3.3 Modes of shipment

3.3.1 Road, air, rail, sea and animal

Below is a matrix to assist with the selection of the most appropriate mode of transport:

Ratings are from 1 to 5, where 1 is the strongest at the individual criterion.

	Speed	Reliability	Cost	Flexibility	Safety	Other
Air	1	1	4	4	1	Limited network Limited capacity in crises
Sea	4	4	1	3	3	Restricted network Long admin delays
Road	2	3	3	2	4	Extensive networks Sensitivity to network condition
Rail	3	2	2	5	2	Fixed networks, routes and schedules
Animal	Depends on distance	Depends on distance	Depends on distance	1	5	Contracting can be challenging Consider how to add RC visibility

3.3.2 Choosing modes of transport and designing a strategy around it

In both local and international transport operations, the objective should always be to optimise the utilisation of resources used. This is easier to achieve in large international shipments than in the local management of transport, where there are usually multiple delivery points and sizes can vary widely.

In general, the objectives will always be to maximise the load being moved and minimise distances travelled and loading/offloading time, at a total cost that delivers value for money (VfM). However, factors influencing the optimisation process vary from one type of transportation to another.

Factors to consider include:

- local labour regulations (e.g., legal working hours for drivers)
- local security regulations (e.g., legal driving hours, curfews, checkpoints)
- delivery point characteristics and access constraints
- vehicle and fleet characteristics: available vehicles and their total/individual capacity
- environmental considerations
- available budget for transportation

The transport chosen will depend on multiple factors.

Accessibility	Cost factors
- Security issues - Delivery timeline and other programme imperatives - Transport infrastructure available, from origin to delivery point - Export/import customs regulations - Access conditions	- Distance and journey time - Weight and volume of goods - Funding available - Delivery schedule (especially in emergency) - Demand for transport (with limited supply, cost is likely to increase)

Donor compliance	Others
- Some donors will impose a maximum ratio of cost of transport to cost of items as a performance indicator - Some donors will not fund air transportation – transport must then be arranged earlier	- Dangerous goods require special transport methods or bring constraints (air freight regulations) - Certain items require refrigeration in transit - Cross-border transport may impose restrictions on vehicle/driver based on nationality

Modes of shipment

- Options include: Air, Road, Sea, Rail, Animal
- Always look for the mode of shipment that optimises the utilisation of available resources (time, budget, vehicles, manpower)
- Consider the local context: labour law, security, traffic, environment, infrastructure