# STUDY ON INTERNATIONAL HUMANITARIAN TRANSPORT, LOGISTICS AND STOCKPILING CAPACITIES

## **SUMMARY FINDINGS**

# 1. BACKGROUND

Following commitments of the *Communication on Reinforcing the Union's Disaster Response Capacity* and the *EU Consensus on Humanitarian Aid*, DG ECHO launched a study on "international humanitarian transport, logistics and stockpiling capacities." **The specific objectives were to** identify potential gaps in the international emergency response capacity in terms of transport, logistics and stockpiling; to map the current and planned response capacities of (i) major international humanitarian actors and (ii) EU Member States; and to make recommendations to further strengthen response capacities of key international humanitarian actors.

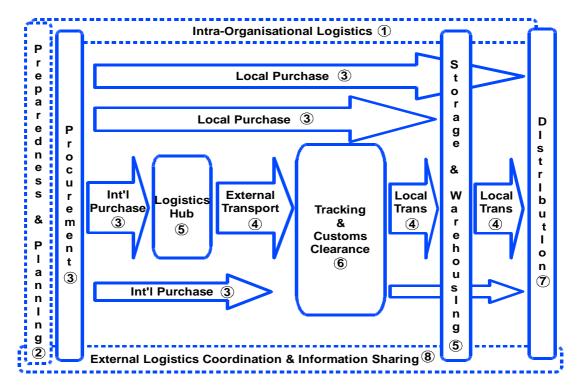
# **Parameters of the study:**

- (1) Three simultaneous or consecutive disasters occur in the world requiring international response and assistance: a complex emergency (oPt); a sudden onset emergency (Pakistan); and a slow onset emergency (Horn of Africa);
- (2) The international community responds immediately (within 72 hours) and sustains life-saving, relief efforts (up to 180 days);
- (3) Current and/or on-going operations of the international community are not disrupted in responding to these scenarios.

# 2. MAIN FINDINGS

Involving up to 80% of humanitarian organisations' operational budgets, logistics are often the most complex element of an emergency relief operation. The consultants report that apart from financing, there are no large gaps in the transport, logistics, and stockpiling physical assets in the humanitarian supply chain. Gaps exist mainly in 'soft' areas of logistics, such as coordination; personnel; preparedness & planning; procurement; tracking & customs clearance; distribution; and information management. There is an inability to accurately measure performance using humanitarian assistance-specific criteria, resulting in seemingly inefficient operations, where no funding is provided for critical operational assets. The development and acceptance of a common set of key performance indicators (KPIs) would help evaluate relative performances between organisations, including the military; the UN; NGOs, Member States, etc.

### 3. CONCLUSIONS PER FUNCTIONAL CATEGORY OF THE SUPPLY CHAIN



## 3.1. Intra-Organisational Logistics

The recognition of logistics as a strategic function varies widely and is challenged particularly in prolonged periods without major emergencies. Organisations are concerned about their ability to expand core logistics staff to sufficient strength in times of need as funding is project or emergency appeal related. There is not enough qualified, trained staff to respond beyond the 72-hour immediate timeframe. It is recommended that logistics personnel are included in planning and programming activities and that donors take a longer-term approach to funding.

### 3.2. Preparedness and Planning

Little planning is done on a level that engages both programming and logistics departments within organisations and, with the exception of Avian-Human Influenza, no global scenario-based exercises have taken place that include the majority of logistics players. A lack of measurable outcomes from preparedness and planning activities causes donors to be reluctant to provide regular and/or significant funding pre-disaster. Relatively few education and training opportunities exist for logistics personnel of humanitarian organisations. Global table-top simulation exercises with the participation of all stakeholders, including military/civil defence, and covering all of the supply chain processes would significantly increase the effectiveness and efficiency of the humanitarian community. MS can offer subject-matter experts, including military or civil defence / protection personnel, in building, organising, running and evaluating preparedness activities and planning exercises.

