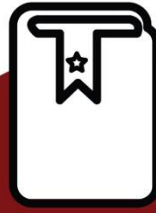


2nd Edition

**LEARNER'S  
GUIDE**



**TECHNICAL COMPETENCY UNIT**



**ADM.TEC  
014.2**

Apply Knowledge on Supply Chain  
and Logistics Operation



**ASCEND**

ASEAN Standards and Certification  
for Experts in Disaster Management

## ASEAN Standards and Certification for Experts in Disaster Management

# APPLY KNOWLEDGE ON SUPPLY CHAIN AND LOGISTICS OPERATION

ADM.TEC.014.2

## Learner's Guide



ONE ASEAN  
ONE RESPONSE

The Association of Southeast Asian Nations (ASEAN) was established on 8 August 1967. The Member States are Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam. The ASEAN Secretariat is based in Jakarta, Indonesia.

The "ASEAN Standards and Certification for Experts in Disaster Management (ASCEND)" is under Priority Programme 5: Global Leadership of the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) Work Programme 2021-2025 that envisions ASEAN as a global leader in disaster management.

The publication of this document is part of the "ASEAN Standards and Certification for Experts in Disaster Management (ASCEND) Toolboxes Development for Five (5) Professions" project.

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For inquiries, please contact:

### The AHA Centre

Graha BNPB, 13th floor Jl. Raya Pramuka Kav. 38 East Jakarta 13120 Indonesia  
Phone: +62 21 21012278 Fax: +62 21 21012287 Email: [info@ahacentre.org](mailto:info@ahacentre.org)

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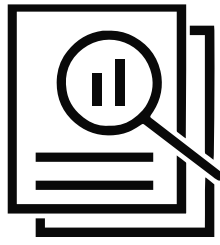
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ASCEND Programme and  
Toolbox:  
**Introduction**



**ASCEND**

**1.1**

## The ASCEND Programme

Southeast Asian governments, through the ASEAN Committee on Disaster Management (ACDM), continue to invest in strengthening disaster management systems for a more secure and resilient region. However, the compounding risks and increasing uncertainty of disasters in our new climate reality threaten to set back the socioeconomic development gains of ASEAN societies. Widespread and recurring disaster damages and losses can overwhelm national capacities and worsen regional transboundary effects.

The Declaration on One ASEAN One Response (OAOR) at the 2016 ASEAN Summit in Vientiane, Lao PDR, reaffirms ASEAN's vision to move towards faster and more integrated collective responses to disasters inside and outside the region. However, ASEAN's past experiences responding to large-scale disasters showed that realising the OAOR can be challenging. Various responders from different countries, institutions, organisations, and companies seek to contribute to the overall response. Their goodwill is appreciated, and several provide much-needed assistance. But ASEAN and affected Member States sometimes found it challenging to determine what knowledge and skills responders have and how they can effectively contribute to national and regional efforts.

Learnings from past experiences and shared commitment to realising the OAOR vision increased the need to develop regionally recognised Competency Standards and a certification process for disaster management professionals. The increased support led to initiatives that eventually created the ASEAN Standards and Certification for Experts in Disaster Management (ASCEND) Programme. ASCEND is now part of Priority 5: Global Leadership of the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) Work Programme 2021-2025, a programme that envisions ASEAN as a global leader in disaster management.

**1.2**

## The objectives of ASCEND

- To ensure disasters across the region are met with competent disaster management professionals in order to reduce the loss of life, respond effectively, recover more quickly, and decrease risks throughout the ASEAN region wherever possible. Note: In cases of extraordinary, diminished capacities, non-certified persons may be utilised at the discretion of the AMS in compliance with local governance/rules/laws.



- To establish a guide for certification of disaster management professionals across ASEAN Member States. The disaster management professionals will be certified in a competency-based assessment to perform tasks across all strategic components of AADMER, i.e. risk assessment and awareness, prevention and mitigation, preparedness and response, and recovery.
- To ensure disaster management professionals can work interchangeably and cooperatively both in their home country and in all AMS.

**1.3**

## Advantages and benefits of an ASCEND certification

### For ASEAN

The ASCEND certification enables ASEAN Member States to efficiently manage emergencies and disasters by fostering a regional network of competent professionals. It equips ASEAN countries with a system to recognise the expertise of incoming assisting teams if needed. Simultaneously, it streamlines resource mobilisation for assisting countries while upholding the ASEAN Standards.

### For AHA Centre

Given ASEAN's rapid development and vulnerability to natural hazards, there is a pressing need for a skilled workforce of disaster management professionals. The ASCEND certification can bridge the existing knowledge and skills gaps, promoting stronger cooperation and interoperability among disaster managers in the region.

### For disaster management professionals

The ASCEND certification serves as a valuable credential for disaster management professionals, providing evidence of their expertise and qualifications. It also helps organisations to determine the capabilities of certificate holders in performing critical job functions of specific occupations in the disaster management sector.



