

Transport Overview

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Definition

In the context of humanitarian organizations transport is defined as:

“The activities involved in moving supplies from point of origin to internal customers or beneficiaries”.

The aim of transport is to physically move supplies in a reliable and safe manner, on time, cost effectively and efficiently to its destination.

The Role of Transport

The role of transport is to facilitate the movement of physical goods. This may be from points of manufacture, storage or pre-positioning, to points of use; or between hubs and distribution points; or hubs to end use; or distribution points to end use; or return from end use back to hub and pre-positioning points or manufacturers. The source and destination may be in the same country, or one may be in a different country requiring international movement.

The rapid growth of technology and the changes in the delivery of humanitarian aid has done little to change the fact that relief supplies still have to be collected and delivered via some physical form of the transmission. Even though new technologies have enhanced the speed at which cargo can be transported or monitored, the basic concepts surrounding transportation have remained largely the same for many years.

Historically, the transportation of supplies has been regarded as an ancillary function of little or no central importance. More recently, efficient transportation has been recognized as an essential determinant in providing consistent, quality service to beneficiaries. A good transport system fulfills the "rights" of supply chain management. That is:

- The right good
- Delivered to the right recipient
- In the right quantities
- In the right condition
- At the right location
- In the right time
- For the right price

Summarizing this thinking into a series of actionable steps, and successfully implementing those steps, will ensure timely and effective delivery of humanitarian assistance. Goods will arrive as scheduled, at the right price, in maximized loads with no breakages or pilferage. A good transport system complements an efficient distribution system.

Common Terms in General Transport

There are several key concepts that used across all forms of transport:

Shipper	The person or legal entity that is sending the goods from point of origin. The sender does not have to be the owner of the cargo.
Carrier	The person or legal entity that either owns the vehicle or vessel upon which cargo is transported - or "carried" - or has legal responsibility for physical stewardship of the cargo between two points.
Receiver	The person or legal entity that is duly authorized to receive cargo on the receiving end. Receivers are also sometimes called "consignees," however the term consignee has specific legal meaning in customs proceedings, while a receiver could take possession of cargo through a variety of means, domestic or international.
Agent	A person or legal entity who is legally and contractually designated to act on behalf of a shipper, carrier or receiver. Agents can act in a variety of functions, from handling goods to processing documentation.
Service Provider	Any contracted third-party entity that offers a service, usually on a for profit basis. A service provider may be involved in a variety of activities, including being an acting agent or a contracted carrier.

"Take Possession"	When physical goods are transmitted into the direct care and stewardship of one party, be it a transporter, a warehouse, or customs, that party is said to have "taken possession" of the cargo. Taking possession does not mean the party holding the cargo then owns the cargo, they are only physically holding it for their part of the transport process.
Intermodal	Any form of transport that changes between two or more modes of transport. Intermodal transport can be facilitated through the use of containerized shipment, however cargo can also be transported through intermodal means simply by directly loading and offloading through a variety of means.
Material Handling Equipment (MHE)	MHE is any form of mechanical equipment used to facilitate the loading and offloading of cargo, or the movement of cargo around an open space such as a port or a warehouse. MHE includes forklifts, cranes, pallet jacks, and more.
Incoterms	Incoterms - short for "International commercial terms" - are mutually agreed upon international shipping terms that designate responsibilities, risks and limitations of shippers, carriers and receivers. Incoterms generally are only applicable and enforceable for international shipments.

Developing a Transport Strategy

A transport strategy depends, not only on the needs within the organization, but varies from organization to organization and from situation to situation. Some factors to consider when developing a transport strategy are:

- How to identify transport service providers
- How to manage transport – self managed or third-party provided
- Capacity of transport modes available
- Quantities of goods requiring movement over time
- Nature of goods/products/supplies to be transported
- Distances to be covered
- Environmental issues such as climate, government legislature, and infrastructure
- Number of destinations, hubs and pre-positioning locations
- Origins, routes, and destinations
- Available transport modes & their relative costs
- Human resources
- Terrain
- Funding
- Security
- Special circumstances, such as the nature of disaster

The above factors would be valid for both emergency and non-emergency situations.