# 3.3. Standardisation

**Global standardisation has failed** to date for three reasons: 1) The standards were developed unilaterally and not accepted by / acceptable for other stakeholders; 2) The implementation of the standards would require considerable effort and resources, but would not add enough value to abolish the old, current standards; and 3) The standards are too varied; unknown or not uniform within the community. A gap exists of identifying the most **common, life-saving goods/services required for all types of disasters and standardising the nomenclature, specifications, etc. of relief items used by various agencies. Common standards should be developed involving as many stakeholders as possible. These standards should provide enough detailed guidance to add value to the existing systems and also leave enough room for the specifics of the organisations that are supposed to apply them to increase the chance of acceptance. <b>Donors can force the issue by only purchasing the agreed upon standardised item.** 

## 3.4. Procurement

There does not appear to be a gap in the actual procurement of relief items until the criterion of appropriateness and priority are applied. Enough capacity exists to purchase significant quantities of appropriate and/or standardised relief items. There are excellent procedures in place and, given sufficient funding, no gap is evident. However, there can be a significant gap between the relief commodities that are required in the emergency and those sent. Procurement often can only be done when the need arises, which leads to temporary supply shortages, over-reliance on producers and higher prices. The Complex Emergency and Sudden Onset disaster, by definition, do not allow lead times for purchasing all relief items. It is recommended that humanitarian organisations track and assess specific items and quantities of basic NFIs. Donor organisations should fund a series of workshops to develop the basic relief item list for different scenarios and determine the minimum use per year. With the use of SPHERE, a list of 10-15 of the most commonly used items should be developed against the anticipated beneficiary caseload. This would require funding for a minimum amount of certain NFIs, but would enable organisations to better plan procurement and achieve better prices on the market through longer – term contracts.

### 3.5. Humanitarian Transport

**Transport poses one of the smaller challenges in the overall supply chain**, with the main exception being strategic airlift of goods/assets from the stockpile/warehouse into the affected country or region. **The global pool of air, sea and land transport capacities, both commercially as well as publicly owned, is sufficient to cover for all transport needs of the global humanitarian supply chain.** Stakeholders prefer air transport carried out by civilian (commercial) aircraft over the use of military aircraft for a number of reasons (humanitarian principles, cost effectiveness, availability, ease of organisation, etc.). However, MOU's with political/military organisations exist and are being used to have access if and when required and available. **There is no gap in 'hard' assets among the HA players.** The issue is rather one of funding and co-ordination. The biggest gap in transport is the time and

measurement for evaluating transport efficiency and the related benefits of the asset. It is difficult for a donor to fund an aircraft for a year when the relief duration is designated as 3 months, even if that operation continues for years in 3-6 month increments. **It is recommended that** more organisations use the logistics cluster (including donors) as it evolves into a more inclusive mechanism. Key Performance Indicators (KPIs) need to be developed that encompass the entire humanitarian transport field and allow for comparisons across all players commercial 'scorecards' need to be adapted to humanitarian operations.

## **3.6.** Storage and Warehousing

There are not yet sufficient stockpiling facilities to respond efficiently, even though much has been done in the last 2-3 years with the UN Humanitarian Response Depots (UNHRD-WFP) and the Regional Logistics Units (RLU-IFRC). A slight expansion of current facilities would close the gap. Some stakeholders retain their own systems of national stockpiles and warehouses; others rely on a system of smaller warehouses in all countries where they are already running operations. The concept of unmarked, unbranded stocks is more widely accepted. The potential of the private sector, through both existing and possible arrangements, is exemplified by both Humanitarian Response Depots and the Regional Logistics Units (IFRC) systems cooperating with commercial entities for various activities. Gaps exist in terms of (lack of consensus on) the type, quantity, and standardisation of relief items held in stockpiles and a possible lack of control users have of whom else uses the UNHRD, e.g. ECOWAS. Also there is a lack of staging facilities and forward bases. Smaller, regional warehouses could be established with minimum, standardised stock and staging areas under contract for immediate use as required. It is recommended that the RLU and UNHRD networks are further supported in their development, while encouraging the respective managers to meet on a regular basis. In order to increase the interoperability between the existing/evolving systems, standardisation of NFIs is a precondition and should be supported as well as software and other mechanisms that facilitate the information-sharing aspect of stockpiling while having the ability to generate activity reports to compare the advantages of the facilities. Continued and new relationships with private entities should be considered, but not replace or diminish the humanitarian's own capacity to respond.