**1.4**

## The ASCEND Toolbox

A set of technical requirements must exist before it is possible to implement the ASCEND programme in participating ASEAN Member States. The first requirement is the ASCEND Competency Standards, containing forty-three (43) regionally recognised core and technical competencies in selected disaster management professions. The Competency Standards outline the work elements and performance criteria that guide for certification of disaster management professionals across the region.

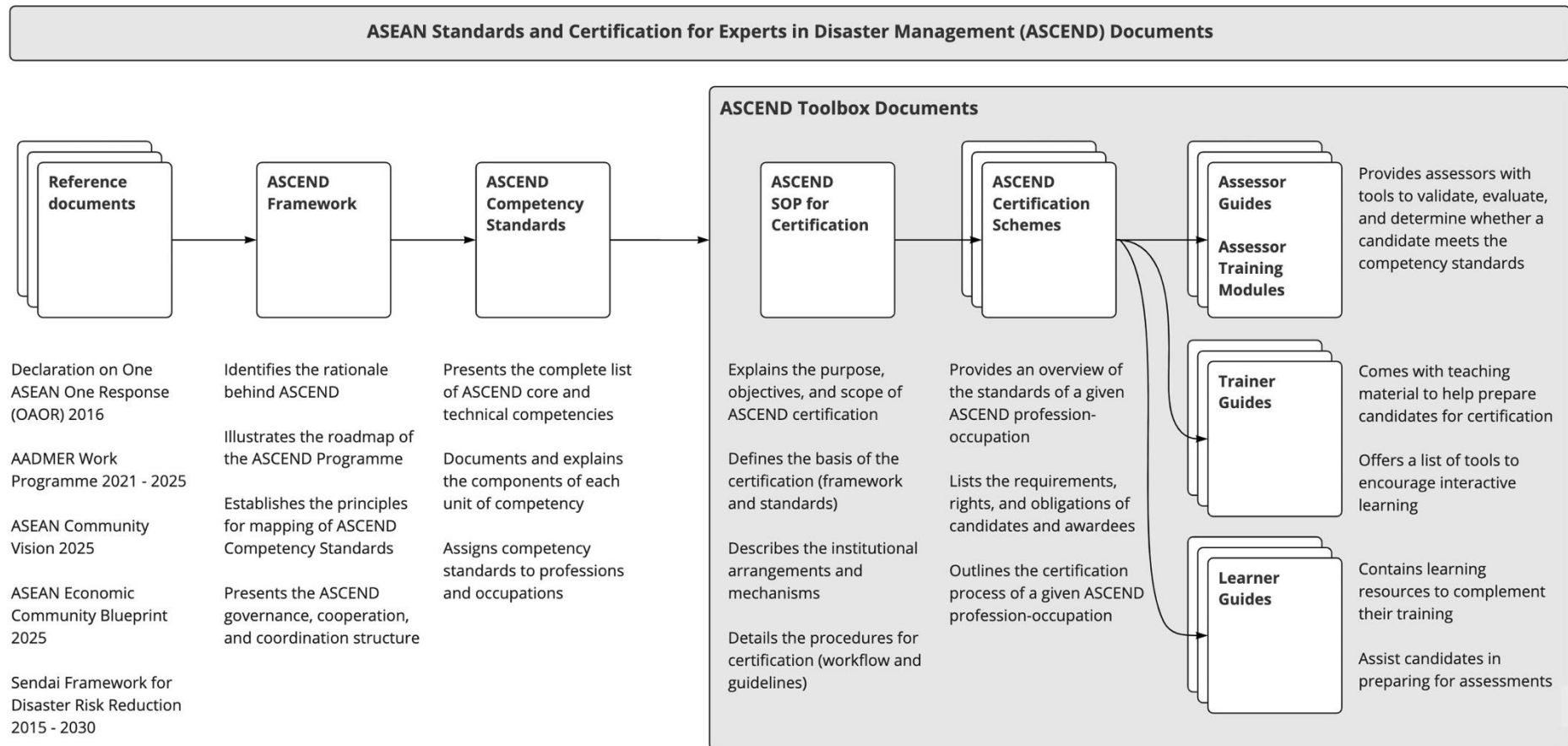
Another requirement is the development of an ASCEND Toolbox for five professions. These professions are Rapid Assessment, Humanitarian Logistics, Information Management, Water, Sanitation and Hygiene (WASH), and Shelter Management. The ASCEND Toolbox consists of an SOP, Certification Schemes, Assessor Guides, Trainer Guides, and Learner Guides. The ASCEND Competency Standards, approved by the ASEAN Committee on Disaster Management, are the primary basis of the Toolbox documents.