Transport management in emergencies can be a complex task depending on the nature of the disaster. Humanitarian organizations have increasingly begun to tap into the joint transport services as a strategy in emergencies, such as those offered by the Logistics Cluster during emergencies. A joint transportation service is based on a collaborative approach and aims to leverage the advantages of centralized coordination and sharing of assets.

Managing Transport Providers

Humanitarian response organizations have increasingly begun to rely on external transport providers. An external transport provider is defined as any third party who can carry or identify vessels that can carry cargo through commercial means. In the event third party transport providers are contracted, there has to be a structured approach to the selection process, similar to other forms of procurement, and subsequent monitoring and control of the provider or providers selected. There are a number of important issues to be considered to ensure that a reputable provider, who will provide the required level of service, at an acceptable cost, is sourced.

The selection process adopted for the acquisition of all services is covered by the organization's approved procurement policy, processes and procedures. Ideally, contracting should be done in a competitive manner, on market terms, and negotiations undertaken in an open and transparent fashion, thus ensuring cost effectiveness and equal opportunities for the appropriate commercial entities.

There has also been an increasing level of attention to the ethical standards of contractors, including their facilitation and participation what would be considered violations of state and national laws, human rights abuses, or their involvement with parties to conflict. Entities such as ethicalcargo.org provide tools and training to guide agencies seeking ethical cargo solutions.

Criteria influencing transport service providers

The criteria for selection will vary from organization to organization. Some factors that may influence the selection of transport service providers are:

- Carrier characteristics and capacity
- Proven efficiency
- Timeliness of delivery
- Known integrity, reputation and reliability
- Good relationships with other carriers
- Responsiveness to urgent needs of the organization (if previously contracted)
- Financial viability to cover costs of providing the service
- Adequate communication systems to facilitate tracking
- Assets to safeguard organization cargo
- Ability to provide a multi-modal service, if need be
- Presentation of timely reports and correct invoices

Organising transport

In emergency contexts, transport can logically be divided between domestic/local transport and international transport. The general concepts around domestic and international transport remain largely the same, however special considerations are required for both.

Domestic transport movement - Local movements within a specific country will usually involve road transport, however rail, air, river and even at time sea transport can occur in domestic movement. This may involve movement of bulk loads from ports, airports and railyards to warehouses and depots, bulk movements between facilities such as warehouses or depots, or delivery of smaller consignments from a local warehouse or depot to end users at a number of destinations in an area. Domestic transport requires actors to follow all local laws and safety regulations.

International movement - International transport requires the transmission of physical goods across a legally defined international border or boundary, and in most normal circumstances requires undergoing standard customs procedures. In normal circumstances the local market will not always be able to provide all the products and services required to fulfil the needs identified in an emergency response. Response agencies therefore will source goods externally and organize the transportation of relief supplies to affected locations. To ensure efficiency and compliance with import regulations the organizations seek service providers with expertise and capacity to handle certain aspects of the movement.

Typical Service Providers

Freight Forwarders – Commercial third-party companies or individuals that act as brokers between transport companies, customs agents, logistics providers, and other commercial services that might support packaging/handling, warehousing, transportation, or any other aspect of moving material goods from one place to another. Unless a requesting agency has well defined transport routes and a detailed understanding of the shipping market, freight forwarders are essential for identifying and pricing transport options, especially in chaotic post emergency settings. Forwarders have contacts within the transport communities and know how where to look for the best shipping options.

Clearing Agents – Commercial third-party companies or individuals who specialize in understanding import and export regulations, and help facilitate the flow of material goods through customs. Though clearing agents may be used for import or export, the majority of their services are employed for getting goods into countries. Import and export regulations are complex and the failure to comply can result in fines or worse. Many countries require an official licensing process for clearing agents, and unless organizations have specific expertise in customs agents should always be consulted for imports of any kind.

Inspection Services – Private third-party services that conduct inspection on goods in transit. This may include physical counting, damage inspection, laboratory testing, inspection of batch/lot/expiration, validating specifications, etc. Inspection services may be required for importation, but many agencies employ inspection services during upstream transport, especially at the point of procurement.

