

# WHO Conference on Health Aspects of Tsunami Disaster in Asia Phuket, Thailand, 4-6 May 2005



## Panel 2.18

“Logistics, Information Technology and Telecommunications  
in crisis management”

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# Logistics Support to the Tsunami Response

- **What were the major barriers in delivering timely and effective logistics support?**
  - **Wide scope and sudden onset of disaster**
  - **Scale of the response caused congestion and confusion, and sometimes competition for logistics resources**
  - **Scale of response sometimes overwhelmed capacity of transport hubs to cope**
  - **Local devastation caused “absorption capacity” to be reached while supplies still arriving**



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# Logistics Support to the Tsunami Response

- **How to overcome them for any future crisis?**
  - More effective pre-disaster collaboration and coordination agreements
  - National disaster plans that incorporate mechanisms for managing the logistics aspect of the response including customs, warehousing, distribution plans etc.
  - Better identification and use of local logistics capacity and people
  - Agreements on information sharing and collaboration on logistics infrastructure and pipelines
  - More logisticians in the field as first responders



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# Logistics Need Assessment



Information on the logistics situation was extremely difficult to get, especially for those organisations without teams on the ground. Poor communications was partly to blame. A different scope and approach was required in each major affected area. Those areas with ongoing civil strife posed problems for information sharing and assessment.

- What was done well ?

- Agencies with an existing footprint responded very quickly and offered assistance to “new agencies” e.g IOM in Aceh
- 94% of agencies conducted assessments with multidisciplinary participation. (Fritz Institute Survey)
- Clear from the beginning the areas of problematic access
- Information sharing worked well where UNJLC present
- Individual agencies worked well in assessing their own needs



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# Logistics Need Assessment



- **What could have been done better ?**
  - Rush to be present sometimes impinged on ability of agencies to coordinate
  - Integration of international response with national response was sometimes poor
  - Only 58% of assessment teams contained a logistician
  - 88% of assessment teams were international, but only 38% contained someone from the area
  - Cooperative strategic logistics planning should be attempted
  - Information sharing about logistics situation needs to be improved and prioritised (especially between Military and Civilian actors)
  - Lack of information was an issue due in large part to
    - Lack of trained local staff and presence
    - Destruction of infrastructure limited access to affected area
    - Limited local political background in areas with conflict



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# Logistics Coordination mechanisms



- **Collaboration: (Fritz Institute Survey)**
  - 56% of agencies worked with others in setting up their supply chain
  - 77% worked with local authorities
  - 69% worked with military
  - 77% worked with private sector
  - 47% used implementing partners
  - 72% used an interagency hub at some point
- **What was done well ?**
  - Establishment of coordination centres e.g. CNO/LOC in Sri Lanka.
  - UNJLC deployed in some countries/areas
  - International military coordination centre set up in Thailand (Utapao)



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# Coordination mechanisms



- **What could have been done better ?**
  - Sometimes competing coordination mechanisms
  - “Too many meetings” –sometimes unsure of why meetings occur.
  - Communication/Coordination between field level ops centres and national level coordination not always clear. Same for CMCOORD.
  - Better ownership and involvement in logs coordination by agencies
  - Better coordination and advertisement of “assets available” lists
  - Clear that collaboration was done mostly on an “ad hoc” basis and only in response to clear need: need better commitment to “pre-emptive” coordination
  - In some locations better linking of National logistics coordination mechanisms with International mechanisms.



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# Gap filling initiatives – Were logistics needs met?



It was clear that in the early days of the response there was insufficient transport capacity to meet needs, especially from strategic staging points to the affected area, and then for distribution within the area.

## • What was done well ?

- International militaries provided lift and other support.
- A great deal of ad-hoc load sharing was performed.
- Good use of external tools for augmenting logistics capacity i.e. DRN for ground handling in Colombo, TNT in Banda Aceh.
- Generous donations meant most agencies had ability to charter logistics assets.
- Staging posts reduced congestion e.g. Subang in Malaysia
- Emergency response depots were extensively used and made response transport much easier e.g. Dubai



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# Gap filling initiatives – Were logistics needs met?



