Checklist for vehicle needs assessment

Assessing vehicle needs involves not only calculating the quantity of vehicles required, but assessing the types of vehicles which can perform and be maintained in the area of operation. Make sure that the existing infrastructure (roads, workshops, and fuel) is fully evaluated before obtaining vehicles.

What will the vehicles be used for and how many are needed?

**Heavy vehicles:**
- Will the vehicle be used for transporting people or relief supplies?
- What will be the frequency or use (one off transport, or scheduled deliveries for distribution)?
- What is the total quantity (of supplies or people) to be transported?
- Are any special configurations necessary: if a truck is to carry dangerous goods such as fuel, ensure that dangerous goods regulations are followed.

**Light vehicles:**
- How many vehicles are needed for staff? In an emergency it is advisable to have a ratio between light vehicles and international staff of 1:1. In more stable situations, fewer vehicles would be acceptable.
- What special vehicles may be needed (e.g. ambulance)?

What configurations of vehicles are needed?

- What is the condition of the routes that will be used? Tarmac roads, good unpaved roads (with stone or macadam surface), sand or dirt trails, or no roads (in which case consider animals for transport).
- How long are the journeys expected to be?

**Heavy vehicles:**
- What configuration for heavy vehicles should be used according to the road conditions: 4x2, 4x4, 6x2 or 6x4?
- Should trailers be used? Trailers can be more economical, e.g. with relatively small investment, one is able to transport twice the amount of cargo. The following configurations for heavy vehicles (trucks/trailers) could be appropriate:
  - Truck with trailer (6x2 or 6x4) with a combined capacity of 20-40MT for transport up to 3,000 km, 2-7 day trip, normally for use on tarmac roads;
  - Truck (6x4, 4x4, 4x2) for intermediary distribution with a capacity of 10-15MT (normally 1 day trip) on unpaved roads with stone or macadam surface;
  - 5-10MT capacity trucks on tracks and trails (generally for trips of half a day or less up to distribution points).

**Light vehicles:**
- What configuration for light vehicles should be used according to the road conditions: 4x2 or 4x4?

**Trailers:**
Prior to purchasing trailers, the following additional questions should be considered:
- Are the roads and bridges suitable to drive on with trailers?
- Are the drivers capable of driving with trailers?
- What are the regulations in the country regarding weight and length of truck-trailer combinations?
- What type of trailer is needed? Can the trucks be operated with trailers or would tractor-trailers be better? Can the trailer be transported on the truck on empty runs? Ensure there are airbrakes, a towing hook, extra fuel tanks, and spare wheels. Particular attention must be paid to the tow-bar strength and number of axles.
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Source: UNICEF

What makes and Samples of vehicles would be appropriate?

- What makes of vehicles are maintained (to supplier specifications) by local service dealers? The heavy vehicle fleet must be standardized to suitable makes and Samples already operating in the country. If a mixture of Samples of truck is unavoidable, it may still be possible to standardize to a single make.
- What is the availability of vehicles: the spare capacity of local transport companies, and possibility of purchasing new or second hand vehicles?

Infrastructure (fuel, workshops)

- Is there a service network available with the know how to maintain the fleet, or will it be necessary to set up dedicated workshops and fuel stations?
- Are there sufficient spare parts and tires in the local market, or must they be imported?
- Is fuel (diesel and gasoline) and are lubricants readily available in the area of operation? (note the number of fuel stations, capacity and likelihood of fuel availability).