Third Party Logistics Provider (3PL) – Commercial third-party logistics providers that can assume a portion of or the entire supply chain. 3PLs can act on behalf of contracting agencies for a variety of services, including warehousing, kitting, procurement, quality inspections, transport and even developing supply chain strategies without providing a physical service. 3PLs tend to be more expensive, but can offer wholistic solutions to some agencies who may need additional support.

The aforementioned service providers are all vendors, and as such the regular procurement process for each respective agencies should still be applied. Agencies would do well to obtain multiple quotes, review performance, and incrementally conduct new bid analysis. Criteria for selection of above service providers might:

- Licensed by the government to conduct customs clearance formalities and be up-to-date on changes in customs requirements
- Offer a wide variety of services, so that shippers do not need to contract several different companies for different services
- Own or have access to a bonded warehouse to protect and control shipments in transit
- Own a trucking fleet for inland transport and have access to specialized vehicles when needed such as container trucks, low-bed trailers, tankers, etc
- Have trained, competent, experienced and trustworthy staff
- Have a proven record of reliability, accuracy, and timeliness, as verified by references from other groups that have used their services
- Are flexible in their availability at short notice, also outside of office hours and on public holidays
- Have an established reputation and have been in business for a number of years
- Have influence in the transport market, with port authorities, etc
- Are experienced in successfully handling duty exemption arrangements for humanitarian organizations
- Have an office in the port area or nearby
- Are experienced in verifying goods arriving in the port: discharge, storage and loading operations, checking weights and inspecting shipping packages for visible damage
- Are experienced in hiring porters and stevedores for cargo handling
- Have at least a country-wide, preferably a multi-country regional network
- Use technology effectively, including a good telecommunications system and, preferably, a computerized tracking system that allows visibility of where shipments are at a given time

Although it is advisable to use an intermediary such as a freight forwarder or clearing agent to handle international movements, it is still important to have a basic understanding of the roles of other third-party service providers involved in international movement. It should be noted that these third parties may be private companies or in some cases state run organizations.

Other related parties frequently encountered with cargo operations are:

- **Customs Officials** – Agents designated by the national authority of countries to facilitate the lawful transmission of items into incorporated national territory.
- **Airport / Sea Port Authorities** – Government lead or appointed authorities who oversee the safe and efficient operation of ports of entry, including coordinating positioning and movement of vessels and aircraft and ensuring security measures are enacted on behalf of the national authority in question.
- **Ground Handling Agents** – Government run or privately contracted services who manage ground handling at airports and sea ports. Ground agents are usually sub contracted and coordinated by forwarders or the airlines, however occasionally humanitarian agencies may need to liaise directly with them to solve problems.

Planning and Scheduling Movement

Routine movements, taking place on a regular basis, need to be planned at the outset. Non-routine movements occurring on an ad hoc basis will have to be planned the need arises. Ideally movements should be planned and managed by a transport office or dedicated focal point responsible for determining the appropriate routing for the goods, allocate resources (own or contracted) and inform the destination of estimated delivery time. During movement designated focal points will track the progress of the goods and update delivery times accordingly and will manage the staff involved in the movement and deal with any issues that arise. They will also handle any problems that occur during the movement, liaising with contractors, freight forwarders and shippers as required. The transport office may actually produce the required documentation to cover transit, alternatively they will be responsible for collecting the required documents together for dispatch.

Once movements have been planned and are initiated, it is important to maintain an information flow between all parties involved to ensure the safety and security of the goods and the adherence to service as promised. In environments within which humanitarian aid organizations operate, many events can impact the efficient movement of goods. In natural disaster or conflict zones, the risk to the movement is potentially high. Having up-to-date information on the status of the movement allows problems to be quickly identified and dealt with. Movements in a national context can usually be managed more closely than movements between or across countries. National movements can be usually planned and coordinated more easily while international movements will often be managed by one or more third parties, working in different time zones and in different languages. Often, international movements are planned and managed by a freight forwarder or logistics service provider working within the broad plan to meet the client requirements in terms of movement time and routing.

In addition to identifying and the primary methods of transport, aid agencies should consider the smaller intermediary steps. As an example, even though an agency may be able to identify an international air transport method into a country, will there be available trucks to adequately pick up and transport cargo from the airport of reception? The same goes for multiple steps in the process, including the ability to identify adequate warehouse space, the ability to understand and comply with import regulations, and generally be able to accommodate all steps of the supply chain, not just the one step in question. Frequently, aid organizations are operating in a "push" model early in a disaster, and persons associated with organizing upstream transport are not necessarily taking directions from or even communicating with the persons engaged in downstream planning. Proper planning throughout all stages is vital to a good transport strategy.

