

Reports:

- Physical Inventory Tag Listing

Data Collection Methodology

The Supply Chain Manager and Head of Operations work together to schedule the PIC and hire an external auditor as needed. The Supply Chain Manager creates the PIC in Insight once warehouse operations have been frozen. The count team performs the offline count and reports the numbers to the Head of Operations and the Supply Chain Manager who then record the counts in Insight. The Country Representative then reviews the count results.

When there are discrepancies, the Country Representative requests a recount. If there are still discrepancies after a recount, the Supply Chain Manager and Head of Operations should investigate possible reasons for the discrepancies. Finally, the Country Representative approves each count line, including lines with discrepancies, then posts physical adjustments so that lines with discrepancies can be adjusted to match the approved count quantity.

Suggested Frequency of Data Collection

Per PIC (once per year)

Supply Chain Cost Indicators

Percentage of POs with Higher-Than-Average Unit Price

Category

Supply Chain Cost

Definition

This indicator measures the percentage of POs that have a higher unit price than the average price for that same unit in Insight.

Unit price means the unit price of item X to which CRS and the supplier have agreed. The price is indicated in the PO.

Average price in Insight means the average unit price of the item in Insight for each business unit, which is calculated from past purchases of that item.

Formula

$$\frac{\text{sum of POs with higher unit price than the average price in Insight}}{\text{total number of POs}}$$

Purpose

This indicator monitors variations in the average unit price in Insight and the most recent unit price in Insight to identify opportunities for adjustments, such as renegotiating with existing suppliers, choosing a different supplier for future purchases, or adjusting the tendering process.

CRS may get better or worse prices compared to purchases made in the past. In some contexts, market volatility or systemic shifts may result in price shifts from week to week or month to month. It is important to consider these market dynamics when analyzing the results from this indicator. Better prices may result from having a good relationship with the supplier, negotiating well with the supplier, having a purchase agreement in place, or ordering a large volume of goods.

Disaggregates

- Supplier
- Item
- Time (month, quarter, year, etc.)

Data Sources

PO Form Fields: • Supplier (**disaggregate**: supplier) • Item (**disaggregate**: item) • Price (**data point**: unit price) Relevant Reports: • Manage Orders Report (Insight) • PO Volume Report (Insight)
Data Collection Methodology
The Procurement Officer or Procurement Manager enters the price information for each line item in the PO. Insight tracks this information across all POs.
Suggested Frequency of Data Collection
Per PO

15.4 PROCESSES

MEAL SYSTEM

This section provides an overview of the development phases for a project's MEAL system. For more detailed information, see the SMILER+ Guide and SMILER+.

Phases of MEAL System Development

During the design phase, programming staff collaborates with the Supply Chain Manager to select output indicators to be collected based on the project objectives. KPIs are selected to monitor project outcomes and provide information for donor reporting, then refined during the start-up phase. Supply chain staff should be consulted during design.

For more information on KPI development activities during the design phase, see the Design chapter. For country programs considering the use of KPIs to monitor their supply chain, contact the GSCM Systems and Performance team at gscminfo@crs.org.

For projects that have distribution activities, the project's MEAL system tracks indicators that are included in the project ProFrame. To reduce redundancy in data collection and increase information sharing among teams, the supply chain, programming, and MEAL teams should work together to jointly develop a monitoring strategy.

Regular monitoring of service delivery points is important. These visits can monitor compliance with donor regulations and CRS policies, confirm accurate reporting, perform data segmentation, and help mitigate risk of losses or potential stockouts.

During the start-up phase, the programming team and the MEAL team design the MEAL system together in a series of workshops. The MEAL system includes how data is collected, analyzed, and shared among the project teams. The Supply Chain Manager should work with programming and MEAL staff to ensure that the supply chain KPIs are integrated into the MEAL system.

For more information on related activities during the start-up phase, see the Start-Up chapter.

MONITORING MEAL4SCM INDICATORS

MEAL4SCM Indicator Monitoring Checklist

CHECKLIST *MEAL4SCM Indicator Monitoring*

The **LMIS Officer**:

- ☐ Regularly monitors Insight usage to ensure that transactional data is entered correctly and on a timely basis.
- ☐ Regularly reviews the Power BI dashboards, updating the presentation of data as needed.

MONITORING OTHER SUPPLY CHAIN INDICATORS

Supply Chain indicator Monitoring Checklist

CHECKLIST *Supply Chain Indicator Monitoring*

The **LMIS Officer**:

- ☐ Oversees the collection and consolidation of data from the various supply chain sub-teams.
- ☐ Aggregates and analyzes data.
- ☐ Prepares reports and dashboards that are then shared with the Supply Chain Manager.

COMMUNICATING AND ACTING ON INDICATORS

Indicator Reporting & Decision-Making Checklist

CHECKLIST *Indicator Reporting & Decision-Making*



The **Supply Chain Manager**:

- ☐ Shares reports and dashboards during regular team, cross-departmental, and external meetings.
- ☐ Determines priority actions due to indicator results and sets deadlines for the completion of those activities.

MONITORING DISTRIBUTIONS

In addition to supply chain monitoring, there are opportunities for coordinated distribution monitoring by the Programming and Supply Chain departments to obtain data that both departments need as efficiently as possible and to prevent redundant work. Both departments do some version of monitoring on their own, which involves requests for forms and information.

The table below summarizes the differences between Distribution Verification Monitoring (DVM) and post-distribution monitoring (PDM).

The Supply Chain Monitoring Officer or other assigned individual or team may be responsible for Distribution Verification Monitoring (DVM). Post-distribution monitoring (PDM) is typically done by the MEAL Team or by an external party.

	Distribution Verification Monitoring (DVM)	Post-Distribution Monitoring (PDM)
What?	Audit of SCM and accounting over the entire distribution chain.	Interviews with a random selection of a statistically significant sample of program participant households, when possible.
Why?	To verify that the distribution was executed as planned from an operational perspective.	To validate the impact of the program's effectiveness via the perceptions of program participants and to verify that individuals or households are using the distributed items or CVA transfers appropriately and that they have received what they were supposed to receive. Also verify that the distributed goods/cash sufficiently met program participant needs (i.e., did we give the right kind of assistance in the right quantities?).
How?	Review documentation (inventory records, losses, and distribution lists) and compare expected distribution quantity with actual distribution quantity, confirm compliance with program plans, verify site logistics, etc.	Typically, in-person interviews at the household level.
Who?	Performed by an independent CRS staff member, most likely from the supply chain team, who is not directly responsible for distribution; it is often done by a Supply Chain Monitoring Officer or an individual or team that may fall under programming or supply chain.	Performed by MEAL staff or external parties (e.g., research organizations).
Where?	At CRS warehouse, partner warehouse/storage location, service delivery point, selected according to perceived risk.	At the household level or near community locations that provide privacy to program participants.
When?	During distribution and other occasions (e.g., after partner receipt of goods, following report submission, etc.).	Within a limited amount of time following a distribution event (e.g., two weeks).

Distribution Verification Monitoring (DVM) is typically called "end use checking" for USG food assistance projects. The **Supply Chain Monitoring Officer** or other designated staff performs the end use checking activities listed below.

- ☐ Visits each service delivery point location.
  - Reviews all inventory and distribution records.
  - Periodically witnesses the distribution event process (For more information about the distribution process, see the Distribution chapter).
- ☐ Visits the warehouse where food commodities are stored.
  - Completes a Warehouse Inspection Form (For more information, see the Warehouse and Inventory Management chapter).
- ☐ Prepares a report card with any findings about deviations from best practices or compliance with donor requirements.
- ☐ Shares findings with programming and supply chain staff.

For more guidance on monitoring food assistance programs, see the TOPS Commodity Management Handbook and the TOPS Commodity Management Toolkit.



MONITORING CRS GLOBAL RESULTS

CRS Global Results is a multi-sector collaborative CRS initiative focused on putting together the people, processes, and technology to identify, collect, and use a set of harmonized metrics at the global level, to track aggregated progress toward strategic CRS goals, across countries and regions. As of August 2022, there are 20 indicators across five goal areas. Below are four global indicators and examples of some complementary supply chain indicators for goods and program participants.

- **2.1 USD value of cash and vouchers distributed.** The value of cash and vouchers distributed by CRS is captured in finance's system, not supply chain's system. The **quantity of goods distributed** indicator provides complementary information about the number of items distributed per item type. For CVA, the data point would be cash and voucher item types.

The **quantity of goods distributed** indicator only tracks the distribution of CVA assets and is therefore a partial accounting of total CVA distributions. By only tracking the distribution of CVA assets, supply chain does not capture CVA transfers that are not associated with a CVA asset. For example, CRS Nigeria distributes one e-card to program participants. This card is reloaded with funds multiple times per year. Each reloading represents a unique CVA distribution; however, only the distribution of the physical card is registered in the SCM data.



- **2.2 Number of people with access to safe and dignified shelter and homes**. MEAL4SCM indicators can be used to track the **quantity of goods distributed**, **average distribution accuracy-recipients**, and **CRS delivery performance** for shelters and shelter kits.
- **4.1 Estimated lives of children under five-years old saved related to selected malaria interventions.** MEAL4SCM indicators can be used to track the **quantity of goods distributed**, **average distribution accuracy-recipients**, and **CRS delivery performance** for bed nets.
- **4.4 Number of people gaining access to basic drinking water services.** MEAL4SCM indicators can be used to track the **quantity of goods distributed** and **CRS delivery performance** for water well construction kits, water bottles, piping, tarps, and rain collection containers.



Photo by Francis Nweke

Chapter 16: Close-Out

16. CLOSE-OUT

Purpose

This chapter provides guidance on specific supply chain activities required to close out a project, including how to coordinate with other internal stakeholders (e.g., programming and finance) to ensure an efficient, well-organized project closure.

16.1 POLICIES, REGULATIONS, AND GUIDELINES

CRS POLICIES AND PROCEDURES

- POL-OSD-PRM-004 Disposition of Program Property Policy
- POL-GSC-INC-001 Inventory Counts Policy
- PRO-OSD-PRM-004 Disposition of Program Property Procedure

CRS GUIDELINES

- CAT User Portal for Guidance on Close-out of CVA Assets and Unspent Funds

POLICIES AND REGULATIONS

USAID

- 2 CFR 700 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (especially 700.16)
- 22 CFR 211 Transfer of Food Commodities for Food Use in Disaster Relief, Economic Development and Other Assistance

USDA

- USDA FAS Food Assistance Program Implementation Guidebook, Section 8
- 7 CFR 1599 McGovern-Dole International Food for Education and Child Nutrition Program

Global Fund

- Operational Procedures on Implementation Period Reconciliation and Grant Closure (for 2014-2016 allocation period and thereafter)

16.2 PROJECT MANAGEMENT STANDARDS (COMPASS) – CLOSE-OUT

Close-out is a critical phase of the project cycle, and supply chain staff are key to successful close-out. Visit the Compass Close-out site for guidance and to access links to tools and resources on the close-out planning and implementation process.