The SOP defines the basis of ASCEND, describes the institutional arrangements and mechanisms, and details the certification procedures. Certification Schemes present an overview of the standards of each profession-occupation and certification requirements, the rights and obligations of candidates and certificate holders, and general guidelines on the certification process. Assessor Guides provide assessors with tools to validate, evaluate, and determine whether a candidate meets the Competency Standards. Trainer Guides come with PowerPoint slides and presenter notes to help trainers prepare candidates for certification. It also offers a list of tools trainers may use to encourage interactive learning. Learner Guides assist candidates preparing for ASCEND certification in their chosen disaster management profession and occupation. It contains learning resources and complementary readings to help prepare them to undergo the required assessment.

The ASCEND Toolbox documents can assist the ASEAN Member States to identify, build the capacity of, and mobilise competent disaster managers across Southeast Asia to help reduce disaster risks and disaster losses in the region through timely and effective response.



Figure 1: Overview of ASCEND Toolbox Documents





# The Learner Guide: Introduction for Candidates



**ASCEND**

Welcome and thank you for your interest in pursuing an ASCEND certification. This Learner Guide is for you to read. It contains learning resources and helps you prepare for the required assessments: oral interviews, written tests, and observation checklists.

## Competency-based learning and assessment

**Competency** is the attitude and ability to use or apply one's experience, knowledge, and skills-sets to perform critical job functions in a defined work setting.

*Table 1: Competency areas and descriptions*

Competency area	Description
<b>Experience</b>	Refers to the qualifications of the candidate that make them eligible to pursue certification. It includes the candidate's formal education, work experience, professional training, and job-relevant life experiences.
<b>Knowledge</b>	Refers to what the candidate needs to know to make informed decisions on how to perform the work effectively.
<b>Skills</b>	Refers to the ability of the candidate to apply knowledge to complete occupational tasks and produce work outcomes or results at the standard required.
<b>Attitudes</b>	Refers to associated beliefs, feelings, motivations, and values that influence a candidate to make decisions and act according to occupational standards and the professional work setting.

There is one Learner Guide for each unit of competency. The Competency Standards and Unit Descriptor section of this document outlines the content you will be studying – broken down into elements and performance criteria that will be covered during training and assessed using competency-based methods. This guide contains a glossary of terms, a list of abbreviations, readings and activities, a self-assessment checklist, and information about the oral interviews and written tests.



**Competency-based methods** help ensure that the ASCEND certification process is relevant, valid, acceptable, flexible, and traceable – in alignment with the ASEAN Guiding Principles.

The relevance principle confirms that the ASCEND certification reflects the current professional needs in the disaster management sector. The validity principle relates to the consistency and equitability of the assessment process. The acceptability principle is about aligning the ASCEND certification to other disaster management professional standards and good practices. The flexibility principle refers to the responsiveness of the ASCEND certification to changes or differences in disaster management work settings and job requirements. The traceability principle ensures that evidence is sufficient to grant the ASCEND certification.

**Competency-based assessment (CBA)** is the process for evaluating whether a professional is qualified and competent to perform in a particular occupation. CBA is used to determine if the candidate's experience, knowledge, skills, and attitudes meet the standards and performance criteria defined in a unit of competency.





# ASCEND Competency Standards and Unit Descriptor



**ASCEND**

**3.1**

## Competency standards

Competency standards are a set of industry-accepted benchmarks that defines the experience, knowledge, skills, and attitudes professionals need to perform well in an occupation. It also reflects the requirements of work settings and considers the developments in the disaster management profession.

**3.2**

## ASCEND Competency Standards

The ASCEND Competency Standards identify the key features of work in selected disaster management professions and performance standards professionals need to meet to be deemed competent. It also provides the list of the forty-three (43) core and technical competencies that serve as the basis for defining the regionally recognised disaster management qualifications across the ASEAN Member States. The five (5) professions covered by the ASCEND Competency Standards include Rapid Assessment, Humanitarian Logistics, Information Management, WASH, and Shelter Management. Under these professions are five (5) categories of occupations: Manager, Coordinator, Officer, Promoter, and Engineer. Overall, there are fifteen (15) profession-occupation combinations (e.g., humanitarian logistics manager, information management coordinator, WASH promoter).

Each ASCEND Competency Standard has its dedicated Toolbox documents: an SOP, Certification Scheme, Assessor Guide, Trainer Guide, and Learner Guide. Only one SOP applies to all profession-occupation combinations covered by the ASCEND certification. The Certification Schemes, one for each of the profession-occupation combinations. Both these documents align with the AQRF Level Descriptors, Section 4: Guiding Principles and Protocols for Quality Assurance of the AGP, and ASEAN Disaster Management Occupations Map. The Certification Schemes also outline the ASCEND competencies under selected professions and occupations, eligibility criteria, basic requirements and rights of candidates, and obligations of certification holders. Assessor Guides describe the components of particular competency standards and offer tools to determine the candidate's qualifications. Trainer and Learner Guides expound on a given competency standard's elements and performance criteria for learning and assessment preparation purposes.