Standard Documentation

Outside of highly specialized forms of documentation utilized for different modalities of transport, there are several widely accepted documents used in virtually all methods of transport. The purpose of utilizing widely accepted documents is to enact some form of traceability and accountability for cargos in transit between all parties who may handle or store the cargo. Widely accepted cargo tracking documentation methods should not be confused with the wide variety of specific documentation required for customs clearance. Customs clearance documents are generally required to certify conformity with national laws and help facilitate tariff revenue, and may be different from country to country. At the very least, agencies should consider using some form of the below documents for all shipments, even domestic shipments between their own managed facilities:

Waybill – A waybill is the ultimate informal "contract" between the sender, the carrier and the receiver of goods. A waybill should contain all relevant information for the shipment itself, including

- The contents of the shipment
- The point of origin and destination
- Names of the shipper/sender, the carrier/driver, and the intended recipient
- Dates of the transaction
- Important information pertaining to the goods; special handling requirements, delivery instructions, etc.

When issuing waybills, one copy should stay with the sender, and at least two copies should travel with the carrier. When cargo is delivered on the receiving end, one of the copies travelling with the carrier should stay with the receiving party providing a transparent paper trail of what should have been on the vessel/vehicle and when it arrived to whom. Ideally, the sender will fill out and generate the waybill, the transporter will cross check contents and confirm the items are correct, and the receiver will cross check and confirm again, noting any discrepancies. Some aid agencies prefer to receive a copy of the waybill signed by the receiver before closing the books on that individual shipment. If a third-party transporter is used, agencies may withhold payment until the countersigned waybill is received in good order. Waybills may also sometimes be referred to as "cargo manifests."

Packing List – The packing list is a far more detailed document that contains key information on the consignment itself. Packing lists might contain:

- Detailed piece counts per line item
- Unit dimensions
- Batch/Lot numbers or dates of production/expiry
- Kit contents and components
- Part numbers

Depending on the nature of the consignment, packing lists could be multiple pages long and have high volumes of information. A detailed packing list will help senders, carriers and receivers accurately identify the quality and status of the consignment. A waybill may only contain an overview of the goods, while placing more emphasis on data surrounding who and when the consignment changed hands. A packing list should contain as much or as little information required to successfully convey the full state of the goods in the consignment.

Invoice / Proforma Invoice – Invoices and Proformas are typically only applied when goods are coming from a vendor, or when goods are physically transported across a national border. For domestic movements, the invoice largely contains financial information relevant to the consignment, and should designate of goods have been paid for or not. Proformas are largely only used when attempting to obtain duty free status during import, and as such aid agencies will only likely be producing proformas during the customs phase.

Cargo Insurance

Insuring cargo while in transit can be complex for aid agencies, especially when multiple forms of transport are involved across multiple countries, and into areas of heightened risk, such as natural disasters or protracted armed conflicts. For many agencies, the single largest expenditure of their response activities is the pipeline of relief items heading to affected populations, and proper care should be invested into maintaining this pipeline through risk mitigation measures. Generally there are two approaches organizations use for insuring cargo:

- Relying on insurance provided by the third-party transporter
- Developing a self-managed insurance plan

The risk of using a self-managed or third-party transport provider in the required area must be assessed prior to the appropriate insurance being taken out. In moving goods – especially to and within high risk contexts - there will be potential risks of theft or loss of the goods.

Third-party Transporter Insurance

Transporter provided insurance can be useful in that it provides coverage for short term gaps, for specific activities that self-insurance isn't designed for, or last mile activities that have enhanced risks. Cargo may be covered by the overall shipping terms of a contract with the third-party transporter, but it is strongly advised that all organizations relying on third-party transporter provided insurance to confirm the insurance status and requirements with the sender/owner of the goods to be moved. Shippers should understand the level of insurance that the provider will offer to cover the goods it carries on behalf of its clients; often if any insurance cover is offered, it will be fairly nominal and only cover a portion of the real cost of the items.