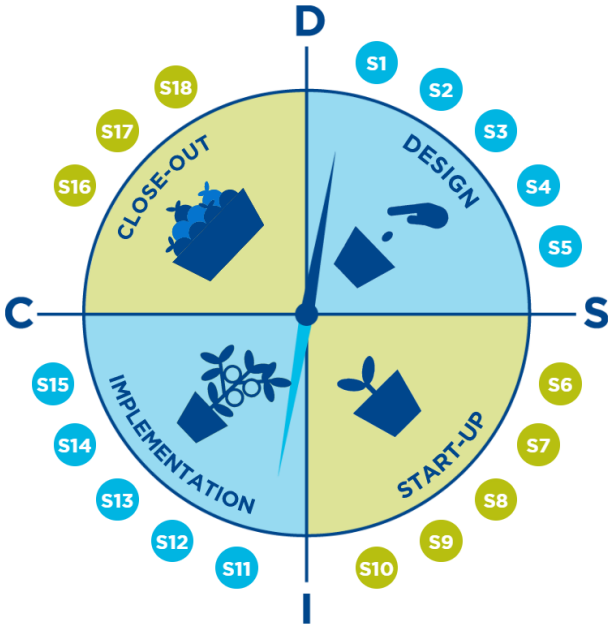
Review relevant sections of the Comprehensive Project Close-out Plan template, available through Compass.

CLOSE-OUT

The close-out standards emphasize the importance of accountability and cross-disciplinary collaboration as projects come to an end.

IMPLEMENTATION

The implementation phase standards focus on timely, evidence-based, cross-disciplinary management of project activities and resources, in close collaboration with CRS partners.



DESIGN

The design phase standards focus on design issues that have a significant impact on a project's implementation.

START-UP

The start-up standards focus attention on this critical, and often challenging, phase of the project management cycle.

16.3 CLOSE-OUT OVERVIEW

The Project Manager, Chief of Party, and/or Head of Programming leads the close-out planning process and monitors the close-out action plans and deadlines, in close collaboration with the Head of Operations, Finance Manager, Supply Chain Manager, HR Manager, and other senior staff.

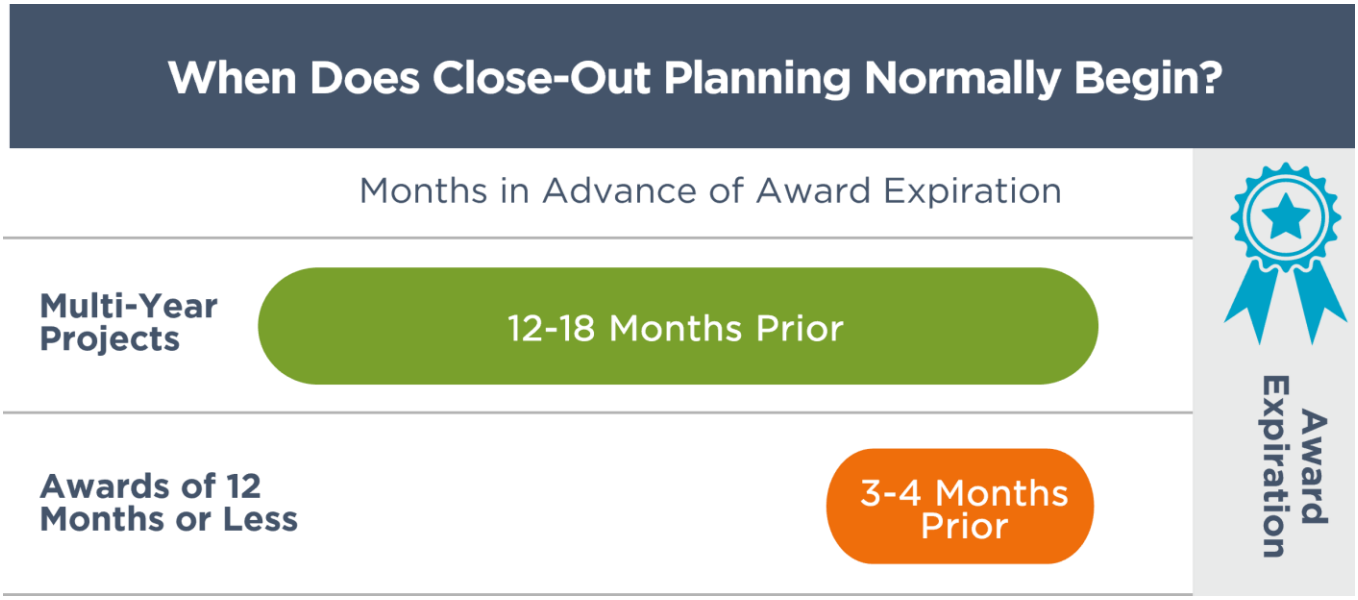
For supply chain staff, it is critical that

- transactions charged to the award (e.g., procurements and vehicle usage) cease on the date of award expiration;
- outstanding transactions and payables (e.g., processed POs and supplier payments on account) are accrued and closed as soon as possible;

- and transactions and general supply chain activities are fully documented (see the Records Management chapter for more details on requirements).

Once the award expires, CRS usually has 90 days to prepare and submit all final reports. The award document and donor regulations, as well as CRS policies and procedures, dictate the requirements and the deadlines.

Close-out planning for multi-year programs and projects will normally begin 12-18 months in advance of award expiration, depending on the overall length of the project and its complexity. For awards of 12 months or less, close-out planning will normally begin about 3-4 months before expiration.



CRS often seeks follow-on funding for an award, either as a new award or through a cost modification (i.e., extension). Close-out activities must proceed under the assumption that these efforts will not succeed. In addition, many donors have highly complex operational, administrative, and financial close-out requirements, which are demanding and require the early formation of the planning team.

Although close-out in a follow-on project scenario typically has fewer close-out tasks and more streamlined processes related to project assets (e.g., capital asset transfers from one project to the next rather than third-party transfer, sale, or donation), core reporting and many administrative processes that require careful planning still need to be completed.

The guidance below applies whether CRS is the Prime Recipient (PR) or a subrecipient. However, when CRS is a subrecipient, the prime has the authority and responsibility to engage with the donor around close-out requirements and timelines. CRS and our partners must understand the requirements and be aware of any plans the prime has to seek an award modification (e.g., a cost or no-cost extension) that could impact the timing and scope of CRS and partner close-out activities.

16.4 ROLES AND RESPONSIBILITIES

The following staff is involved in the close-out process: Supply Chain Manager, Warehouse Manager*, Logistics Manager, Procurement Manager, Program Manager/Chief of Party, and Head of Operations. For more information about each of these roles, see Roles and Responsibilities.

Function/Activity	Head of Operations	Supply Chain Manager	Warehouse Manager*	Procurement Manager	Logistics/Fleet Manager	Program Manager/ Chief of Party	Head of Program
Communicates the upcoming project end date and coordinates with stakeholders on project closure activities	C	C	C	C	C	R	A
Coordinates with stakeholders on important dates and activities for final purchases and closing out contracts with suppliers		A	I	R		C	
Prepares, implements, and documents the transfer or disposal of remaining inventory	C	A	R			C	
Prepares and implements vehicle disposition plan	C	A			R	I	
Terminates the lease of unnecessary warehouse or office facilities per the lease termination plan	A	R	C	C		I	I
Properly manages any remaining CVA assets and equipment	I	I	C	C		R	A
Conducts an After Action Review (AAR)	C	C	C	C	C	R	I

R=Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

* The Administrative Manager will have a similar role in the RACI as the Warehouse Manager for goods that are stored in the office storage location. References to the Warehouse Manager throughout this chapter can also refer to the Administrative Manager. For CVA assets, an Administrative Assistant or Administrative Officer may be designated as a CVA Asset Custodian. This designated staff is responsible for managing goods (e.g., voucher booklets and credit/debit cards) acquired for CVA programming that are generally stored in an office.

16.5 PREPARING FOR PROJECT CLOSURE

As stated in the Compass Close-out site, preparing for project closure is a joint effort that entails close coordination between programming and supply chain staff.

Preparing for a Project Closure Checklist

CHECKLIST *Preparing for Project Closure*



The **Supply Chain Manager**:

- ☐ Informs verbally and in writing any deadlines for contracted suppliers to submit invoices to CRS.
- ☐ Conducts a supply chain staffing assessment for the post-project period.
- ☐ Considers options for shifting recurrent warehouse and inventory management costs (e.g., warehouse leases, utilities, security, and staff salaries) from the expiring project to other benefitting projects.
- ☐ Makes sure that all project-specific procurement, warehouse, inventory, and other records are filed logically and securely retained in the country program's archives as per CRS and Country Program Document Retention Policies and Procedures.
- ☐ Provides supply chain related information for final reports to be submitted to the donor and national government as required by the award document and donor regulations, and local law.
- ☐ Archives any market assessment, monitoring, analysis, and reporting resources and data as these may be useful for local partners or future CRS projects (e.g., at proposal, design, and/or planning phases) involving a resource transfer component.
- ☐ Documents all close-out activities, especially communications with suppliers, partners, government authorities, and donors.

Please see below for context-specific callout boxes that also apply.

Any locators that have been created for the project should be closed **after the last day of the quarter after the project end date**. For more information, refer to the Create and Deactivate Locators Job Aid.

16.6 PROCUREMENT CLOSE-OUT

Procurement Close-Out Checklist

CHECKLIST *Procurement Close-Out*



To finalize procurement activities by the end of a project, the **Program Manager**, in coordination **with the procurement team**:

During the last **six months** of the award –

- ☐ Establishes cut-off dates for project procurements (goods and services).
- ☐ Scrutinizes the initiation of procurements of significant value and/or that are unplanned.

During the last **three months** of the award –

- ☐ Reviews the project's procurement plan and remaining budget.
- ☐ Identifies all outstanding legitimate transactions for which CRS will receive an invoice after the expiration deadline.
- ☐ Coordinates closely with finance staff to accrue the necessary funds prior to expiration and liquidate all supplier advances.

FINAL PURCHASES

If a project's procurement plan is well maintained, there should be no need for rushed and unplanned purchases at the close of a project. All procurements should be started well ahead of the project end date, considering procurement process requirements and supplier lead times. It is a good idea for programming to review the project's procurement plan and remaining budget at least three months before project closure (or more depending on the types of goods/services utilized by the project and their respective lead times) and communicate any outstanding needs to procurement.

Country programs should not start any procurement and/or contracting activities in the period of six months prior to the grant closure. Pending deliveries should be listed and transferred to the new Prime Recipient (PR). CRS, as a sign of courtesy and goodwill, can accept receiving and transferring the goods upon conditions that CRS still has remaining capacities and resources in the country.

CONTRACT CLOSURE (PO OR PURCHASE AGREEMENT)

In this section, the term "contract" refers to any PO, purchase agreement, or other contracting instrument.

Once the supplier has fulfilled all contractual obligations, the contract must be closed out. The contract close-out process ensures that all contractual obligations have been met and that residual obligations (e.g., warranties, guarantees, after-sales service and support, etc.) are clearly defined in terms of responsibility, liability, procedures, and timeframes.