**It was clear that in the early days of the response there was insufficient transport capacity to meet needs, especially from strategic staging points to the affected area, and then for distribution within the area.**

- **What could have been done better ?**
  - Agreement on priorities for use of assets e.g. operational support and assessment vs. direct relief
  - Overwhelming agency and bilateral assistance meant a great deal of chaos, and less pressure to coordinate
  - Better linking of logistics of national response to the international response
  - More standby capacity for temporary warehousing
  - More sharing of assets – common logistics services/booking



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# Capacity building initiatives



- **What was done well ?**
  - Rapid emergency restoration of road access to most locations
  - Emergency rehabilitation of many port/airport facilities
  - Realisation of need to track incoming goods led to development of tracking systems
  - Support to governments on mapping and information management of affected areas
- **What could have been done better ?**
  - Provision of staff to support and clarity on goal of tracking systems
  - Inter-agency coordination of logistics assistance
  - Integration of govt. mapping/assessment agencies into international response and vice versa.
  - Better tools to link different coordination centres



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# Key learnings (Fritz survey)



- Assessment
  - Local staff were not trained
  - Lack of accurate information due to destroyed infrastructure
- Collaboration
  - Competing supply chains caused a “bullwhip” effects in procurement and congestion in the distribution network
- Human Resources
  - Shortage of trained and experienced logistics staff led to significant internal reassignment
  - Ineffective processes and time to develop skills in local staff
- Systematic supply chain analysis
  - Supply chain processes are in place but are still largely manual and “excel” driven
  - Reports are currently generated more for donors and not for the improvement of operations



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# Proposed Recommendations for discussions

- **What was done well ?**
  - In general the logistics component of the response worked.
    - Initial chaos in many areas and locations, delays, wastage etc, but this is common to any response, especially to a massive disaster.
  - Initial military assistance was critical
  - Customs regulations were, in general, relaxed to allow incoming aid.
  - Informal in-country load sharing and cooperation worked well
  - Formal common logistics services and hubs worked e.g. UNHAS/UNJLC/Subang
  - Agencies published tables of needs and deliveries better than in many prior emergencies e.g. IFRC mobilization table
  - Attempts were made to share supply chain and pipeline



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# Proposed Recommendations for discussions

- **What could have been done better ?**
  - **Better coordination and information sharing on logistics situation**
  - **Pre-existing agreements on information sharing mechanisms especially between national authorities, international organisations and militaries e.g. transport suppliers**
  - **Strategic planning of logistics needs during the crisis to be maintained and shared**
  - **Integration of “needs” and “pipeline” data to get a better strategic overview or just a vision of what’s incoming to an agency**
  - **Customs agreements for easing of procedures for key operational support items during emergencies e.g. Tampere convention**



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# Proposed Recommendations for discussions

- **What could have been done better (continued) ?**
  - Contingency planning to contain logistics components e.g. alternate customs regimes, logistics capacity assessments, strategic hubs identified (possibly regional), supply stockpiling agreements etc
  - Better consolidated assessment of needs would have allowed for a more “demand” driven logistics response and planning: a lot of supplies arrived before assessments completed.
  - Better balance between operational support and relief items in initial deliveries.
  - Contingency planning and training to include commodity tracking/arrivals tracking component
  - Agreement on supply chain reporting and sharing standards



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# Tsunami Relief Supply Chain Survey



- Conducted by Fritz Institute
- 18 organisations responded (47%)
- Planning:
  - 72% of orgs had a process to plan for the relief effort
  - Only 28% stated that their plan met their needs
  - Only 33% distributed plan according to established guidelines
  - Planning problems affected ability to respond via assessment, appeal and resource mobilisation



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# Resource Mobilisation (Fritz survey)



- Financial
  - Only one response stated that necessary financial resources were not available when needed.
- Staffing
  - 88% of organisations called on people from other operations/HQ
  - 72% of organisations used roster lists
  - 50% had stand-by mechanisms in place
  - Needs met temporarily by
    - 1-3 months 50% of contractors
    - 3-6 months 28% of contractors



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# Procurement (not just health) Fritz survey

- 56% of organisations experienced delays in procurement processes, often due to many organisations wanting the same items
- Frame work contracts/agreements
  - 70% with vehicle suppliers
  - 50% with medical items
  - 56% for non-food items
  - 20% for food items
- Unsolicited donations
  - Vehicles were useful due to limited availability
  - Valuable resources were wasted in identifying, prioritizing, transporting or storing unsolicited goods that arrived in impacted areas
  - Donations of unsolicited items did not have a negative impact on organisations with established processes to stop goods before they reach the local area



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# Transportation execution (Fritz survey)



- 83% of respondents experienced problems due to poor infrastructure
  - Congestion at airports due to surge in response
- Customs was seen as a bottleneck in Indonesia and later Sri Lanka
  - Medical supplies and radio equipment experienced longer delays
  - Continual changes in rules on Customs procedures and requirements: inconsistently applied and poorly communicated
  - Positioning a staff member with Customs authorities helped with communication

- Ranking criteria for deciding what transport resources to use (average, out of 5)

Availability	4.65
Time	4.33
Compatibility	3.06
Cost	2.94
Political	1.83

# Communications (Fritz survey)



- 83% of organisations communicated via cellphone or satphone for first few days
- 50% had email within a week
- 87% had communications problems during the response
  - Mostly this seemed to be due to cellular systems not being able to handle the load due to increased volume or system/network damage



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