To ensure that freight insurance is properly applied, the full real value of the cargo must be declared to the third-party transporter prior to shipping and the costs and inclusion of insurance must be transparent, being included on any invoicing, and partially expressed through the Incoterms when in use. Many shippers also include the value of the transportation itself as part of the "value" of goods, as any loss or damage due to accident or negligence on behalf of the transporter will also result in the lost cost of the transport service itself. If a catastrophic loss should occur, ideally the shipper will be able to recover the full value without external litigation. Shippers should express a desire to insure cargo through the carrier/third-party when soliciting transport from brokers and forwarders to ensure service is available up front, and normally third-party or carrier provided insurance is negotiated through the forwarder.

There may be instances where organizations develop long term transport contracts with third-party providers, through which the shipper may not know the full value of every shipment over the contracted period. Such arrangements might be common in landside trucking contracts, which might go for a year or more over a changing response. If organizations wish to utilize insurance provided through the transporter in this case, they will need to develop a strategy to account for potential values of future cargo. This might include designating a maximum ceiling of coverage for any given movement that is roughly equal to or higher than any possible load, or develop a scheme through which cargo value is declared per movement and the third-party transporter adjusts billing accordingly. Organizations should never assume long term contractors will factor different insurance needs into quoting, and should be transparent in the bid process to avoid confusion later on.

Individual cost of third-party provided insurance may be influenced by the reputation of the transporter. In setting up contracts with providers, it is important that the type of insurance be clarified and incorporated in the contract terms. If there is any doubt as to the cover provided, advice from the organisation's office handling insurance should be sought. If insurance costs differ for different transporters, these should be included in the overall cost comparison matrix.

Things organizations should keep in mind:

- Type of insurance: What is covered and to what extent, and where do responsibilities start and stop for the transporter?
- Duration of insurance coverage
- The overall process for reimbursement and payment

For long term, open-ended contracts:

- Scope: does the insurance cover all potential contexts of operation? What if a transport requires operating in more than one country?
- Does the insurance accommodate changing risk conditions?

Self-managed Insurance

Some humanitarian agencies have opted to develop a global self-managed insurance schemes in the form of self-insurance or some form of "blanket insurance."

A self-insurance scheme for cargo requires a fairly robust accounting system, whereby organizations intentionally add costs to budgets for cargo movement, but simply keep a small portion of that money in a separate, global pot which can be paid out in case of cargo loss. Self-insurance is useful in that it is quick and efficient and doesn't require dealing with outside brokers, however it requires a great deal of internal control and analysis. Smaller agencies or agencies that have fluctuating size and types of activities may not be able to adequately predict their global self-insurance needs, and may end up taking substantial global losses.

A method of obtaining global blanket cargo insurance might come from soliciting large international insurance brokerages, who may be able to provide a flat or relatively fixed rate for cargo insurance based on their estimation of risk of any individual agencies' activities. Global cargo insurance might end up being slightly more expensive per kg, but saves substantial amount of time identifying insurance solutions for every transport. The specifics of a global insurance plan would be negotiated based on the need of the requestor. As an example, if an aid agency maintains a large fleet of self-managed cargo vehicles in many high-risk countries, there may be a need to develop a high annual global premium to cover all risks associated with cargo movement. On the other hand, if an aid agency is largely only doing international transport using regular carriers, then insurance may be issued on a case by case basis.