Contract (PO or Purchase Agreement) Close-Out Checklist

CHECKLIST *Contract (PO or Purchase Agreement) Close-Out*



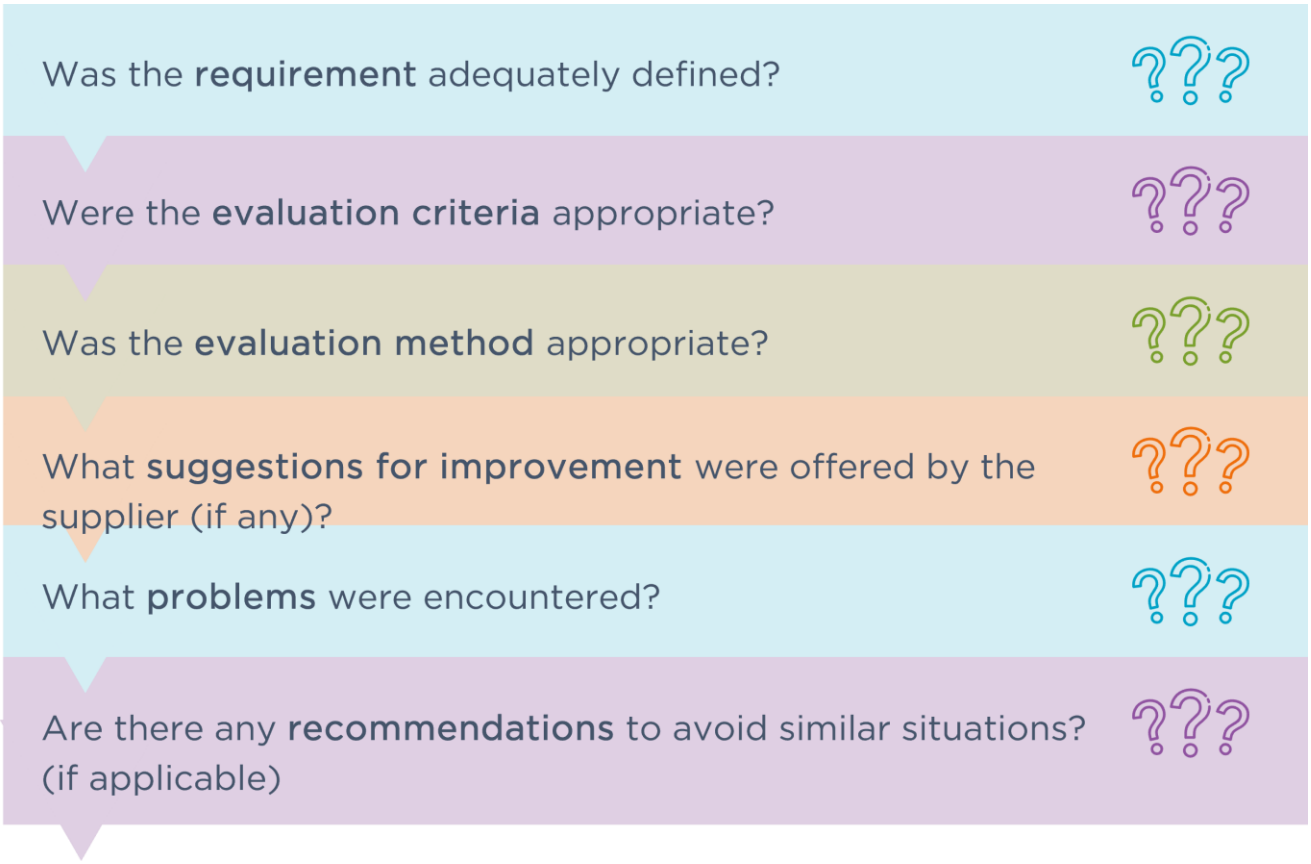
Once the supplier has fulfilled all contractual obligations, the **Procurement Officer:**

- ☐ Continues to monitor discrepancies between the goods or deliverables required in the contract and the goods or deliverables received and resolves them according to the guidelines and requirements in the Receiving and Inspecting Goods and Receiving Services sections of the Receiving chapter.
- ☐ Continues to monitor delivery timelines in open contracts for the project (see the Contract Management section in the Procurement chapter).
- ☐ Prepares the final contract performance report jointly with the Requestor and includes lessons learned (see Lessons Learned section below).
- ☐ Prepares and attaches the supplier assessment form to supplier records and notes any major issues with customer service, product quality, late delivery, etc.
- ☐ Ensures that financial securities such as bid bonds, performance bonds, and advance payment bonds are returned to the proper authorities when they are moot.
- ☐ Ensures that the status of the PO in Insight is “closed.”

Lessons Learned

When closing out contracts, the requestor and procurement staff involved with the contract should complete a report on lessons learned (for small, simple contracts) or After Action Review (AAR) (for large, complex contracts). These reports provide valuable information to improve successful procurements in the future.

Lessons learned should cover the topics and questions shown in the figure below, at a minimum.



Document Retention

For legal and audit purposes, all documentation related to the procurement process must be maintained as required and described in the Records Management chapter.

Country programs, in collaboration with the Office of General Counsel (OGC), should define whether is in the best interest for CRS to negotiate with the supplier the possibility to reassign the contract to the next Prime Recipient (PR) or terminate the contract. In any case, CRS in goodwill should provide the new Prime Recipient (PR) with the supplier's contacts and be transparent about the supplier's performance.

16.7 WAREHOUSE AND INVENTORY CLOSE-OUT

INVENTORY DISPOSITION

If the supply chain team has been actively managing D-goods and ND-goods inventory during the life of the program, then there should be minimal residual inventories at the end of the program. Each donor has specific guidance and rules on how to dispose of D-goods and ND-goods.

The first step is to obtain the relevant agreement, donor appliable rules, and guidance to understand the donor's disposition requirements. Use the donor requirements and CRS requirements to develop the disposition plan.

According to the Inventory Counts Policy, after an award has expired, a project-specific PIC must be conducted within five business days to determine the total value of distribution and ND-goods owned by the project that remain in the country program's inventory.

When CRS Implements Health SCM Projects through National Systems and/or Third-Party Logistics (3PL) Settings:

In country programs, the stock status report should be obtained from all stakeholders (national program, third-party logistics) at all levels on an agreed upon date. In addition, the country program should organize the PIC per the CRS inventory counts policy in all locations or selected locations (based on defined criteria in collaboration with the national stakeholders and the donors). The PIC confirms the stock quantities and qualities at the end of projects to facilitate the reporting or transfer, if required.

The PIC report will need to include the International Non-Proprietary name, dosage, packaging, batch number, expiry date of the product. This PIC will be submitted to The Global Fund at the agreed date as per the closure plan.

The Supply Chain Manager and the Warehouse Manager collaborate with programming team to determine options for disposal of residual D-goods and ND-goods inventory. If required by the donor, CRS submits a disposition request seeking approval to dispose of residual goods. Options to consider for disposal of residual goods include developing a final distribution plan to distribute remaining goods, transferring goods to another donor-funded program, transferring to a third party, selling or retaining and reimbursing the donor the current fair market value. Goods are disposed of as directed or approved by the donor.

Disposal of Residual D-goods & ND-goods Inventory Checklist

CHECKLIST

Disposal of Residual D-goods & ND-goods Inventory



The **Supply Chain Manager**:

- ☐ Creates a plan for removal from premises and final disposition of D-goods and ND-goods, supplies, and equipment.
- ☐ Creates a document (both electronic and paper) disposition plan for both electronic and paper records, which provisions for either destruction or retention (including digitization before the destruction of paper) as per local and donor requirements guided by CRS policy.
- ☐ For equipment and supplies purchased with donor funds, follows their disposition instructions. For equipment and supplies purchased with CRS unrestricted funds, adheres to CRS property disposition procedures.
- ☐ Conducts inventory match checks to identify and correct inventory record inaccuracies.
- ☐ Prepares an asset and property (D-Goods and ND-Goods) disposition plan for review and approval. Responsibility of submission to donor may vary depending on the donor (often performed by Community of Practice (CoP) or a member of the IDEA team). Repeated follow-up with the donor to obtain approval may be necessary. Note: in some cases, the national government may also need to be involved in disposition planning and approval, depending on local law.
- ☐ Prepare Donation Agreements for all assets we will donate and legally transfer to partners, and Bills of Sale for all assets sold. These agreements must be signed by the partner or buyer prior to initiating the transfer.

The **Warehouse Manager**:

- ☐ Inventories residual D-goods and ND-goods (e.g., CVA smartcards/voucher booklets, vehicle spares, office supplies), equipment and property funded by the award, held both by CRS and by CRS partners.

Please see below for context-specific callout boxes that also apply.

See the Disposing of Inventory Losses section of the Warehouse and Inventory Management chapter for guidelines on disposal of CVA assets.



To transfer inventory from one project to another, the goods must be issued out under the original POET and received using the new POET, using the POET Correction source codes. See Memos 43 and 44 for further guidance.

DISPOSITION OF EQUIPMENT, VEHICLES, AND CAPITAL ASSETS

Disposition of Equipment, Vehicles, & Capital Assets Checklist

CHECKLIST

Disposition of Equipment, Vehicles, & Capital Assets



The **Supply Chain Manager**:

- ☐ Relocates capital assets and property from CRS offices that will close, and from partners, to the CRS main office or other location.
- ☐ Documents all asset and property dispositions once approved by the donor and, as appropriate, national government authorities.
- ☐ Prepares Donation Agreements for all capital assets we will donate and legally transfer to partners, and Bills of Sale for all assets sold. These agreements must be signed by the partner or buyer prior to initiating the transfer.
- ☐ Prepares Fixed Asset Notification (FAN) forms to Global Finance for all capital asset transfers (to another project) or disposal by sale or donation.

Agreement should specify who would be responsible to pay any duties and fees that may be owed to local government when transfer title to property that was imported duty and tax free to a third party.

The **Supply Chain Manager** works with the **Fleet Manager** to:

- ☐ Verify that vehicle/motorcycle assets files are up-to-date and include copies of the entire procurement file, registration and insurance covers, accident reports, maintenance and repair reports, and vehicle log sheets as per CRS policies and procedures (see Fleet Manager's Toolkit Chapters 3 and 11).
- ☐ Update the vehicle disposal and acquisition plan.
- ☐ Determine the current fair market value of equipment (e.g., vehicles, generators).
- ☐ Determine the current fair market value of supplies (e.g., printer paper, printer cartridges, tires, brakes, vehicle oil, blankets, buckets, an unused motorcycle, a mountain bike, etc.).

Reminder: Follow all donor definitions and disposition requirements.

WAREHOUSE AND OFFICE CLOSURE

Warehouse & Office Closure Checklist

CHECKLIST *Warehouse & Office Closure*



When CRS decides there is no longer a need to lease a warehouse, storage facility, or office, the **Supply Chain Manager** and **Head of Operations** will review the respective contracts to:

- ☐ Identify the terms of the lease to determine if the premises will be surrendered before the end of the lease or at the end of the lease.
- ☐ Identify termination terms and conditions:
    - Is there a notification requirement? If so, what is the timeframe for making the notification?
    - ☐ What condition must the premise be when returned to the landlord? If CRS is required to undertake repairs or other maintenance before surrendering the premises, identify repairs or maintenance that must be accomplished, develop a budget, and determine who will undertake required repairs (i.e., CRS staff or a third party).
- ☐ Prepare lease termination plan. The plan will include key actions, responsible party, and target dates for:
    - ☐ Advance notification.
    - ☐ Date for final inspection and handover.
    - ☐ Terminating utilities.
    - ☐ Terminating guard services.
    - ☐ Terminating insurance coverage.
    - ☐ HR plan.
    - ☐ Making repairs and performing maintenance activities.
    - ☐ Taking inventory of D-goods and ND-goods.
    - ☐ Taking inventory of supplies and equipment used in the operation of the facility.
    - ☐ Create a plan for removal of CRS-owned property from premise.

16.8 CLOSE-OUT OF PROJECTS WITH CVA

Detailed guidance on closing out programs using the Cash and Asset Transfer (CAT) Platform can be found on the Cash and Asset Transfer (CAT) User Portal. The guidance below focuses on steps that involve coordination with or leadership by supply chain staff.