# 3.7. Tracking and Customs Clearance

Existing tracking systems are sufficient up to the delivery of the relief items to the distributing agency. At this point, the control of the relief items shifts from the logistics personnel to the programming staff and / or to other agencies, making accurate tracking down to the 'last mile' difficult. Only a few organisations (e. g. UNHCR, ICRC) have sufficient field personnel to physically monitor the final distribution of relief items to the beneficiaries. A variety of tracking systems exists lacking consistency, sometimes even within an organisation. Customs clearance is accomplished most by local agents and requires a solid relationship between agencies and individual logistics officers and customs agents. There is a gap in understanding by non-logisticians of customs clearance. A lack of core logistics staff numbers inhibits the ability

of agencies to properly train and monitor logistics activities to the last point. **It is recommended** to focus efforts on the main stockpiling facilities of RLU and UNHRD systems that have a broader reach among agencies. Workshops highlighting customs issues such as forwarding agents, documentation, authorities and roles/responsibilities, etc. would be useful to all organisations operating in humanitarian response. A protocol for customs clearance for each of the scenario situations could be developed and a checklist provided to all players who are in need of the customs services. Additional core logistics personnel and commodity tracking software, the 'sharing' of distribution and monitoring staff at the local level would be more cost-effective than each agency providing its own staff. Possible links for monitoring through the cluster system can be explored.

### 3.8. External Logistics Co-ordination and Information Management

The Logistics Cluster is the major coordination mechanism, but there are a number of international co-ordination channels. A gap exists in the number of agencies utilising these mechanisms for logistics purposes. The reliance of the logistics cluster on the commodity/service requirements of the other clusters needs to be addressed. One of the few, main reasons for there being a gap in transportation assets is if the HA community does not co-ordinate its efforts by prioritising the relief goods to be transported and locations for delivery. There are enough (too many) different information management (IM) tools in the humanitarian logistics environment, but the information value for the user is only as high as the quality of the input into the IM system or tool, and organisations have problems to accept other organisations tools. The main gap is in the inability of various systems to read each other and/or provide any useful output or management tools. It is recommended that the logistics cluster co-ordinates its activities early with the other clusters and at the local level so as not to develop to be an end in itself. Improvement of existing system rather than development of new ones and a specialised gap analysis could assess the specialised needs in information management of logistics organisations and providers.

### SUMMARY CONCLUSIONS ON GAPS AND RECOMMENDATIONS

	GAP	POSSIBLE GAP	RECOMMENDATIONS
1. INTRA- ORGANISATIONAL LOGISTICS	-	<i>MS:</i> - lack of govt. co-ordination; - emergency funds are short- term.	<ul> <li>Logistics personnel funded as core staff and included in all planning activities;</li> <li>Co-ordination of relief activities should go through existing mechanisms.</li> </ul>
2. PREPAREDNESS & PLANNING	<ul> <li><i>MS:</i></li> <li>Lack of measurable outcomes from preparedness activities.</li> <li><i>HA orgs:</i></li> <li>Qualified staff;</li> <li>Lack of training for planning;</li> <li>Lack of standardisation of requirements.</li> </ul>	activities. <i>HA orgs:</i> - Lack of ability/ expertise in	<ul> <li>Regular scenario-based planning exercises should be supported for supply chain main players;</li> <li>Programming players to include Logistics in planning;</li> <li>MS to offer expertise (govt. or military);</li> <li>MS to fund standardised commodities;</li> <li>Standardised relief items identified and defined.</li> </ul>
3. PROCUREMENT	<i>HA:</i> - Ability to procure/ lease services pre-disaster.	•	- List of 10-15 most common, life-saving relief items prioritised for front- loaded funding.
4. HUMANITARIAN TRANSPORT	<i>MS:</i> - Misuse of commercial KPIs for measuring HA performance.	<ul> <li>MS:</li> <li>Understanding of 'last resort' being first used in the case of military assets;</li> <li>Suspending support prior to appropriate replacement being identified.</li> <li>HA orgs:</li> <li>Strict mandates may inhibit flexibility;</li> <li>Competition among relief agencies can run up costs.</li> </ul>	HA-specific transport
5. STORAGE & WAREHOUSING	MS: - No consensus on supporting HA stockpiling. HA orgs: - Lack of common or universal commodity tracking system.		<ul> <li>Co-ordination between warehouse managers at UNHRD and RLU;</li> <li>Development of software that can accurately and timely identify stockpiling quantities and information sharing.</li> </ul>
6. TRACKING & CUSTOMS CLEARANCES		<i>MS:</i> - May not have bi-lateral or military agreements in place to allow interventions.	- Workshop highlighting customs issues, common protocols or procedures developed.
7. DISTRIBUTION	HA orgs.	MS:	- Potential sharing of