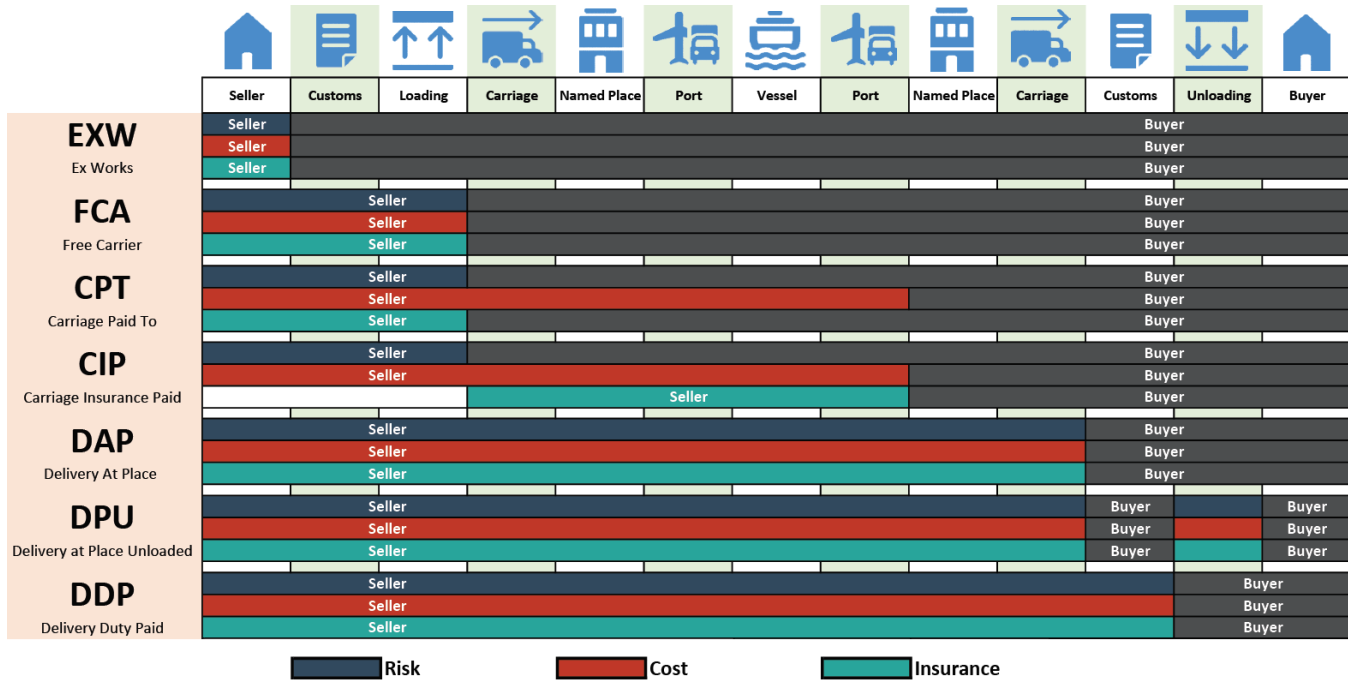
Incoterms

International Commercial Terms (Incoterms) used in international contracts of sale are widely agreed upon, pre-defined commercial terms for defining limits of risk, cost and liability for any form of international transport, detailing the roles and responsibilities of the shipper, the carrier and the receiver /consignee. Incoterms are negotiated and set by the [International Chamber of Commerce \(ICC\)](#), and are connected various forms of international trade law and maritime time. Incoterms were established in the 1920s, and now are generally updated every ten years, with the most recent update in 2020.

Incoterms function as a short hand for all parties involved with an international shipment, and allow for different parties to quickly reference and understand where their obligations lie. The shipper in this context may be the supplier of goods, or it may be the party purchasing the goods and arranging for transport. The contracted carrier transporting the goods may only function as a broker or intermediary, but will be able to reference Incoterms when dealing with the shipper to fulfill its obligations. Organizations that are organizing international procurement and shipment should seek to include Incoterms in both their procurement and transportation contracts.

Incoterms cover all forms of international transport, however there are special inclusions for sea shipping only. the current reference point for shippers is Incoterms 2020, however sellers and carriers may agreed to older versions of Incoterms insofar as all parties are aware of what terms they are referencing when talking about procurement and transport. Reference the below charts and tables for an overview of the most current 2020 Incoterms.