Supply chain close-out activities for CVA can be placed in three different categories:



Close-out of CVA projects and/or activities will be led by the Program Manager. However, supply chain staff play key roles in managing and/or disposing of inventories and closing out contracts with participating vendors and service providers. Transfers and disposals must be performed per donor requirements.

Close-Out Activities Checklist

CHECKLIST *Close-Out Activities*



The **Program Manager**, supported by the **programming team**:

- ☐ Collects electronic CVA assets from program participants and submits them to the CVA Asset Custodian for re-entry into inventory, if applicable.
- ☐ Deactivates all electronic CVA assets that have been distributed to program participants.
- ☐ Clears data from and/or deactivates electronic CVA assets (including residual assets and those recovered from program participants), as applicable.
- ☐ Collects loaned CVA equipment from suppliers and/or other stakeholders, such as smartphones, Point of Sale (POS) devices, and receipt printers. Returns equipment to the Warehouse Manager or Administrative Manager. Documents in writing the return to CRS, using the Property Tracking Form and a Goods Received Note (GRN). (See the Returning CVA Assets to CRS in Insight section in the Distribution chapter for more information on how to document this return in the system).
- ☐ Communicates to the CVA Asset Custodian post-project plans for remaining CVA assets, e.g., disposal and removal from inventory, transfers to another project or organization structure.
- ☐ Communicates to warehouse or administrative staff post-project plans for CVA equipment, e.g., dispose, sell, transfer to another project, or organization structure.
- ☐ Communicates to procurement staff post-project plans for supplier contracts (Financial Service Provider, or FSP, electronic platform, and voucher vendors).

The **CVA Asset Custodian**:

- ☐ If applicable, receives from programming staff previously distributed CVA assets recovered from program participants. Puts away CVA assets into the appropriate locators and updates bin cards and inventory system records.
- ☐ Inventories residual CVA assets. As per instruction from the Program Manager, disposes of project specific CVA assets (e.g., paper vouchers) or transfers to another POET and locator CVA assets that may be used for another project. Updates bin cards and inventory system records.
- ☐ Coordinates with the Logistics Manager or Officer to transfer CV Assets to other internal or external IOs, as needed.

The **Warehouse Officer**:

- ☐ If applicable, receives CVA equipment from programming staff that was loaned to voucher vendors, partners, or other stakeholders. Puts away the CVA equipment into the appropriate locators and updates bin cards and inventory system records.
- ☐ Inventories residual CVA equipment. As instructed by the Program Manager, disposes, sells, or transfers to another POET and locator CVA equipment that may be used for another project. Updates bin cards and inventory system records.
- ☐ Coordinates with the Logistics Manager or Officer to transfer CV equipment to other internal or external IOs, as needed.

CONTINUED *Close-Out Activities*

Procurement staff:

- ☐ Inform voucher vendors of deadlines for submitting vouchers and/or invoices for payments.
- ☐ Communicate with Financial Service Providers (FSPs) to recover surplus funds that were not transferred to program participants or claimed by program participants, as per the contract.
- ☐ Close POs and/or contracts (See Procurement Close-out section).

16.9 AFTER ACTION REVIEW (AAR) FOR SUPPLY CHAIN

An After Action Review (AAR) is a learning-focused process that helps an organization learn and improve by assessing what happened and why. It is usually led by the Program Manager/Community of Practice (CoP) and may be conducted at any time during a project or program.



Supply Chain team members should always be included in a project After Action Review (AAR).

The After Action Review (AAR) is not designed to judge success or failure; rather, it is an attempt to discover lessons learned, focus directly on specific tasks or activities, encourage team members to share knowledge gained, and provide an opportunity for more team members (supply chain, finance, programming, country leadership, and other operations staff) to solicit improved results.

If a project-wide After Action Review (AAR) is not being conducted, the Supply Chain Manager may opt to lead a lessons learned activity with just the supply chain team.

See the following resources for conducting an After Action Review (AAR):

- After-Action Review: Technical Guidance, USAID, Feb 2006
- After-Action Review Guidance USAID
- Intro to After-Action Review, David Gurteen



Photo by Oscar Leiva/Silverlight

Appendix A: USG Food Assistance Call Forward

APPENDIX A: USG FOOD ASSISTANCE CALL FORWARD

Purpose

> This appendix supplements the International Transport chapter and Appendix B: USG Food Assistance International Transport of the CRS Supply Chain Management Handbook. This appendix enables supply chain staff to understand and follow the unique requirements for USG food assistance sales orders, from preparing and submitting the Call Forward to receiving the freight contract for shipment of food cargo.

For information on the selection of USG food commodities, see the USAID Commodity Reference Guide and the USDA's Commodity Requirements.

A 1.1 OVERVIEW

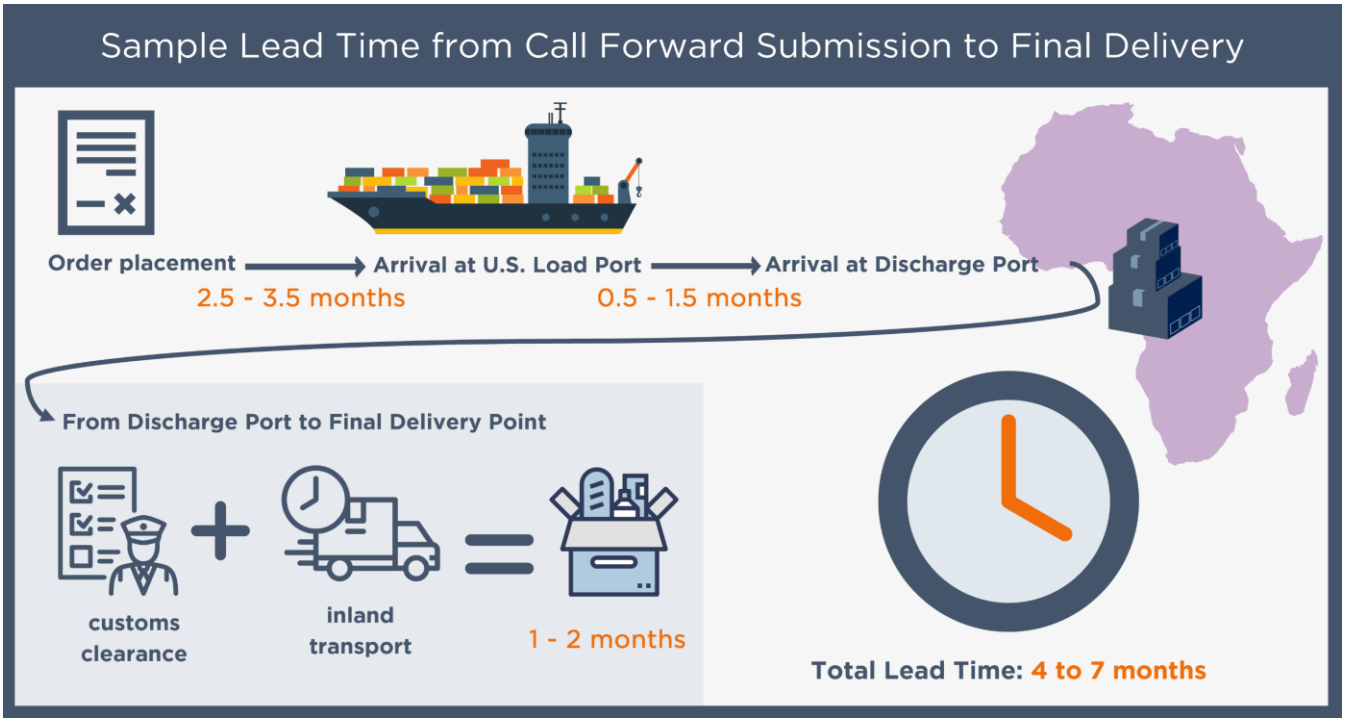
A Call Forward begins the process of ordering goods from USG-approved suppliers or prepositioned warehouses. In this appendix, the acronym USG is used to refer collectively to the USDA and the USAID.



A 1.1.1 LEAD TIMES AND TRANSIT TIMES

Logistics and programming staff should be aware of the number of days between the date when the Call Forward is submitted and the date when the goods become available for consumption.

For example, as seen in the figure below, packaged food commodities shipped by ocean vessel to coastal West Africa can take four to seven months from Call Forward submission to final delivery to CRS.



The USAID's Bureau of Humanitarian Assistance maintains a significant inventory of prepositioned emergency relief goods. These goods can be accessed upon request and with donor approval as part of an approved award. Release of these goods generally includes air or surface transport.

The table below shows the average lead time for the delivery of goods to the port of discharge from the day of Call Forward submission.

Day 1	Day 15	Day 22	Day 27	Day 29	Day 79	Days 94-124	Day 110	Days 125-155
Call forward submitted	Solicitation issued	Freight offers due	Commodity offers due	Commodity and freight awards	(Bulk) Arrival at U.S. load port	(Bulk) Arrival at discharge port	(Packaged) Arrival at U.S. load port	(Packaged) Arrival at discharge port

Time from Order Submission to Goods Arrival at U.S. Load Port



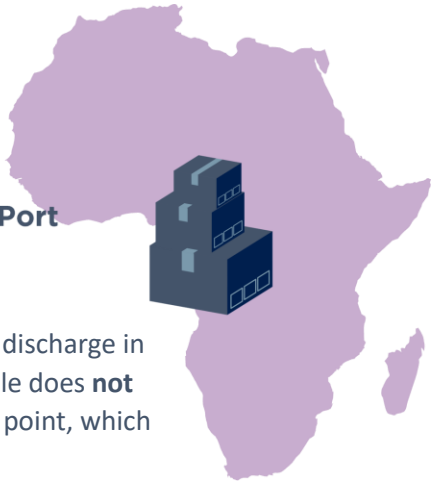
Once the Call Forward has been submitted, bulk commodities typically arrive at the U.S. load port 30 days quicker than packaged commodities. Bulk commodities arrive at the U.S. load port within 79 days on average, while packaged commodities arrive within 110 days on average.

Time from U.S. Load Port to Discharge Port



Arrival at U.S. Load Port → Arrival at Discharge Port

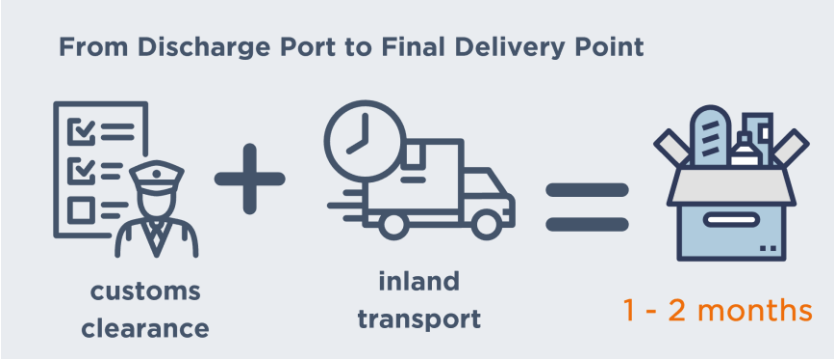
0.5 - 1.5 months



The USAID's Bureau of Humanitarian Assistance provides average transit times from U.S. load ports to ports of discharge in various regions around the world, as provided in the table below. The table does **not** include time for customs clearance and inland transit to the final delivery point, which requires additional days and is discussed in the next section.

Trade Route	Average Number of Days from U.S. Load Port to Discharge Port
Central America/Caribbean	15
West Africa	40
Central and Southern Africa	45
Red Sea	40
Southeast Asia	45
South America	25
Balkans	30
former Soviet Republics	30

Time from Discharge Port to Final Delivery Point



Once goods have arrived at the discharge port, customs clearance and inland transport to the final delivery point can add another one to two months, particularly in land-locked countries.

