

## P. DISASTER LOGISTICS

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### P.1. Introduction

UNDAC members must have an understanding of the mechanics of humanitarian relief logistics as logistics is one of the most important elements of a relief operation. The ability to deliver the appropriate supplies in the appropriate amount in optimal condition, where and when they are needed, is a prerequisite for an effective emergency operation. In the UN system, the World Food Programme (WFP)/United Nations Joint Logistics Centre (UNJLC) is normally responsible for coordinating logistics in a humanitarian operation. This chapter aims to give UNDAC members an understanding of how disaster relief logistics systems are planned for.

The logistical responses in an emergency may be divided into providing for limited needs, such as providing critical medical items, communications equipment, repair items for water supply, sanitation, electrical power, etc., and moving bulk commodities, such as food and shelter or even people themselves. It is important to bear in mind that there are a number of other factors that pose constraints on logistics, such as pre-existing logistics infrastructure, political factors, the sheer number of humanitarian actors, the damage caused by the disaster, and sometimes the security environment.

### P.2. Logistics overview

#### ***Emergency logistics***

Emergency logistics is a “systems exercise” and requires:

- Delivery of the appropriate supplies in good condition, when and where they are needed.
- A wide range of transport, often improvised at the local level.
- Limited, rapid, and specific deliveries from outside the area.
- A system of prioritising various relief inputs.
- Storing, staging, and moving bulk commodities.
- Moving people.
- Coordination and prioritization of the use of limited and shared transport assets.
- Possible military involvement in logistics support (especially in cases of civil conflict).

Main factors in the operating environment which shape the response are:

- Capacity of the infrastructure.
- Availability and quantity of transport assets in the country.
- Politics of the situation.
- Civil conflict in the area of operations.

Effective planning for logistics programmes requires both implementation and operations plans as well as information and control systems.

International involvement in logistics operations varies greatly from situation to situation. However, some or all of the following usually comprise the responders, e.g., United Nations Development Programme (UNDP), Office for Coordination of Humanitarian Affairs (OCHA), WFP, United Nations High Commissioner for Refugees (UNHCR), United Nations Children's Fund (UNICEF), World Health Organization (WHO), International Committee of the Red Cross (ICRC), International Federation of Red Cross and Red Crescent Societies (IFRC), non-governmental organizations (NGOs), the military and private sector entities.

### ***Structure and organization of emergency logistics***

The structure and organization of logistics is based on the supply chain.

Components of this chain are the following:

- Port of entry.
- Primary warehouse.
- Forward warehouse.
- Terminal storage point.

There must be support by adequate facilities and equipment to carry out the following functions:

- Management.
- Central support.
- Procurement.
- Port clearance.
- Warehouse/storage.
- Transport.
- Scheduling.
- Communications.
- Commodity control.
- Distribution control.

## **P.3. Disaster relief logistics**

### ***Planning disaster logistics programmes***

Planning and anticipation are the cornerstones of good logistics and must be based on the knowledge of, among other things, geological, technical, political and physical aspects. It is important to establish an implementation and

operations plan, with the first describing the tasks necessary to build the system, including the linkages, the sequence, the resources involved, and how progress is measured. The second, the operations plan, must set goals and responsibilities for relief deliveries, as well as proposing schedules to meet goals, and describing how the control system will operate. As logistics is part of an on-going relief operation, any logistics planning must be coordinated with plans in other sectors of the relief operation. Logistics operations underpin and support the goals of the humanitarian community. It is also important to take into account that there may be breakdowns for various reasons and plans must take this into account, being as flexible as possible.

Any logistics planning must also contain information and control systems since accountability and monitoring of performance against realistic and continually assessed standards are important to the success of the operation and to the donors. To achieve this, procedures must be established for recording and reporting on the quantity, location and condition of commodities, where and when they will next move, and who is responsible for them at each stage. This requires a set of requisition forms, waybills, stock records, and reporting formats. An efficient commodity tracking system must have an overview of the entire pipeline, from relief goods en-route, to relief goods in warehouses in the country, to relief goods already distributed to beneficiaries.

