

# Transport

- 1 Definition
- 2 Policies
- 3 The Role of Transport
- 4 Transport in Emergencies
- 5 Operations - Transport Strategy
  - 5.1 Managing transport providers
  - 5.2 Organising movement
  - 5.3 Planning and Scheduling Movement
  - 5.4 Planning Movements
- 6 Mode of Transport
- 7 - Air Transport
- 8 - Road Transport
- 9 - Sea transport
- 10 - Rail transport
- 11 - Other modes of transport
- 12 Administration - Safety and security of goods to be moved
  - 12.1 Insurance
- 13 References

## 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.

## Policies

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.

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 three of the "rights" of supply. That is, getting the goods there at the right time, in the right condition and in a cost effective manner. 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.

## The Role of Transport

The role of transport is to facilitate the movement of 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.

## Transport in Emergencies

Transport management in emergencies is a complex task depending on the nature of the disaster. How it is structured is very dependent on the state of the infrastructure, security in the area of disaster, demand, nature of product etc. More and more, humanitarian organizations are beginning to tap into the joint transport services when they are offered by the Logistics Cluster during emergencies. The service is based on a collaborative approach and aims to leverage the advantages of centralized coordination and sharing of assets.

## Operations - 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 the function; i.e. whether to lease, outsource or manage own fleet;
- capacity of transport modes available;
- quantities requiring movement over a period of time;
- nature of goods/products/supplies to be transported;
- distances to be covered;
- environmental issues such as climate, government legislature, infrastructure, taxes etc;
- number of destinations, hubs and pre-positioning locations;

- origins and routes;
- available transport modes & their relative costs;
- human resources;
- terrain;
- funding;
- security; and
- circumstances – such as Nature of disaster.

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

## Managing transport providers

Occasionally the need arises, or the decision is taken to use external transport providers. In this event there has to be a structured approach to the selection (see contracting) 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.

### Point to note

The selection process adopted for the acquisition of all services is covered by the organization's approved procurement policy, processes and procedures.

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.

### 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;
- timely delivery;
- known integrity, reputation and reliability;
- good relationships with others 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 to the vehicle;
- assets to safeguard organization cargo;
- ability to provide a multi-modal service, if need be; and
- presentation of timely reports and correct invoices.

For information on International Trade, see International Commercial Terms used in international contracts of sale: [INCOTERMS 2000](#) , [INCO terms explanation](#), [INCOTERMS narrative](#), [INCOTERMS practical application chart](#).

## Organising movement

There are two types of transport movement in an emergency:

### 1. Local transport movement

Local movements within a specific country will usually involve road transport. This may involve movement of bulk loads from ports, airports and railheads 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.

### 2. International movement

In normal circumstances the local environment will not always be able to provide all the products and services required to fulfill the needs identified in an emergency environment. Logisticians therefore become responsible for sourcing externally and organizing the transportation of relief supplies to affected locations. Often the relief supplies come from other countries and have to go through various processes before they are received. To ensure efficiency and to allow the logisticians to focus on their core job, the organizations seek service providers with expertise and capacity to handle certain aspects of the movement.

The common service providers are:

- freight forwarders;
- clearing agents;
- inspection services.

Criteria for selection of above service providers:

- 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 you do not need to contract many different companies for different services (e.g. sea and air freight, re-packaging of damaged materials, etc.);
- 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; and
- 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;

Other related parties are:

- customs officials;
- port authorities;
- customs brokers; and
- stevedores;

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.

## 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. This office will be responsible for determining the appropriate routing for the goods, allocate resources (own or contracted) and inform the destination of estimated delivery time.

During the movement the transport officers will track the progress of the goods and update delivery times accordingly. They 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 promise. 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.

See: The Relief item Tracking Application (RITA), a commodity tracking tool available on Logcluster website- <http://www.logcluster.org/cargo-tracking>

## Planning Movements

Movements in a national context can usually be managed more closely than movements between or across countries. National movements can be usually planned and co-ordinated more easily.

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. They will work within the broad plan to meet the client requirements in terms of movement time and routing.