A 1.1.2 PLANNING AND SUBMITTING ORDERS

Good planning ensures that food commodities arrive at the right time. A long-term pipeline analysis (12 to 18 months) should be created and updated annually at a minimum (see Sample Pipeline Analysis).

For USAID awards, staff should submit Calls Forward in USAID's Web-based Supply Chain Management (WBSCM) system following the annual Bureau of Humanitarian Assistance Call Forward Schedule. Submission should follow these deadlines unless an exception is granted in advance. For USDA awards, Calls Forward should be timed according to that agreement. The CRS freight forwarder sends communications to supply chain and programming staff via email about entry deadlines for sales orders.

Sales orders that are not routed to the USAID's Bureau of Humanitarian Assistance by close of business on the day of the Call Forward deadline will be rolled over to the next month's procurement.

Typically, the Bureau of Humanitarian Assistance does not accept Call Forward submissions during the month of September.

Tips

1. Use historical data from the USAID's and USDA's schedules to time Call Forward submissions for arrival at the final delivery point when goods are needed for consumption.
2. CRS may request staggered shipments in one Call Forward or sales order. Staff must request delayed delivery dates in the Call Forward.
3. If a country program prefers, in close collaboration with Global International Transportation, it may submit a longer-term Call Forward (e.g., multiple Calls Forward over a given fiscal year).
4. A tolerance of 5% is allowed on Call Forward and sales orders of less than 10,000 metric tons. A tolerance of 2% is allowed if the total weight is over 10,000 metric tons (see 22 CFR 211.4 (f)).

USDA Food for Education (FFE) awards require an approved Evaluation Plan prior to Call Forward and sales order submission.

A 1.2 ROLES AND RESPONSIBILITIES

The table below lists the functions and activities of seven roles involved in managing food assistance for international transportation.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

Function/Activity	Global International Transportation	US Freight Forwarder*	USAID/USDA**	Logistics Manager	Supply Chain Manager	Program Manager/ Chief of Party	Country Representative
Analyzes commodity pipeline	C	C		R	A	I	
Prepares Call Forward	I	I		R	A	C	I
Reviews, signs off, and submits the Call Forward acting as "requisitioner."	I	I		I	I	A	R
Reviews and approves submitted Call Forward	I	I	R	I	I		C
Enters the sales order information in WBSCM	A	R	C	I	I	I	I

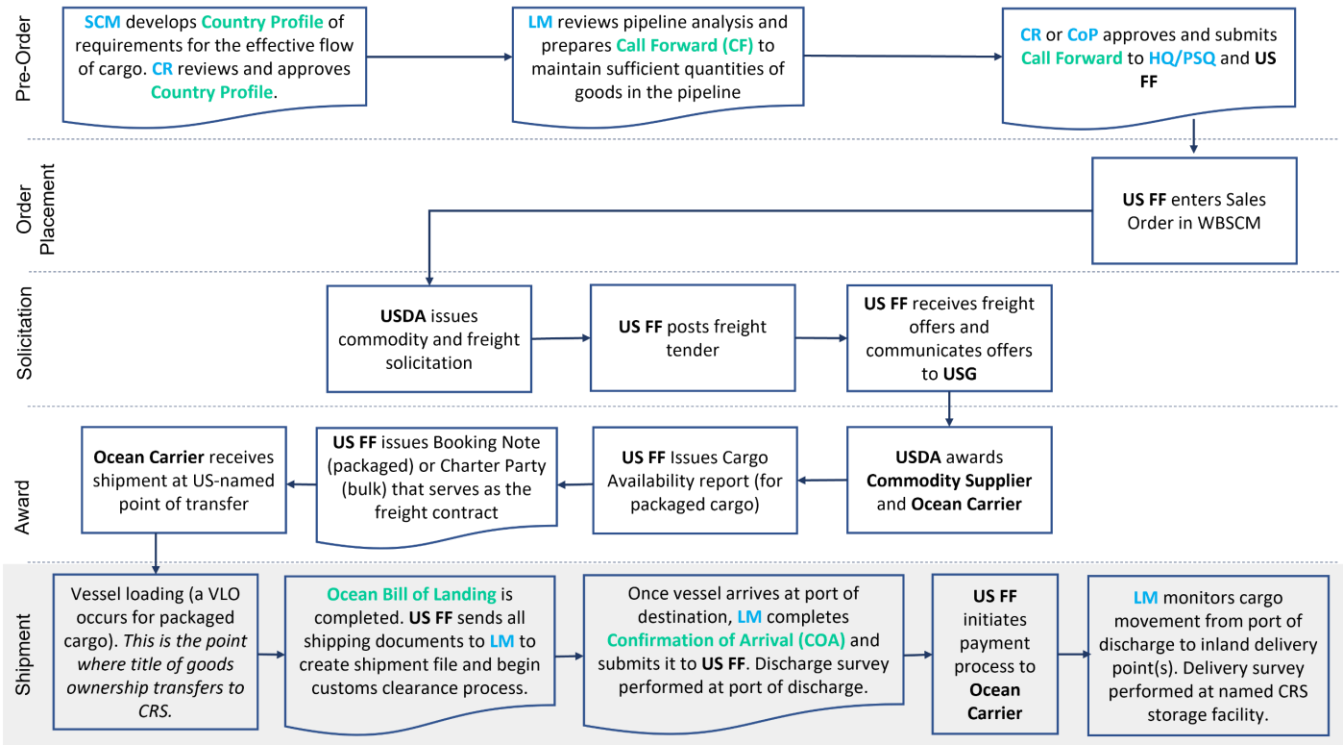
Responsible; **A**=Accountable; **C**=Consulted; **I**=Informed

*Global International Transportation uses the services of a U.S.-based Freight Forwarder. The Freight Forwarder is responsible for many USG food assistance activities. Country program logistics staff communicate regularly with the Freight Forwarder.

**These roles refer to the USAID's Local Mission or the USDA's Ag Attaché

A 1.3 PROCCESES

The process below for USG Food Assistance Calls Forward ends after the Award stage. For information about the shipment stage, see Appendix B: USG Food Assistance International Transport.



For more information on commodity packaging size and type, see the USAID Food Aid Product Information Guide. The USAID Commodity Calculator also provides access to a list of available commodities, inclusive of packaging size and type. For any support in completing a Call Forward, contact Global International Transportation.

A 1.3.1 PRE-ORDER

Preparing an Order Checklist

CHECKLIST *Preparing an Order*



The **Logistics Manager**:

- ☐ Monitors the goods pipeline in collaboration with the Program Manager/Chief of Party.
- ☐ Monitors the USAID's Bureau of Humanitarian Assistance procurement schedule or the USDA award details.
- ☐ Determines transit time for estimated arrival of goods at port of discharge.

When goods need to be ordered, the **Logistics Manager prepares the Call Forward in collaboration with the Program Manager/Chief of Party** with the following details:

- ☐ Program type (direct distribution or monetization).
- ☐ Type of good.
- ☐ Quantity in metric tons, provided in multiples of 10.
- ☐ Packaging size.
- ☐ Packaging type.
- ☐ Destination port (or final delivery point for Through bills of lading).
- ☐ Timing of food arrival (arrival at U.S. load port and at destination discharge port).
- ☐ Statement that adequate storage facilities are available.
- ☐ Statement that there is no disincentive to local production.
- ☐ Any special documentation requirements (e.g., best-used-by date, or BUBD, phytosanitary certificates, etc.).
- ☐ Any special shipping requirements (e.g., required containerization, staggered deliveries)*.

*Special requirements may require prior donor approval.

A 1.3.2 ORDER PLACEMENT

Reviewing & Submitting an Order Checklist

CHECKLIST *Reviewing & Submitting an Order*



After the Call Forward is prepared, the **Country Representative as "requisitioner"**:

- ☐ For Title II awards, seeks written concurrence from the USAID Local Mission, at least two weeks in advance of the intended Call Forward submission date.
  - Note that Global International Transportation and the U.S. Freight Forwarder do not review for approval from the USAID Local Mission. The Sales Order cannot proceed until the Local Mission communicates official approval to the USAID's Bureau of Humanitarian Assistance office in Washington D.C.
- ☐ Reviews the information contained in the Call Forward.
- ☐ Signs off on the Call Forward.
- ☐ Emails the Call Forward in advance of the Call Forward deadline (minimum three business days) to Global International Transportation, the U.S. Freight Forwarder, Global Award Management office, and any other relevant stakeholders.

If submitting a Call Forward for monetization of goods, the **Country Representative**:

- ☐ Provides a signed sales contract.
  - Note that for small lot sales, a signed sales contract is not required to accompany a monetization Call Forward. For more details, see CRS' Monetization Policy.

All goods and tonnages requested require donor approval **prior to** WBSCM sales order entry.

For USAID awards, approval consists of a fully executed agreement and an approved Annual Estimate of Requirements (or modification, if applicable). In the absence of an approved Annual Estimate of Requirements or modification, an email of approval from the Bureau for Humanitarian Assistance's Food for Peace is acceptable.

For USDA awards, approval consists of a fully executed agreement (or an approved amendment, if applicable). For more recent awards, the USDA has required an approved Evaluation Plan prior to accepting a Call Forward submission.

For support with the donor approval process, contact the Project Support Officer.

Global International Transportation coordinates with the U.S. Freight Forwarder to generate the sales order by entering the Call Forward information into the USG's Web-based Supply Chain Management (WBSCM) system.

If there are discrepancies or variations in the Call Forward, the U.S. Freight Forwarder or Global International Transportation communicates directly with staff listed in the Country Profile to seek clarification, as needed.

What is a Country Profile?

A **summary of country program contact details and all local requirements for the importation of food assistance commodities** to ensure that communications, documents, and cargo all flow seamlessly once a request for goods has been submitted.

The Logistics Manager must routinely review and update the Country Profile. Updates should occur when there are staff changes or changes to any national-level import and customs clearance requirements.

The U.S. Freight Forwarder confirms the successful entry of the Call Forward information in Web-based Supply Chain Management (WBSCM) system by emailing the Web-based Supply Chain Management (WBSCM) system-generated order number to the Logistics Manager and others listed in the Country Profile. If the sales order number is not communicated by the USAID's Bureau for Humanitarian Assistance procurement schedule deadline, the Logistics Manager should email Global International Transportation and the U.S. Freight Forwarder.

Order Approval

The USG reviews the Call Forward information entered in the Web-based Supply Chain Management (WBSCM) system and will either approve, reject, or request additional information on the sales order.

A 1.3.3 SOLICITATION

After the USG approves a sales order, the USDA issues the commodity solicitation, and the U.S. Freight Forwarder issues the freight tender to meet CRS' requirements in the Call Forward and subsequent sales order.