	1 0 1	<ul> <li>Reporting requirements vs. ability/timing of reports.</li> <li><i>HA orgs:</i></li> <li>Lack of direct control of reporting agencies (last mile).</li> </ul>	staff; - Increase logistics staff at field-level; - Investigate new
8. EXTERNAL LOGISTICS CO- ORDINATION & INFORMATION MANAGEMENT	<i>HA orgs;</i> - Lack of community-wide co-ordination of supply chain activities; - Inability of systems to 'speak' to each other.	redundancy of efforts.	<ul> <li>Encourage participation and use of Logistics Cluster as co-ordination mechanism;</li> <li>Begin co-ordination during preparedness &amp; planning phases;</li> <li>Increase capacity of existing systems instead of inventing new ones.</li> </ul>

## ASSETS AVAILABLE

In order to provide an understanding of the scale of 'hard' assets available in the humanitarian community, the below table indicates the assets 'owned' or otherwise available to the five main humanitarian organisations and identifies the main coordination mechanism for their use.

	NO. of ASSETS	ТҮРЕ	ORGANISATION / CUSTODIAN	COORDINATION MECHANISM
LAND	73,000+	Vehicles – passenger, light-duty, and lorry	35 humanitarian organisations (IFRC- 1,018; UNHCR- 6,990; IOM-1,000; WFP-1,000; ICRC- 2,887, etc.)	Fleet Forum; UNJLC/Logistics Cluster
AIR	210+	Fixed and rotary wing	WFP, ICRC, IFRC, UNHCR, UNICEF, IOM	UNHAS; UNJLC/Logistics Cluster
SEA	400+	Liner, charter vessels	WFP, UNHCR, UNICEF, IOM, IFRC, ICRC	UNJLC/Logistics Cluster
STOCK- PILING	<ul> <li>46,400m2 (UNHRD)</li> <li>7,500m2 (RLU)</li> <li>NB: Both have access within current facilities to expand if/as needed.</li> <li>104,774m2 (ICRC)</li> </ul>	<ul> <li>(5) UNHRD has</li> <li>10,000m2 (5K inside;</li> <li>5K outside)</li> <li>(3) RLU has 2,000-</li> <li>3,000 sq. meters</li> <li>All storage facilities.</li> </ul>	WFP, IFRC, ICRC	UNHRD, RLU; UNJLC/Logistics Cluster

# EXAMPLE OF POSSIBLE KEY PERFORMANCE INDICATORS

The UK's Department for Transportation, through the Freight Best Practices programme has developed KPIs in the commercial Food Supply Chain sector. The table below takes a sample of these KPIs and aligns them with examples of how the HA sector might develop the metrics. The Fritz Institute's publication on Humanitarian Logistics KPIs, when published, should be considered a more exhaustive work reflecting a broader representation of the HA logistics community.

DESCRIPTION	COMMERCIAL KPI	HA POSSIBLE KPI
Vehicle Fill	Measured by payload weight, pallet numbers and average pallet height.	Measure planned capacity vs. actual capacity of vehicle for road conditions for delivery.
Empty Running	Measurement of the distance the vehicle travelled empty during its commission.	Assurance that the vehicle returns empty from distribution (to retain neutrality)
Time Utilisation:	<ul> <li>Measurement of how the time was spent at each leg of the delivery.</li> <li>running on the road;</li> <li>being loaded/unloaded;</li> <li>pre-loaded awaiting departure;</li> <li>waiting loading/unloading;</li> <li>undergoing maintenance/repair;</li> <li>driver daily rest period;</li> <li>idle (i.e. empty and stationary)</li> </ul>	Measurement of on-time departure, arrival and loss/good condition of commodity of land (transit points, Extended Delivery Point Final Delivery Point) and sea transport in order to show the contractor performance and timeliness of dispatches, arrivals and quality of commodities delivered.
Deviations from Schedule:	<ul> <li>Breakdown of time costs of:</li> <li>Problems at supplier and customer premises;</li> <li>Internal company actions;</li> <li>Traffic congestion;</li> <li>Vehicle breakdown.</li> </ul>	<ul> <li>Measure of contractor performance:</li> <li>Timely uplift;</li> <li>Adherence to transit time;</li> <li>Losses incurred;</li> <li>Time, quality, quantity compliance;</li> <li>Documentation in order;</li> <li>Timely paid invoices.</li> </ul>