### Planning sea movement

In planning movements by sea, port capability and the control of port activity needs to be understood in order to assess any possible constraints that could impede the movement of goods. The following factors will indicate the suitability of a port to handle the planned movements:

- the number, type and size of ships that can be handled at one time;
- typical vessel waiting and discharge times;
- availability of equipment to handle different types of consignment – for example, bulk, bagged, loose, containers etc., and its state of repair;
- availability of labour, working hours and typical discharge rates for both manually;
- unloaded cargo and containers;
- operational factors that may constrain activity such as the risk of congestion or the impact of the weather at certain times;
- port documentation requirements and the efficiency of procedures for clearing cargo; and
- storage facilities and infrastructure such as railways, roads;

Where the movement of goods is to an area under the control of the local public authority, a clear understanding of the requirements covering movement of goods must be gained from the appropriate authority prior to initiating any movement.

### Route Planning and Scheduling

For effective route planning and scheduling, the transport officers need to be involved in the development of the distribution plan or at least be aware of it and understand it. Vehicle routing and scheduling process needs to fulfil the following objectives:

- maximising vehicle payload (by maximising vehicle fill out and back) and maximising vehicle utilisation (by maximising number of loaded journeys per vehicle);
- minimising distance (e.g. by minimising overlapping deliveries) and minimising time (e.g. by minimising non moving time); and
- meeting customer requirements, in terms of cost, service and time and meeting legal requirements, in terms of vehicle capacity and driver's hours.

See [Route Planning Techniques](#).

The nature of the movement can be split into two basic types:

- primary movements are those that involve typically bulk movements between two specific locations. This may be, for example, between two warehouses in a network or from a port or railhead to a warehouse; and
- secondary distribution relates to movements that may involve multiple deliveries within a defined area, such as a regional or local warehouse to extended delivery points. In both cases, the emphasis is on achieving full utilisation of the resources used; filling the vehicle to capacity minimising the distance travelled and optimising the hours which the driver is being paid to work.

## 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
3. Road
4. Rail

See below a mode comparison matrix for different modes.

CRITERIA \ MODE	MODE			
	ROAD	RAIL	SEA	AIR
Relative speed	Moderate	Moderate	Slow	Very high
Reliability	Good	Good	Limited	Very good
Cost per tonne/km	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 e.g. Europe/Middle East. From a neighbouring country to operation site Internal transport; Short/medium distance	Large consignments. From port of discharge to inland operation site (warehouse). Ecological.	Large quantities; Less urgent; Pre positioning phase; Second phase; Long distance with no time constraint.	Emergency phase; Expensive goods; Fragile or perishable goods; Cold chain; No alternative option; Small shipments; e.g. diplomatic pouch; Long distance with time constraint.
Advantages	Relatively fast; No transshipment; Direct delivery; Flexible; Cost.	Economical; Large loading capacity; Range and speed (in most countries).	Economical; Large loading capacity; No restriction on loading capacity; Cheap.	Fast; Reliable; Limited losses; Direct; Easy tracking and tracing.
Disadvantages	Roads may be dangerous (land mines) or blocked (rainy season); Sometimes, driver's nationality or vehicle registration not acceptable	Difficulty finding freight cars; Delays; Transshipment; Inflexible; Tracking.	Slow; Transshipments at ports; Use as a second means of transport for large volumes; Higher theft risk in the port; Not flexible.	Expensive; Restricted to journeys between airports; Restricted loading capacity (dangerous goods, size of shipment, weight, fuel, size of packages, etc.).

Table 1: Criteria of different modes of transport, from Fritz Institute

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 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:

### **Mode Selection Criteria**

Four key criteria:

- the speed which the mode exhibits;
- the reliability that the mode demonstrates in its ability to fulfil service requirements;
- the flexibility that the mode exhibits; and
- the comparative unit costs, which the modes incur.

Speed and reliability will have a major impact on the ability to deliver humanitarian aid effectively and efficiently to where it is needed.

Other considerations in the selection of a transport mode are:

- required delivery date;
- cost of transport service;
- reliability and service quality;
- shipment size;
- transit time;
- number of transshipment points;
- item type;
- possibility of damage; and
- range of services.

### **Matching Operational Factors to the Selection Criteria**

It is important to use a structured approach to mode selection. It is important to understand the following points :

- opportunities and constraints in the choice of mode will be identified from careful analysis of all relevant operational factors;
- 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; and
- lack of appropriate infrastructure may also remove the opportunity to use a particular mode.