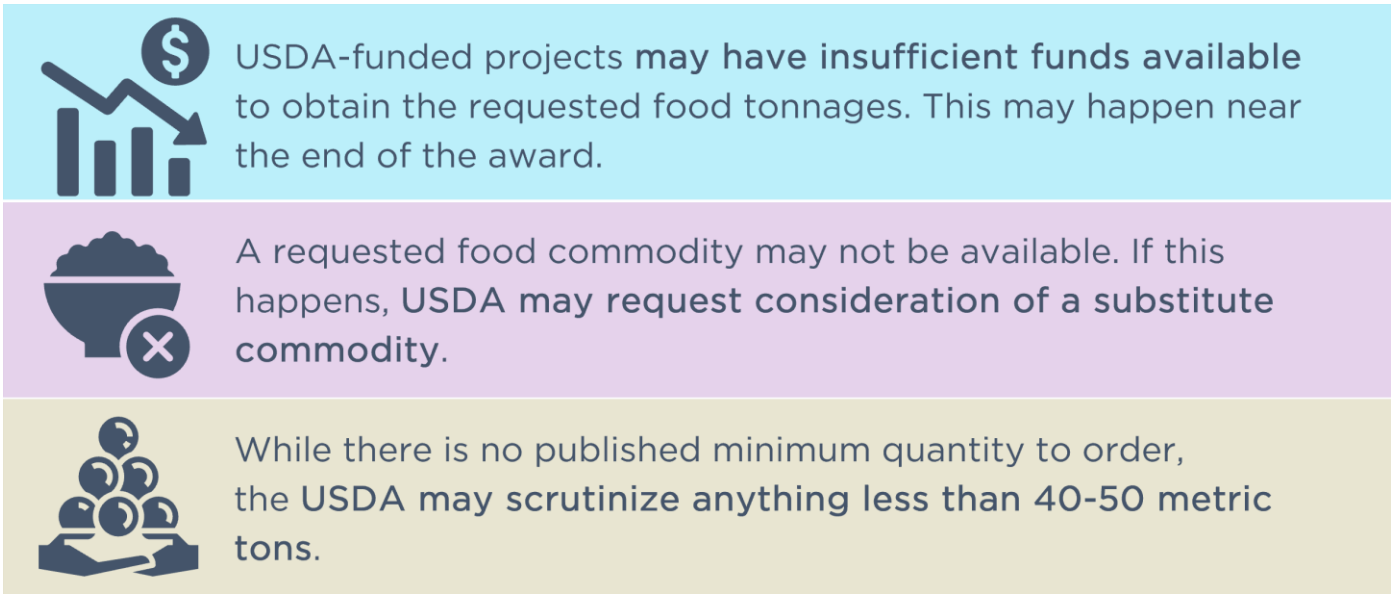
Commodity Solicitation

The USDA manages commodity solicitation for both the USDA and the USAID's Bureau for Humanitarian Assistance.

> The USG may decide to complete the order from globally prepositioned stock, which is usually reserved for emergency use but may also be used for a development program need. If this happens, the USDA will not issue a commodity solicitation, and the USG will take responsibility for issuing the ocean freight solicitation. In some cases, which will be communicated by Global International Transportation and the U.S. Freight Forwarder, the Logistics Manager may be required to tender for inland transportation

If goods will be fulfilled through the regular procurement process, the USDA issues a commodity solicitation to the U.S. Commodity Supplier. It takes USDA at least 45 days on average to complete the procurement process. A PO will be assigned to ordered commodities and will appear as a marking on the packaging.

The figure below shows three common reasons the Call Forward request might need to be updated.



Freight Tender Issue

After USDA has issued the commodity solicitation, the U.S. Freight Forwarder issues a freight tender. Once freight offers are received, the U.S. Freight Forwarder reviews the offers against CRS' terms and conditions. Freight offers that meet CRS requirements are submitted to the USG for award evaluation.

Typically, food assistance cargo that originates from the U.S. is shipped by ocean. Other modes of transport may be authorized for sudden onset emergencies. For more information about modes of transport, see the Planning and Procurement section in the National Transport chapter.

Global International Transportation verifies the eligibility of marine carriers through Bridger Insight to be compliant with the Anti-Money Laundering, Anti-Terrorist Financing, Export Controls, Economic Sanctions, and Excluded Parties Policy (POL-OOD-005).

If CRS is responsible for contracting transport providers to pick up cargo from a discharge port, the Logistics Manager may be required to verify the eligibility of inland transporters with Bridger Insight. This typically happens in shipments under non-Through bills of lading or if prepositioned goods are being sourced.

A 1.3.4 AWARD

Commodity Award

The USDA selects and awards the Commodity Supplier(s) and issues contracts. The selection of commodity suppliers and transporters is based on the lowest landed cost analysis and cargo preference guidelines. CRS does not have access to the contract details.

A single Call Forward submission may result in multiple commodity and freight awards.

Freight Flag Issued

The USG is responsible for negotiations with the potential carriers and for selecting or "flagging" the carrier, either as a U.S.- or foreign-flag or as a combination of U.S. and foreign-flag vessel. U.S. cargo preference law requires that a minimum of 50 percent of all government-generated cargo (based on gross tonnages) be transported on U.S.-flag vessels. Food assistance cargos are subject to this law.

Freight Contract Issued

After the carrier has been selected, the U.S. Freight Forwarder prepares the public freight award notice and issues the freight contract, which details the terms and conditions for the carriage of cargo. Different forms of contracts are used for transporting food commodities in packages versus in bulk, as listed below.

- A Booking Note is used for packaged food commodities.
- A Charter Party is used for bulk food commodities.

The U.S. Freight Forwarder emails the Logistics Manager a copy of the signed contract along with the other shipping documents. If the contract is not received, the Logistics Manager should contact Global International Transportation and the U.S. Freight Forwarder.

> The Logistics Manager should review the freight contract to be familiar with the terms and conditions. This contract is used to settle disputes with the carrier.



For information on the shipment stage, see Appendix B: USG Food Assistance International Transport.



Photo by David Snyder

Appendix B: USG Food Assistance International Transport

APPENDIX B: USG FOOD ASSISTANCE INTERNATIONAL TRANSPORT

Purpose

This appendix supplements the International Transport chapter of the CRS Supply Chain Management Handbook by providing information specific to managing food commodities in the pre-shipment, marine transport, cargo arrival, and import process of international transport. This appendix enables supply chain staff to understand and follow the unique requirements for managing USG food assistance commodities in the international transport process.

B 1.1 POLICIES, PROCEDURES, REGULATIONS, AND GUIDELINES

B 1.1.1 DONOR POLICIES AND REGULATIONS

- BHA Functional Policy External Policy – Award Requirements for Source and Origin for Local, Regional, and International Procurement (LRIP of Food Commodities)
- EOD-110 – Recoopering Packaged Commodities for Food Aid Programs
- EOD-68 – Change in Vessel Loading Observation Requirements and Procedures
- 2 CFR 700 – Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards
- USA Patriot Act of 2001
- USAID ADS Chapter 315: Cargo Preference
- USAID ADS Chapter 320: Branding and Marking
- USAID Regulation 211 (22 CFR 211): Transfer of Food Commodities for Food Use in Disaster Relief, Economic Development and Other Assistance
- USAID Regulation 216 (22 CFR 216): USAID Environmental Procedures
- USAID Regulation 228 (22 CFR 228): Rules for Procurement of Commodities and Services Financed by USAID
- USAID Series 300: Acquisition and Procurement
- USDA Regulation 1499 (7 CFR 1499): Food for Progress Programs
- USDA Regulation 1590 (7 CFR 1590): Local and Regional USDA Food Aid Procurement Program
- USDA Regulation 1599 (7 CFR 1599): McGovern-Dole International Food for Education and Child Nutrition Programs

B 1.1.2 DONOR OR OTHER GUIDELINES

- TOPS Commodity Management Handbook
- TOPS Commodity Management Toolkit
- TOPS Warehouse Safety Guide
- USAID Monetization Field Manual (1998)
- USDA Visual Standards Guide (2013)

B 1.2 OVERVIEW

Food commodities are transferred at the named U.S. point of transfer as specified in the freight contract. The freight contract includes assessment (penalty) clauses for either loading delays or discharge/delivery delays and clauses for payment upon full delivery of the goods. Shipments moving under Through bills of lading are subject to customs inspections by local government agents at the port of discharge and/or at the point of delivery.

The title or ownership of a food commodity transfers to CRS as specified in the USG agreement. Upon title/ownership transfer from the USG, CRS accepts legal responsibility for the goods. Typically, this transfer of responsibility and risk from the USG to CRS occurs at the time and place that the ocean carrier, or its appointed agent, receives the donated food from the U.S. Commodity Supplier.

For USG food assistance cargo moving under Through bills of lading, the shipping company is responsible for the safe delivery of the cargo to its final destination and for all losses until the goods arrive at the location within the country that is specified in the Through bill of lading.

Cargo under Through bills of lading is typically transported in containers that are unloaded ("destuffed") at a CRS or partner storage facility. If containers need to be inspected during clearance activities, the Surveyor should note the removed container seal number and the new container seal number in the survey report.

Landlocked countries can choose to use a Through bill of lading or a non-Through bill of lading. If using a non-Through bill of lading, the Logistics Manager must arrange for clearance at the foreign port and must contract inland transport services. These requests should be made at the time of the Pipeline and Resource Estimate Proposal (PREP). In both cases, the USG will cover the costs (see 22 CFR 211.4(c) (ii)).

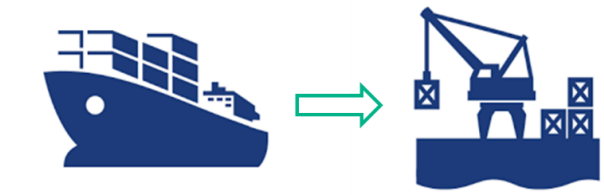
B 1.2.1 UNIQUE SHIPPING TERMS

Incoterms are general trade terms that apply to all cargo transported between buyers and sellers in different countries (see the Incoterms section in the International Transport chapter). However, there are some unique shipping terms that apply to the delivery and discharge of packaged food assistance cargo, as listed and illustrated below and subsequent pages.

Delivered to Place of Rest at Discharge Port (not a Through Bill of Lading)

2(A)(i)

Delivery Ex-Tackle, End of Hook, Along Side Vessel
Non-Containerized Breakbulk



Cargo is delivered to Receiver at place of rest end of hook, along side the vessel.

Carrier's responsibility ends when packages are unloaded onto quay OR directly on Country Program truck (if available).

2(A)(i)

Delivery Ex-Tackle, End of Hook, Along Side Vessel
Breakbulk Containerized for Carrier Convenience



If cargos have been containerized for carrier convenience, the containers are to be discharged and moved to designated warehouse by the port or the carrier's container freight station (CFS).

The carrier is responsible to de-van the cargo and make it available to CP at a place of rest within port-designated warehouses or carrier's CFS.

The carrier's responsibility ends at the port warehouse or the CFS.

2(A)(ii)

Containerized Delivery at Discharge Port

Receiver Required to Strip/De-Van Cargo from Containers



Containers are to be delivered to the Receiver at a place of rest at the carrier's or port's container yard.

Unless otherwise stipulated in Part 1 of the booking note, the amount of free time on containers is ten (10) calendar days.

The carrier's responsibility ends when the containers are placed in the container yard.

Delivered to Port Warehouse or Container Freight Station (CFA) (not a Through Bill of Lading)

2(B)(i)

Breakbulk Delivery into Port Warehouse



The carrier is to place the cargo into the warehouse(s) within the port area.

Carrier's responsibility ends when the cargo is placed in the port warehouse(s).

2(B)(ii)

Cargo Containerized until CFS, Breakbulk Delivery



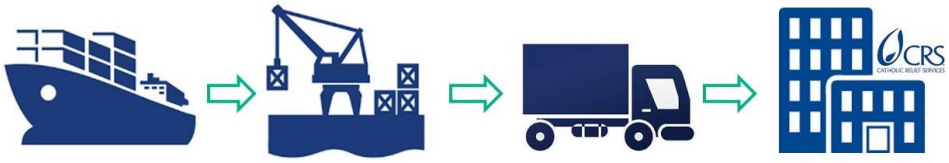
Carrier moves the containers to the carrier's CFS where the carrier is responsible to de-van the cargo and make it available to the Receiver at a place of rest in the CFS.