Incoterms for All Forms of Transport:

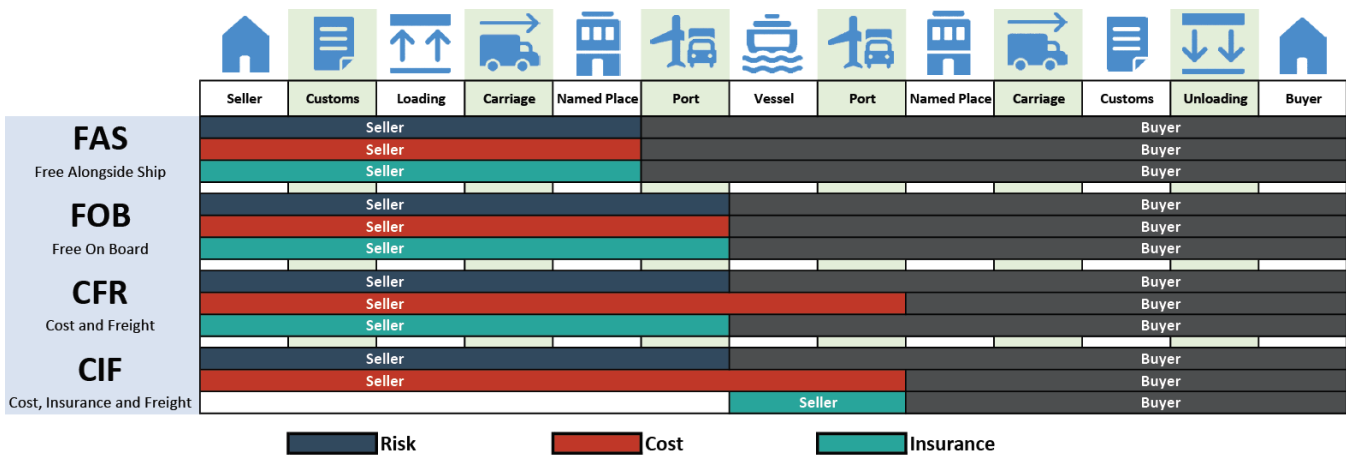


A general description of all-mode Incoterms:

EXW Ex-Works	Buyer takes possession of goods at the seller's premises or at another named place (i.e., works, factory, warehouse, etc.). The seller is not obligated load the goods on any collecting vehicle, nor does it need to clear the goods for export (where such clearance is required)
FCA Free Carrier	Seller turns over possession of the goods to the carrier or another entity designated by the buyer at the seller's premises or another named place. The named place of transfer must be clearly identified; the risk passes to the buyer at that point.
CPT Carriage Paid To	Seller turns over possession of the goods to the carrier or another entity designated by the seller at an agreed place. The seller must contract for and pay the costs of carriage necessary to bring the goods to the agreed place of transfer.
CIP Carriage and Insurance Paid To	The seller turns over possession of goods to the carrier or another entity designated by the seller at an agreed place. The seller must contract for and pay the costs of carriage necessary to bring the goods to the agreed place of transfer. The seller contracts insurance cover against the buyer's risk of loss of or damage to the goods during the carriage. Under CIP the seller is required to obtain only minimum cover insurance. Should the buyer wish to have more insurance protection, it will need either to agree as much expressly with the seller or to make its own extra insurance arrangements.

DAP Delivered at Place	The seller transfers goods to the possession the buyer on the arriving means of transport (truck, vessel, aircraft) ready for unloading at the named place of destination. The seller bears all risks involved in bringing the goods to the named place, including insurance.
DPU Delivered at Place Unloaded	The seller transfers possessions of goods to the buyer, once unloaded, at a named place of destination. The seller bears all risks involved in bringing the goods to, and offloading them at the named place of destination, including insurance.
DDP Delivered Duty Paid	The seller delivers and transfers possession of the goods to the buyer, cleared for import on the arriving means of transport (truck, vessel, aircraft) ready for unloading at the named place of destination. The seller bears all the costs and risks involved in bringing the goods to the place of destination and has an obligation to clear the goods not only for export but also for import, to pay any duty for both export and import and to carry out all customs formalities.

Incoterms for Seaborne Freight Only:



A general description of seaborne freight only Incoterms:

FAS Free Alongside Ship	The seller turns over possession when the goods are placed alongside the vessel (e.g., on a quay or a barge) nominated by the buyer at the named port of shipment. The risk of loss of or damage to the goods passes when the goods are alongside the ship, and the buyer bears all costs from that moment onwards.
FOB Free on Board	The seller turns over possession of the goods on board the vessel nominated by the buyer at the named port of shipment. The risk of loss of or damage to the goods passes when the goods are on board the vessel, and the buyer bears all costs from that moment onwards, including insurance.
CFR Cost and Freight	The seller turns over possession of the goods on board the vessel. The risk of loss of or damage to the goods passes to the buyer when the goods are on board the vessel, however the seller must contract for and pay the costs and freight necessary to bring the goods to the named port of destination.