## **- Air Transport**

(see also Operational Environment)

In emergencies, and especially flooding and conflict situations where road access is difficult, air transport is often the alternative.

Air transport can be provided through:

- schedules air carriers using world airlines and other global logistics service providers or
- air charters; where it is possible to charter planes/helicopters or perhaps to have the use of military aircraft to allow a totally dedicated movement to take place. It is possible to move goods without being constrained by commercial timetables and specific airport locations. The charter may be totally ad hoc, that is, a 'one-off' charter to achieve a particular humanitarian objective. Alternatively it may be a regular event, monthly for example, in order to transport routine supplies or perhaps members of staff. Logisticians should all be familiar with their internal guidelines on the use of military assets.

Factors that influence the decision to charter and the nature of the aircraft chartered:

- availability and cost of different types of aircraft;
- the nature, quantity, weight, size and volume of the cargo;
- equipment for the aircraft and cargo handling available at origin and destination;
- the distance to be travelled and possible constraints on certain airspace;
- ability of certain airports to handle particular types of aircraft;
- possible noise and/or operating hours restrictions at certain airports;
- securing landing and over-flight permission;
- availability of customs and/or immigration at the airport

### **Sending Goods by Air**

The air waybill (AWB) is the most important document related to airfreight. Its completion is regulated by IATA definitions. Each AWB has a unique identifying number, the first part of which is the IATA airline code number. The AWB is the carrier's receipt by air, 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 can deliver.

Packaging and labelling for air transport is an important consideration. Limited space on aircraft will require packaging, plus cargo, to be within the allowable weights and dimensions for that specific aircraft. Unit load devices vary and the specific requirements need to be coordinated before final packaging to avoid delays. However, the method of loading and unloading and onward transit may still require a strong and durable packaging medium.

Ultimately it is the nature of the goods being transported that will determine the precise nature of the packaging.

## **- Road Transport**

### **Use of organisation's own vehicles (own account)**

If an organisation decides to acquire its own vehicles, there are a number of areas to be considered. The type of vehicle, in terms of the chassis-cab and the body type, needs to be determined. The nature of the operation may also require that mechanical handling aids need to be incorporated into the overall vehicle specification

#### **Advantages**

The advantages of owning vehicles include:

- vehicles can be built specifically to carry a particular product. Special equipment for materials handling can be attached;
- the driver can be specially trained and will fulfil the 'ambassador' role for the organisation;
- vehicles can carry the company livery, perhaps the aid organisations logo and, where appropriate, the Red Cross; and
- management retains total control over the vehicle and its operation.

#### **A major disadvantage**

Management of the transport function can occupy a great deal of management time, requires specific expertise and significant capital investment. In contrast, third party carriers can often provide more cost-effective transport facilities but careful consideration must be given to the level of service required.

Third party advantages and disadvantages

Even if an organisation owns its vehicles, there may well be occasions when a need arises for additional capacity, to meet peak activity or other short term needs. This can be met by the use of vehicles supplied by a commercial transport provider (third party).

#### **The advantages of using third party transport include:**

- organisations can use commercial providers to meet fluctuating demand requirements;
- variable loads and journeys can be catered for;
- the haulier may be able to offer a more cost-effective and a more efficient service; and
- responsibility for administration of vehicles and drivers is no longer the responsibility of the organisation, allowing staff to concentrate on more productive areas. There is no requirement for capital to be invested in transport.

#### **Disadvantages**

A measure of control is lost with third party operations. Performance feedback and communication with customers needs to remain a strong feature and be controlled by the contracting organisation.

#### **Selecting vehicle types**

It is important to be able to select the appropriate vehicle for the purpose required even if, at a later stage, it is necessary to revise this choice to reflect availability in the field.

See below a description of the main body types and combinations that are available.

#### **Selecting the body type**

The specification of the vehicle body will vary according to the goods or materials being carried and security. There are many variants of body type available; a description of the main body types is shown below.