Carrier's responsibility ends when the cargo is unloaded from the containers and made available to the Receiver.

Warehouse Delivery (or a Through Bill of Lading)

2(C)(i)

Carrier Delivers to Warehouse Door
CP Responsible to Strip/De-Van Containers or Carrier's Conveyance



Cargo is delivered in the carrier's conveyance at the door of the CP's warehouse(s) located outside the port area.

Country Program is responsible for the unloading of carrier's conveyance at the warehouse(s).

2(C)(ii)

Delivery and Stacking at CRS Warehouse
Carrier is Responsible to Strip/De-Van Containers or Conveyances at their own Time, Risk, and Expense



Carrier is to transport the cargo to the Country Program's warehouse.

Carrier is to unload the cargo from the Carrier's conveyance and stack the cargo into the Country Program's warehouse located outside of the port area and at the Carrier's Expense.

B 1.2.2 UNIQUE DOCUMENTATION REQUIRED

The documents listed in the table below should be sent to Global International Transportation and the U.S. Freight Forwarder as soon as these documents are available. If documentation cannot be obtained within five months from the date of vessel departure from the port of discharge, the country program must immediately notify Global International Transportation and provide an explanation for the delay.

TRANSPORT ACTION(S)	DOCUMENT(S)
1. Arrival Of Shipment	• Confirmation of Arrival (COA) (should be sent as soon as the vessel arrives)
2. Discharge of Cargo	• Tally Sheets • Discharge Survey (or "ex tackle") Report • Survey Fee Invoice (Discharge)
3. Follow-up Claim Action in case of: • Short-landing • Damaged Commodities • Repacking • Disposition of Unfit Commodities • Excess Landing	• Certificate of fitness for human consumption • Invoice for Re-packing (if fit) • Invoice for Destruction (if unfit) • Certificate of Final Disposition, Unfit Certificate (if unfit) • Certificate/Invoice of Proceeds of Sale and Receipt (if applicable) • Report of Damaged Commodities • Any other supporting documentation to support the claim
4. Delivery of Cargo	• Tally Sheets • Delivery Survey • Survey Fee invoice (delivery) • Inland transport invoice • Claim Summary (internal document, USDA program goods only)

B 1.2.3 COUNTRY PROFILES

Country profiles are maintained for all country programs receiving USG food assistance. A country profile is a summary of country program contact details and all local requirements for the importation of food assistance commodities to ensure that communications, documents, and cargo all flow seamlessly once a request for goods has been submitted. Documentation requirements should be included in the Country Profile.

The Logistics Manager must routinely review and update the Country Profile. Updates should occur when there are staff changes or changes to any national-level import and customs clearance requirements.

B 1.3 ROLES AND RESPONSIBILITIES

The table below lists the functions and activities of six roles involved in managing food assistance international transport.

For more information on the CRS staff roles listed below, see the Roles and Responsibilities chapter.

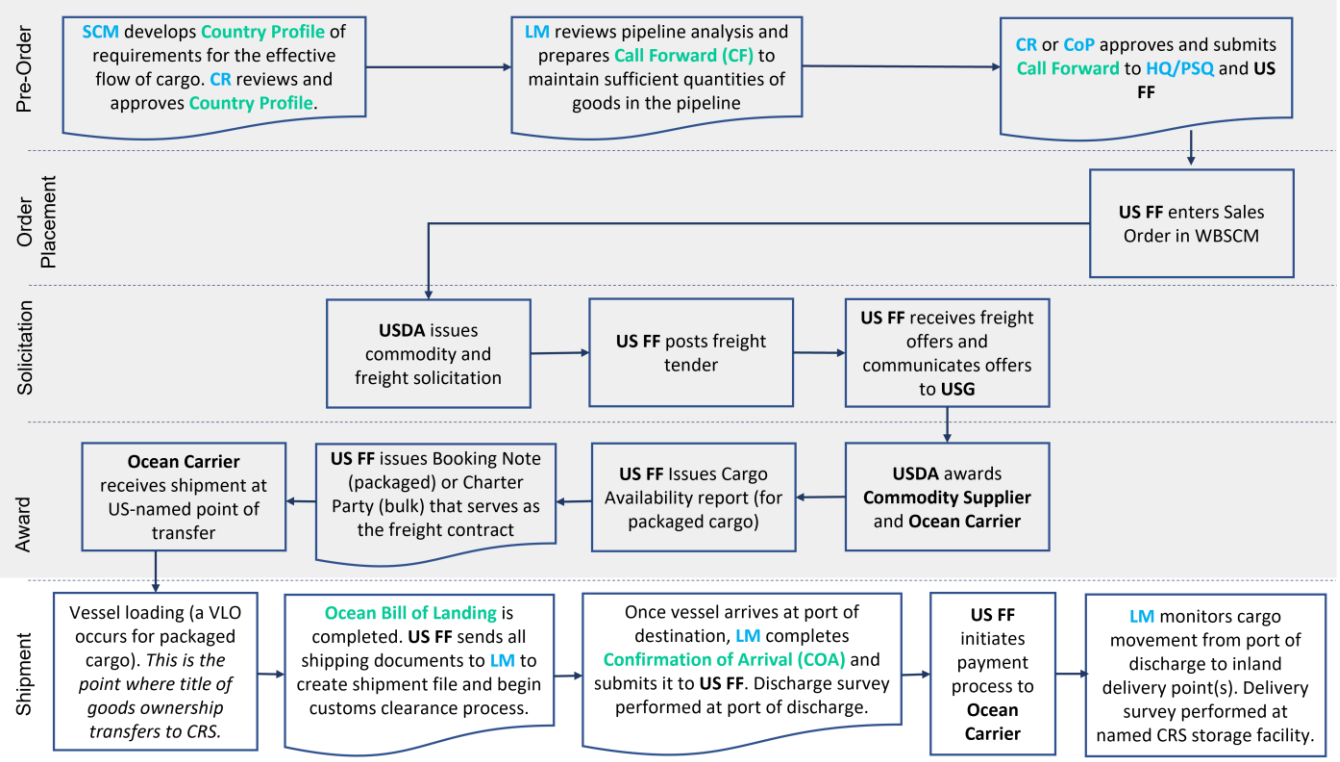
Function/Activity	Global International Transportation	US. Freight Forwarder*	Logistics Manager	Supply Chain Manager	Head of Operations	Program Manager/ Chief of Party
Issues shipping and import documents from Donor, Supplier, and Ocean Carrier	A	R	I	I		
Maintains county program-level shipping file			R	A		
Tracks cargo after vessel loading, and updates stakeholders on estimated times of arrival and potential delays	A	R	I	I		
Confirms cargo arrival at the point of discharge	I	I	R	A	I	I
Facilitates payments to carriers	A	R	I			I

R=Responsible; A=Accountable; C=Consulted; I=Informed

*Global International Transportation uses the services of a US-based Freight Forwarder. The Freight Forwarder is responsible for many USG food assistance activities. Country program logistics staff communicate regularly with the Freight Forwarder.

B 1.4 PROCESSES

The process below for USG Food Assistance International Transport starts with the Shipment stage. For additional information about the Pre-Order, Order Placement, Solicitation, or Award stages shaded below, see Appendix A: USG Food Assistance Call Forward.



USDA in the process map refers to the USAID's Local Mission or the USDA's Ag Attaché.

B 1.4.1 PRE-SHIPMENT FROM U.S. PORT

The pre-shipment processes for USG food commodities described below in this section are provided for information only because the responsibilities in these particular pre-shipment processes belong to the USG or Global International Transportation, not country program staff. For information about pre-shipment processes for all other goods, see the International Transport chapter.

Cargo Receipt at Point of Transfer

The U.S. Freight Forwarder tracks cargo movements from the U.S. Commodity Supplier to the named U.S. point of transfer and liaises directly with the U.S. Commodity Supplier. Global International Transportation will be informed accordingly of any delays that put cargo at risk for not sailing as scheduled.

The quantity of goods delivered by the U.S. Commodity Supplier at the U.S. point of transfer may vary from the quantity of goods ordered. Pursuant to 22 CFR 211.4, there is an accepted tolerance of +/- 5% for shipments less than 10,000 metric tons and +/- 2% for shipments greater than 10,000 metric tons, based on total quantity ordered.

Vessel Loading Observation (VLO) for Packaged Cargo



The Vessel Loading Observation (VLO) is required for all packaged goods except: (1) bagged whole grains (corn, wheat, sorghum); and (2) ocean containers that were loaded at a U.S. Commodity Supplier's manufacturing and packaging location. Any losses found at this stage are the responsibility of the USG.

The results of the Vessel Loading Observation (VLO) are included in the Ocean bill of lading. The cargo is then loaded aboard the vessel for sailing.

Shipping Documents Issued and Cargo Cleared for Export

The U.S. Freight Forwarder completes customs export formalities and assigns a Packing List reference number. The U.S. Freight Forwarder also collects and distributes all required documentation that the country program requires as specified in the Country Profile. Many documents will not be sent until after the vessel sails.

B 1.4.2 PREPARATION FOR SHIPMENT ARRIVAL

For information about preparing for the cargo and shipment arrival, see the Pre-Arrival section in the International Transport chapter.

Cargo Tracking and Documentation

The Logistics Manager maintains a shipment file that contains all the shipping documentation for each individual shipment and maintains a master shipping ledger to track the estimated arrival times of shipments. Global International Transportation and the U.S. Freight Forwarder send weekly updates on the status of shipments.

Food assistance commodities are often split among more than one vessel. Split shipments are very common, especially for large sales orders. Supply chain staff should plan accordingly and be ready for multiple clearances, changing schedules, short-term storage, and internal transport operations.

Clearing and Forwarding

In most countries, cargo clearance requires the services of a licensed clearing and forwarding agent who is responsible for submitting documents to customs and port authorities and for communicating about the shipment status. The clearing and forwarding agent represents CRS to the port authority. For more information about requesting and contracting service providers, see the Start-Up and Procurement chapters.

Clearing cargo in a timely fashion requires proper documentation, including Bill(s) of Lading and other documents such as phytosanitary certificates. The Logistics Manager and the Supply Chain Manager must review import regulations and the Country Profile to ensure that all required documentation is provided.

Failure to obtain the required documents for customs clearance may result in serious delays at the port, causing losses, high demurrage, and/or storage costs.

Duty-Free Authorization

USG food assistance cargo is eligible for duty-free authorization pursuant to 22 CFR 211, unless such cargo is being imported for the purpose of monetization. The Logistics Manager works with other country program staff to complete and apply for duty-free exemption during the start of a project. The duty-free exemption is usually included in the host country agreement (HCA). For more information, see the Start-Up chapter.

Discharge and Delivery Surveys

When USG food assistance cargo arrives at the port of discharge, both the USAID and the USDA require a discharge (or "ex-tackle") survey, pursuant to 22 CFR 211.9(c)(1)(U).

For food assistance cargo under Through bills of lading (i.e., 2ci or 2cii shipment terms), the USAID's Bureau of Humanitarian Assistance and the USDA also require a delivery survey when goods arrive at a CRS storage facility or outside the discharging terminal (depending on the shipping terms). For containerized cargo, the delivery survey occurs when the containers are de-stuffed.