### ***Structure of relief logistics***

A typical relief logistics structure starts at the points of origin, e.g., producing or donor countries, to one or more ports of entry, i.e., land, sea or airports, and one or more primary warehouses (near the port of entry), through to forward warehouses (for holding), and lastly to terminal storage points from which the relief goods are transferred to places of distribution to the beneficiaries. As a rule, the further you get in this logistics flow the smaller the used vehicles will be. The transportation means will usually start with ships, trains or aircraft, through big trucks with trailers or semi-trailers, to smaller trucks or even smaller four-by-four vehicles.

For a full-blown logistics operation the following facilities will be needed:

- Offices and administrative equipment.
- Warehouses at various levels.
- Fuel and spares stores.
- Workshops.
- Vehicle parks.
- Vehicles for management staff.
- Fleets of trucks.
- Special vehicles such as cranes, tankers and cargo-handling machines.
- Communications equipment.
- Accommodations.

The resources for a logistics operation will usually come from a variety of organizations; from one's own organization, from the national authorities, from relief organizations, or from the private sector. A large part of the logistics structure may very well be an already existing, loose and multi-organizational structure that was built up in the very first phase of the emergency. The looseness may result in the loss of commodities, as the structure will be built up by improvised means. It is, therefore, important - if you are among the first on-site - to take this into account and try not to build a loose structure, or - if you arrive later in the emergency - to take steps to organize the operation in a more tight and accountable manner.

### ***Distribution***

Distribution to individuals and families is firstly very different from the rest of the logistics chain and, secondly, it creates the biggest problems of diversion of relief aid. The effectiveness of the distribution depends on how recipients are chosen and identified. The person or persons in charge of this should always take into account the complexity and highly political aspects which it entails. Organizations with the task of distribution must have extensive experience in this field as well as being politically independent. Final distribution is often undertaken by national authorities or NGOs.

### ***National authorities***

As in other areas of relief work, it is vital that there is a close relationship with the national authorities when carrying out logistical operations. The following have proved to be central in the relationship with governments and the effectiveness of logistical operations:

- Agreement over the form and content of the master commodity management plan.
- Agreement on the agencies authority to control commodity movement and distribution.
- Agreement on setting up communications networks, e.g., radio, telex, and satellite.
- Arrangements for travel to and in restricted areas.
- A public commitment to the security of agency staff and action to be taken in the event of specific incidents.
- Use of agency resources in support of the authorities in the event of specific emergencies.
- Duty-free/ taxation exempt status for all equipment and consumables.
- Timely and efficient customs procedures for emergency relief items (both aid for beneficiaries and support items for UN operational usage).
- Favourable foreign currency exchange rates.
- Early agreement on the strategy for phase-out and hand-over of the operation to national authorities.

## **The UN**

The responsible UN representatives (United Nations Disaster Management Team (UN-DMT), WFP/UNJLC, UNHCR, UNICEF or others) may well be in the process of, or have already established a logistics structure normally led by WFP/UNJLC in the early stages of an emergency. When a humanitarian relief operation is coordinated with clusters of organizations within the different sectors of humanitarian activity, WFP is the designated lead-agency for the logistics cluster. Its mission will usually be to assist the government in their logistics efforts. The UN Resident Coordinator/Humanitarian Coordinator (RC/HC) should be prepared to designate a transport/logistics support group, responsible for port and airport clearance, commodity tracking and scheduling, local procurement of goods and equipment, vehicle allocation, management and maintenance, driver support and payment, and storage.

External procurement procedures will usually be handled by the relevant agencies, while procedures in-country should be laid down by the relevant UN organizations before emergencies. It is important that all staff is familiar with the ordering system and that cash handling is systematized in an operational fashion, that does not lay unnecessary constraints on operational aspects. In-country UN-personnel will normally be familiar with the local customs procedures and will be able to help with these.

### ***Logistics assessment checklist***

If there is a need for the UNDAC team to carry out a rapid assessment of logistics capacities, a checklist is given in Chapter G – Disaster Assessment.

The full spectrum of UNJLC logistics assessments (rapid and full) is available in the UNJLC Logistics Operations Guide (LOG) available on; [www.unjlc.org](http://www.unjlc.org), and in the UNDAC mission software.