Identifier Axles & Type	Max Gross Weight (Tonnes)	*Specimen Payload (Tonnes)	Typical Length (Metres)
2 axles 4 wheels	3.5	1.0	Various
2 axles 6 wheels	7.5	3.5	Various
2 axles 8 wheels	18.8	12.0	12.0
3 axles Rigid	26.0	18.0	12.0
4 axles Rigid	36.0	25.0	12.0
3 axles Artic	26.0	18.0	16.5
4 axles Articulated Tractor and Trailer	38.0	24.0	16.5
5 axles Articulated Tractor and Trailer	40.0	24.0	16.5
6 axles Articulated Tractor and Trailer	41.0	27.0	16.5
Vehicle and Drawbar Trailer	40.0	26.0	18.75

\* Note that the specimen payload is the weight of goods that could be carried without exceeding the maximum gross vehicle weight. Where legislation does not specify a maximum gross weight, or local circumstances allow, this payload may be increased. For goods which have a high cubic measurement, but are light in weight, the capacity of the load carrying area may be filled before the maximum payload is reached.

Table 2: Selecting the body type.

### Platforms

The simplest and cheapest body type is the platform or flat bed. It provides all round access to the load, but offers little security or protection from the weather. Loads also need to be restrained. This will generally involve roping and sheeting, which is a time consuming operation.

### Van body

The van or box body reduces the payload of the vehicle, but provides protection for a perishable product and added security. Construction will depend upon the needs for insulation, waterproofing or strength. Access is usually provided by a rear door. Sometimes a door will be built into one, or both, of the body sides.

### Curtain sided bodies

Curtain sided bodies overcome the disadvantages of access, since the curtains can be pulled back to reveal the full length of the platform. This improves the speed of loading as well as unloading. Advantages of load restraint and weather protection are maintained, while body weight is less than the box body. Other variants will replace the curtains with sliding panels.

### Tankers

Tankers are designed to carry powders or liquids. They require a pumping mechanism and piping to discharge the load.

### Bulk carriers

Bulk carriers are generally built as box bodies without the roof. They will require a tipping mechanism to allow the load to be discharged.

### Drawbars

A rigid master truck with a drawbar trailer is the usual configuration. The bodies may be of the demountable type. Drawbars offer increased cubic capacity for bulky lighter loads.

### Road transport documentation

Whether the vehicles being used are owned, hired or are managed by a third party, it is important to ensure that all local laws relating to the licensing, insurance and regulation of vehicles are being adhered to :

- normally a licence to operate the vehicle on a public highway is required;
- for larger trucks there may be an additional licence fee to be paid;

- vehicles should be insured to at least the minimum required by law; different organisations will have internal policies regarding the extent to which their own vehicles should be insured; and
- vehicles may also require documentation relating to the maximum permissible weights in terms of gross vehicle weight, axle weight and payload.

[Transport contract and considerations for a transport contract](#) (see Procurement Annexes).

Drivers are also required to hold the appropriate licence for the class of vehicle they are driving.

## - Sea transport

Sea transport is convenient for bulky pre-planned consignments. In the early days of emergency situations, sea transport is not used to service immediate needs in rapid on-set disasters but more to pre-position or serve post disaster and longer term needs. The key document used in shipping is the bill of lading (B/L). Logisticians should familiarise themselves with it.

### Bills of Lading

The B/L is the transport waybill for a sea freight consignment. It is usually issued in a set of three originals and several non-negotiable (N/N) copies. The B/L is signed on behalf of the ship owner by the person in command of a ship or the shipping agent, acknowledging the receipt on board the ship of certain specified goods for carriage. It stipulates the payment of freight and the delivery of goods at a designated place to the consignee therein named.

The B/L is the major shipping document and has three roles.

- It affirms the contract of carriage and sets out the terms thereof. It is evidence of the contract between the consignor and the shipping line, and on the reverse details the conditions of carriage.
- It is the carrier's receipt for the carriage of goods by sea and is signed by the master or another duly authorised person on behalf of the ship owner, acknowledging receipt on board the ship of certain specified goods that he undertakes to deliver at a designated place.
- Possession of the original B/L gives the title to the goods being carried. It is a negotiable document of title to the goods. The consignor must make sure that at least one original B/L reaches the consignee in good time (since he will receive the goods only against presentation of at least one original B/L). The carrier usually establishes three original B/L, which are sent to the consignee under two separate registered mails (it is also possible to send one by ship's bag).