The USAID's Bureau of Humanitarian Assistance will not reimburse CRS for the delivery survey in the absence of the discharge survey for Through bills of lading.

For food assistance cargo under non-Through bills of lading (i.e., 2ai, 2aii, 2bi, or 2bii shipment terms), a delivery survey is optional but recommended.

The country program must contract the services of a Surveyor. For more information about requesting and contracting service providers, see the Start-Up and Procurement chapters. The Logistics Manager communicates with the Surveyor ahead of vessel arrival to confirm the date and time of arrival and the start of discharge operations. The Surveyor must be present for the entirety of the discharge operations. The Surveyor may be assigned responsibility for ensuring that the appropriate authorities promptly analyze cargo with suspected damage and for obtaining certificates for unfitness or short landings.

The Supply Chain Manager must immediately inform the contracted survey company's management if the contracted Surveyor is not present at the time of vessel discharge and container destuffing or has performance issues.

Survey Reports

After a discharge or delivery survey is completed, the Surveyor sends CRS a survey report. The survey report records discrepancies such as over-landings (i.e., overages), short-landings (i.e., shortages), and damaged cargo as manifested at the time and place of discharge from the vessel or during the delivery of goods at a CRS warehouse. All original tally sheets and photographs taken during offloading operations must be attached. The survey report is important for CRS to be able to file claims against the carrier for marine or inland transport losses. For more information about filing claims for marine or inland transport losses, see the Inland Transport Claims and Marine Claims sections.

Slight variances from the documented package weight for bagged food commodities occur regularly, typically due to changes in humidity. The USDA allows a 2% tolerance for weight variance for bagged commodities. Any variances larger than 2% should be included in the survey report.

For a checklist of what should be included in the survey report, see the USDA's Survey Specifications.

Survey reports and all supporting documentation should be submitted to Global International Transportation or the U.S. Freight Forwarder within five months after the survey is conducted. The submitted survey reports and documentation must be in English. For CRS to be reimbursed, the supporting documentation must include the cost of the survey.

Inland Transport

For non-Through bills of lading, CRS may be responsible for contracting transport service providers. For more information about requesting and contracting transport service providers, see the National Transport and Procurement chapters.

To reduce any avoidable costs for containerized cargo under non-Through bills of lading, the Logistics Manager should determine the free-time period for containers and the costs of both demurrage and port storage.

Inland Transport Claims

Before submitting an invoice to Global International Transportation and the U.S. Freight Forwarder, any losses and damages that occurred during transit should be deducted from the inland transport service provider's invoice, as provided in the contract with such service provider.

CRS may waive the claim and write off the loss—although this practice is strongly discouraged—if the declared loss is less than 500 USD and meets one of the three criteria below.

- The loss is not detrimental to the program.
- CRS believes the transporter was not at fault for the loss or the loss is not the result of an established pattern with the responsible party.
- The cost to pursue a claim for such loss exceeds the value of the claim.

Inland transport losses that occur under Through bills of lading are included in the marine claim, if filed against the marine carrier, and are subject to loss value threshold requirements applicable to marine claims.

Pursuant to 22 CFR 211.9(b), when losses or damages are attributed to a local transport service provider, the supplier might offer to replace the lost good(s), as long as the replacement good is a similar item with an equal or greater unit value and of equal or greater quantity than the loss.

B 1.4.3 SHIPMENT ARRIVAL

Arrival Confirmation

Confirmation of Shipment Arrival Checklist

CHECKLIST *Confirmation of Shipment Arrival*



Within 24 hours after the vessel arrives with USG food assistance cargo at the port of discharge, the **Logistics Manager:**

- ☐ Completes Arrival Form.
- ☐ Submits Arrival Form to Global International Transportation and the U.S. Freight Forwarder.

Vessel Unloading

A CRS Port Agent must be on site to observe the off-loading operations. The Port Agent must communicate to the Supply Chain Manager and the Head of Operations any problems related to customs clearance, port storage, transport, or the discovery of damages/losses. For more information about the Port Agent role, see the International Transport chapter.

In some countries, for non-Through bills of lading, "extra days" for vessel off-loading are charged to CRS. In these countries, the Logistics Manager or Supply Chain Manager should negotiate with port authorities for the maximum number of free days for completion of vessel discharge and port clearance operations.

Short and Over-landings

A short-landing (or shortage) of goods occurs when the discharged and/or delivered quantity is less than the quantity listed on the bill of lading. An over-landing (or overage) of goods occurs when the discharged and/or delivered quantity is more than the quantity listed on the bill of lading or the Cargo Manifest.

Short and over-landed quantities are indicated in the survey report(s). For containerized cargo, short and over-landings are captured during the delivery survey when containers are de-stuffed.

If the short-landed amount is not documented in the survey report, the shortage will be considered an in-country loss and *not* a marine loss. Only the amount indicated on the survey report as short-landed can be accounted for as short-landed.

For cargo under Through bills of lading, short-landings and damages identified at the time of the container de-stuffing are considered marine losses even if the losses occurred during inland transport.

Damaged Commodities

Any damages discovered during discharge and de-stuffing (e.g., torn or crush packages, oil leakages, evidence of an infestation, spoilage, etc.) should be included in the survey report and described as damages pending reconstitution or laboratory testing.

When damaged food commodities are discovered during discharge and/or unloading activities, supply chain staff must follow CRS procedures for segregating and inspecting damaged goods. Failure to follow these procedures may result in a claim against CRS filed by the USG pursuant to 22 CFR 211.8.

Determination of loss can only be made through lab analysis or confirmation from a USAID representative (within 72 hours of notification) that damaged food commodity is unfit for human consumption, not simply through visual inspection of damaged packages and their contents. Disposal should follow the requirements in 22 CFR 211.8(b).

Pursuant to 7 CFR 1599.8-10, for USDA food commodities, country programs must follow the process above, and must also report all potential or actual losses with a total value of 5,000 USD or more to their Global USDA contact person within 15 days of identification of the loss.

For more information about inspections, sampling and testing, and loss handling, see the Warehouse and Inventory Management chapter.

Country program staff must prepare and submit a Damaged and Missing Commodities Report to the USAID's Bureau of Humanitarian Assistance or the USDA with information about what party was responsible for the commodities when damaged goods were discovered. Once approved, short-landed goods may be written off from CRS financial records. For more information, see Finance's In-Kind USG Commodities procedure.

Marine Claims

The discharge or delivery survey is a required document to file a marine claim. For Through bills of lading, both the discharge survey and the delivery survey are required before the marine claim can be established. The Surveyor might be called upon to clarify issues with the survey reports and to provide depositions for use in litigation. For more information, see the Discharge and Delivery Surveys section.

Marine Claims Checklist

CHECKLIST *Marine Claims*



When short-landings or damaged commodities are discovered either during discharge or delivery, the **Logistics Manager**:

- ☐ Completes the Arrival Form and submits the form to Global International Transportation Shipping and the U.S. Freight Forwarder.
- ☐ Determines the value of the short-landed or damaged goods.
- ☐ Alerts the Supply Chain Manager, the Head of Operations, and the Country Representative about the short-landed or damaged goods.
- ☐ Files a Notice of Intent to file a claim (see 22 CFR 211.9(c)(II)(a)).
- ☐ Submits the Notice of Intent to file a claim to the vessel captain, vessel agent, inland carrier, or inland carrier's agent within three days after the losses were observed (see USDA 15 specifications).
- ☐ Submits a copy of the Notice of Intent to Global International Transportation and the U.S. Freight Forwarder, beginning the process for preparing a marine claim against the carrier.

Reconditioning/Repackaging

While the USAID's Bureau of Humanitarian Assistance and the USDA both reimburse the costs of reconditioning food commodities, they have different approval requirements and thresholds for reimbursement.

- The USAID's Bureau of Humanitarian Assistance requires advance approval for reimbursement depending on the cost of reconditioning USAID food commodities. For costs up to 500 USD, advance approval is not required. For costs over 500 USD, advance approval by the USAID Mission is required in writing. A copy of the approval letter must be sent to Global International Transportation and the U.S. Freight Forwarder.
- The USDA does not require advance approval for reimbursing the cost of reconditioning USDA food commodities.

Supplies for reconditioning/repackaging should be discussed with the USG donor and included at the time that the agreement is signed. There should be an adequate quantity of clean unused bags, tins, cartons, jerrycans, and packaging supplies and equipment (e.g., stitching machine, thread, heavy tape) to be used for reconditioning when the need arises. Extra bags may be ordered at the call forward stage.

When reconditioning occurs at a CRS storage facility, warehouse staff should document the reconditioning process in the Reconditioning Report. For more information on the reconditioning process, see the Warehouse and Inventory Management chapter.

B 1.4.4 STORAGE AND TRANSPORT OF GOODS FROM PORT OF DISCHARGE

Storage at the Port in a Transit Facility

CRS should avoid storing goods at the port in a transit facility because there is a high risk of loss, damage, and misappropriation in port warehouse facilities.

If storage at these facilities for cargo under Through bills of lading cannot be avoided:

- CRS should store the minimum quantity possible.
- The Surveyor, Clearing and Forwarding agent, and/or CRS Port Agent should inspect the facility and report on conditions.

If storage at these facilities is necessary for cargo under non-Through bills of lading, CRS must ensure to the greatest extent possible the security of both the facility and the inventory stored there.

When goods under non-Through bills of lading are de-stuffed in a port transit facility, a delivery survey must be performed.

Whenever possible, the CRS Port Agent should maintain a presence at the port as long as goods are stored there to help prevent incidents and to immediately report any incidents that occur.

Transport out of the Port

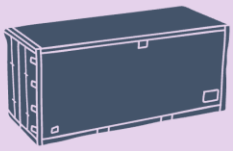
All clearance activities must be completed before the food assistance commodities leave the port.

For cargo under non-Through bills of lading, goods that are discharged from a vessel are typically placed directly onto trucks that CRS has contracted. There should be an adequate number of trucks available to receive the goods. Usually, the Clearing and Forwarding Agent will manage transport operations as part of the agent's agreement with CRS.

For containerized cargo, the containers should remain unopened during discharge. The figure below shows the methods for moving containerized cargo out of the port terminal.



Containers are loaded onto trucks or trains, taken from the port to the destination storage facility, and destuffed for storage



Containers are loaded onto port vehicles and taken from the port to the Container Freight Station for onward transport



Containers are taken to a transit warehouse at the port and destuffed for temporary storage

All inland transport contracts from the port of discharge to a land-locked country must be sent to Global International Transportation and the U.S. Freight Forwarder who will manage the payment and reimbursement process. Country programs should not pay transporters directly for USG food assistance commodities since these costs can be reimbursed by USAID.

Carrier Payment

Disbursing Freight Funds to a USG Food Aid Cargo Carrier Checklist

CHECKLIST *Disbursing Freight Funds to a USG Food Aid Cargo Carrier*



To make sure that these freight funds are disbursed as required by the donor to the carrier of USG food aid cargo, the **Logistics Manager**:

- ☐ Submits the Confirmation of Arrival (COA) Form to Global International Transportation and LifeLink Logistics once vessel arrival is confirmed.
- ☐ **For cargo moving under Through bills of lading:** Informs Global International Transportation and LifeLink Logistics when the last transport truck has completed delivery at the destination.
- ☐ **For cargo moving under non-Through bills of lading:** Submits all invoices and supporting documentation (e.g., Waybills, tucking details) to Global International Transportation and LifeLink Logistics (because the donor may still reimburse for inland transport to landlocked countries).

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