CIF	The seller turns over possession of the goods on board the vessel. The risk of loss of or damage to the goods passes to the buyer when the goods are on board the vessel. The seller must contract for and pay the costs and freight necessary to bring the goods to the named port of destination. The seller also contracts for insurance cover against the buyer's risk of loss of or damage to the goods during the carriage, however the seller is only required to obtain minimum cover insurance. Should the buyer wish to have more insurance protection, it will need either to agree as much expressly with the seller or to make its own extra insurance arrangements.
Cost, Insurance and Freight	

Mode of Transport

A mode of transport is the means by which goods and material are transferred from one point to another. The basic modes of transport are:

1. [Air](#)
2. [Sea / Riverway](#)
3. [Road](#)
4. [Rail](#)

See below a mode comparison matrix for different modes.

	Road	Rail	Sea/Riverway	Air
Relative Speed	Moderate	Moderate	Slow	Very High
Reliability	Good	Good	Limited	Very good
Cost per kg	Medium	Low/Medium	Low/Very Low	High
Flexibility	High	Low	Low	Medium
Other Considerations	Extensive Network	Limited and fixed infrastructure	Restricted Network	Limited Network
	Short and medium distances from neighbouring country to operation site; internal transport for short and medium distances	Large consignments from port of discharge to inland operation site; ecological	Large quantities; less urgent; pre positioning phase; long distances with no time constraint	Emergency phase; expensive goods; fragile or perishable goods; cold chain; no alternative option; small shipments; e.g. diplomatic pouches; long distance with time constraint.
Advantages	Relatively fast; no transshipment; direct delivery; flexible; cost	Economical; large loading capacity; range and speed (context depending)	Economical; large loading capacity; no restriction on loading capacity; cheap	Fast; reliable; limited losses; direct; easy tracking and tracing
Disadvantages	Roads may be dangerous or blocked; sometimes driver nationality or vehicle registration not acceptable	Difficulty finding freight cars; frequent delays; transshipping required; inflexible; limited tracking	Slow; transshipping at ports; use as a second means of transport at high volumes; higher theft risk in ports; not flexible	Expensive; restricted to journey's between airports; restricted loading capacity; special considerations (dangerous goods, size limits, packing, etc.)

In emergencies, the criteria of speed and reliability must be examined when considering the choice of mode. Different modes have quite different characteristics and will need to meet the speed/reliability/cost criteria to varying degrees. The appropriate mode must be carefully selected if it is to match all the requirements. Multi-modal solutions may provide the most effective and efficient transport option.

Whilst the physical characteristics of certain goods and supplies may determine a specific mode of transport, most goods will be capable of being moved by a variety of modes. Customer requirements and constraints on the organisation providing the transport must be considered. In humanitarian aid situations, it is often environmental factors, such as the destruction of roads and railways that have a significant impact on mode selection.

It is important to fully recognise the operational characteristics of the mode or modes that have been selected. It is also necessary to consider the type of vehicle or equipment that will be used within that mode. Prior to making a decision on the mode of transport, it would be useful to create a matrix ranking of influential factors for choosing transport modes. Some factors to consider in the rating:

Other considerations in the selection of a transport mode are:

- Required delivery date
- Cost of transport service
- Reliability and service quality
- Shipment size and item type
- Anticipated transit time
- Number of transshipment points
- Range of different services offered by a third-party provider
- Modes that realistically cannot be considered should be ruled out of the decision process immediately

- Geographical factors should be considered, as they may remove the opportunity to use a particular mode
- Lack of appropriate infrastructure may also remove the opportunity to use a particular mode

References

File 	Modified
PNG File Incoterms 1.png	yesterday at 12:26 PM by Kelly Bradley
PNG File Incoterms 2.png	yesterday at 1:36 PM by Kelly Bradley
PDF File INCOTERMS 2020.pdf	yesterday at 1:33 PM by Kelly Bradley
PDF File LOG-2-3-TRANSPORT-ANNEX-Consignment note.pdf	Jul 16, 2015 by Business admin access
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