The B/L states to whom and on what terms the goods are to be delivered at destination. Without an original B/L the goods will not be released. The usual way to get the goods without the presentation of the original B/L is the establishment (by the consignee's bank) of a bank guarantee covering the value of the goods. Such guarantee can only be cancelled by remittance of the original B/L to the bank. It is sometimes possible, at the discretion of the carrier, for the consignee, holding a copy B/L to sign a Letter of Indemnity in return for delivery of cargo. On receipt of the B/L it should be passed to the party responsible for clearing the goods. Once the vessel has docked and the goods have been unloaded, the B/L and appropriate customs documents will be required to obtain release of the goods for onward transport.

### Terms of the B/L

There are three different entries possible in the box headed "CONSIGNEE":

- To bearer: this means that any person having possession of the B/L may collect the goods; such person is not required to disclose their identity or to explain how they came into possession of the B/L. The mere fact that they have possession of and present the B/L is sufficient. Issuing B/L "to bearer" is not common practice and carries significant risk.
- To order: this is the form of B/L used most frequently in commercial transactions. As long as the shipper holding the B/L has not endorsed it, he is entitled to dispose of the goods. By endorsing it, he transfers his rights to the endorsee, that is, the person to whom the B/L is assigned by endorsement. Title to the goods is thereby transferred to the new holder of the B/L who may in turn assign it by endorsement to somebody else.
- To a named party (straight B/L): in contradiction to a B/L "to order", the straight B/L (one in which it is stated that the goods are consigned to a specified person) does not entitle the shipper to dispose of the goods. That right is vested exclusively in the receiver who alone has the right to collect the goods, upon presentation of the B/L and proof of his identity.

**The Straight B/L** may be assigned by means of a document instrument in writing, evidencing the assignment, which the assignee must present to the master of the vessel together with the original B/L when he collects the goods.

On a straight B/L, the term "to the order of" printed on standard B/L must be crossed out, and the deletion initialled by both the shipper and the Master.

**A Clean B/L** is a B/L, which contains nothing in contradiction to qualify the receipt on board of the ship, the goods in "apparent good order and condition". Goods may sometimes be 'received alongside', which can result in a delay prior to the physical loading of the goods onto the vessel.

**An Unclean B/L** is a B/L containing notation that goods received by carrier were defective.

**The Through B/L** is issued when a shipper wishes the carrier or shipping line to arrange for transport to a destination beyond the port of discharge. The through B/L, in addition to the agreement to carry goods from port to port, includes a further journey (by sea or land) from the port of ship's destination to a distant place (for instance, a destination inland instead of a port). See [INCOTERMS 2000](#), [INCO terms explanation](#), [INCOTERMS narrative](#), [INCOTERMS practical application chart](#).

## - Rail transport

Rail transport is a safe land transportation system when compared to other forms of transportation. Rail transportation is capable of high levels of passenger and cargo utilization and energy efficiency, but is often less flexible and more capital-intensive than highway transportation is, when lower traffic levels are considered. Rail transport costs less than air or road transport. It is very suitable for the movement of large load sizes over longer distances, but it has the following disadvantages:

- it lacks the versatility and flexibility of motor carriers since it operates on fixed track facilities. It provides terminal to terminal, rather than point to point delivery services;



- though it offers an effective method of bulk haulage, it is slow.

Documentation for movement by rail is controlled through the rail waybill. The rail waybill is a non negotiable document. It contains the instructions to the railway company for handling, dispatching and delivering the consignment. No other document is required except for international transport across borders, where enquiries should be made locally as to the proper documentation needed.

## - Other modes of transport

Other modes of transport especially valid for emergency situations and remote under-developed areas are:

### **Animal**

The goods being moved must be packaged in relation to the weight that the particular animal being used can carry. There are many possible variations of available local animals depending on geography, climate, the local economy, and a variety of other local conditions. Advise consulting a local expert.

### **Barges and boats**

Where road and rail transport is not possible due to lack of infrastructure it may be necessary to transport goods by river. This mode of transport also suits bulk shipments of commodities. This will often be done using motorised barges or similar vessels. Goods can be loaded and unloaded using jetties and quayside facilities. In some cases they may be unloaded from seagoing vessels direct for onward transit.

What size and type of barge (self-propelled or dumb) that may be required will be determined by availability. Barges are used frequently in the Rhine /Danube basin, the Mississippi basin and Mekong Delta and the coastal waters of south-east Asia. It provides a relatively cheap and simple means of transport which is not dependent on sophisticated port handling facilities. Barges have been adapted in the United States and Europe so that they form part of a multi-modal transport system where barges are integrated with road and rail movement. Also barges are part of the lighter aboard ship (LASH) / barge system and refers to the practice of loading barges (lighters) aboard a larger vessel for transport. It was developed in response to a need to transport lighters, a type of unpowered barge, between inland waterways separated by open seas. Lighters are typically towed or pushed around harbours, canals or rivers and cannot be relocated under their own power. The carrier ships are known variously as LASH carriers, barge carriers, kangaroo ships or lighter transport ships.

## Administration - Safety and security of goods to be moved

Legislation and regulatory frameworks for transport usually include a specific requirement for vehicle safety. Most humanitarian organisations also lay down safety and security policies that need to be followed. Requirements will include the vehicle weight, the way it is loaded and how the load is distributed.

Drivers and operators of vehicles are responsible for using a vehicle on the road with a safe and secure load. Legislation will often state that, in transit, the drivers have full responsibility for the safety of their load, even if they did not load it personally. Even if, in some countries, the legislation is not implemented, respected or followed, every effort must be made to ensure that the organisation's drivers are following the legislation that has been laid down.

### **Avoiding in-transit theft**

A thief intending to steal a loaded vehicle requires:

- knowledge of an attractive load;
- the opportunity to access it;
- time to steal it and to get away before detection;
- a market for the goods; and
- limited or negligible perception of risk.

Main sources of vehicle theft are from depots, from overnight parking areas and from the roadside. Theft can be committed by:

- stealing an unattended vehicle;
- hi-jacking the vehicle;
- threatening or bribing drivers.

Drivers are central to prevention of this type of loss, and their integrity is essential.

Consequently, careful recruitment and selection of drivers is critical. Training will impress upon them the need for care, and procedures to follow to avoid risk of theft. Driver identification cards can be used for added security and to avoid thieves gaining access to vehicles by misrepresentation when parked on third party premises. However, there is little to prevent deliberate collusion by drivers. Vigilance is essential and attention to any pattern of discrepancies on loads.

## Insurance

Insurance is required for both the load and the vehicle. Insurance for the load may be covered by the overall shipping terms, if the road transport is performing an onward shipment for example. In other cases the load may be covered by a blanket insurance policy. It is advisable to confirm the insurance status and requirements with the sender/owner of the goods to be moved. Necessary precautions must be taken to avoid theft and loss.

The risk of using a transport provider in the required area must be assessed and the appropriate insurance taken out. In moving goods through the use of third party providers, as part of a humanitarian aid initiative, there will be potential risks attached in terms of theft or loss of the goods. It is necessary to 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. It is important, therefore, to ensure that the goods that the third party provider is carrying are properly insured.


The cost of this may be influenced by the reputation of the haulier. In setting up contracts with providers, it is important that the situation on insurance be clarified and if appropriate, 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 transportation provided by different hauliers, these should be included in the overall cost comparison matrix.

Things to look out for:

- type of insurance: Who and what is covered and to what extent;
- duration;
- scope: in-country coverage only? What happens when the vehicle crosses borders?
- how are high risk areas covered, if at all; and
- reimbursement process and how long it takes.

## References

[WFP Transportation Manuals](#)

File 	Modified
PDF File LOG-2-3-ANNEX-Route Planning Techniques.pdf	Jul 08, 2015 by Business admin access
PDF File LOG-2-3-TRANSPORT-ANNEX-Consignment note.pdf	Jul 16, 2015 by Business admin access
JPEG File LOG23TRANSPORTComparisonmatrixfortransportmodes_large.jpg	Jul 08, 2015 by Business admin access
JPEG File LOG24Selectingvehicletypes_large.jpg	Jul 08, 2015 by Business admin access

 [Download All](#)