The ASCEND Toolbox documents can assist the ASEAN Member States to identify, build the capacity of, and mobilise competent disaster managers across Southeast Asia to help reduce disaster risks and disaster losses in the region through timely and effective response. The Toolbox documents may



also serve as a reference for ASEAN Member States' seeking to develop and implement national-level competency-based certification processes based on their respective capacities and needs. The ASCEND Competency Standards and its derivative Toolbox documents will be reviewed and updated every five (5) years to ensure it reflects changes in the disaster management profession and remains relevant. Table 2 describes its main components.

*Table 2: Components of the ASCEND Competency Standards*

Component	Description
<b>Unit title</b>	Describes the critical work function to be performed in an occupation
<b>Unit number</b>	<p>A coding system to organise the units of competency. It also indicates the types of competency standards.</p> <ul style="list-style-type: none"> <li>▪ ADM.<b>COR</b>.000.0 are core competencies. These are general professional knowledge and skills related to international humanitarian principles and disaster management standards, including ASEAN mechanisms and procedures.</li> <li>▪ ADM.<b>TEC</b>.000.0 are technical competencies. These are specific knowledge and skills needed to perform effectively in work areas under their chosen disaster management profession and occupation.</li> </ul>
<b>Unit description</b>	Provides information about the critical work function covered by the unit.
<b>Elements</b>	Presents the occupational tasks required to perform the critical work function in the unit.
<b>Performance criteria</b>	Lists the expected outcomes or results from the occupational tasks to perform and the standard required.



**3.3**

## Unit descriptor

**Unit title** : **Apply Knowledge on Supply Chain and Logistics Operation**

**Unit number** : **ADM.TEC.014.2**

**Unit description:** This unit deals with the skills and knowledge required to understand storage and transport management. It provides all the information, knowledge and skills to supervise emergency logistics operations undertaken by the local authority.

### Element 1.

#### **Apply warehouse management**

##### **Performance Criteria**

- 1.1 Identify basic storage and inventory management processes
- 1.2 Identify logistic hub operations, its costing and risks

### Element 2.

#### **Apply transport management**

##### **Performance Criteria**

- 2.1 Identify characteristics of each transport mode (Road, Rail, Water, Air, and multi-modal transport)
- 2.2 Identify transport challenges, and typology of transport network, and consideration factors
- 2.3 Identify fleet management process
- 2.4 Identify custom clearance mechanism



## 3.4

# Glossary of Terms and List of Abbreviations

Terms and abbreviations	Descriptions
<b>AADMER</b>	ASEAN Agreement on Disaster Management and Emergency Response
<b>ACDM</b>	ASEAN Committee on Disaster Management
<b>AGP</b>	ASEAN Guiding Principles
<b>AHA Centre</b>	ASEAN Coordinating Centre for Humanitarian Assistance on disaster management
<b>AMS</b>	ASEAN Member States
<b>AQRF</b>	ASEAN Qualifications Reference Framework
<b>ASCEND</b>	ASEAN Standards and Certification for Experts in Disaster Management
<b>ASEAN</b>	Association of Southeast Asian Nations
<b>ASEAN ERAT</b>	- ASEAN-ERAT (ASEAN Emergency Response and Assessment Team) is an initiative to join operations within ASEAN members, including rapid assessment, support to logistics, emergency communications, and coordination before and during a mission to a disaster or emergency.
<b>B/L</b>	Bill of Lading
<b>CBA</b>	Competency-Based Assessment
<b>ECHO</b>	European Community Humanitarian Aid Office, now known as DG-ECHO or Directorate-General for European Civil Protection and Humanitarian Aid Operations, is the European Commission's department for overseas humanitarian aid and civil protection.



<b>ERAT</b>	Emergency Response and Assessment Team
<b>FDP</b>	Final Delivery Point
<b>GIO</b>	Goods Issue Order. It is an authorising document from the stock owner to the warehouse manager to release goods. It contains items and related quantities approved for the release and the intended destination of goods. The only authorised stock owner (or designated replacement) can approve stock release and only for assigned projects.
<b>GRN</b>	Goods Receive Notes. The purpose of the document is to confirm quantities received in the stock based on Packing List, Waybill, Donation Letter, or similar evidence of incoming shipment and should note damaged or missing items. GRN also captures Quality Control (QC) outcomes at the primary point of delivery from 3rd party.
<b>GSM/CDMA</b>	Global System for Mobiles/ Code Division Multiple Access
<b>HF/VHF</b>	High Frequency/ Very High Frequency
<b>IDP</b>	Internally displaced persons
<b>IFRC</b>	International Federation of Red Cross and Red Crescent Societies
<b>INCOTERMS</b>	Incoterms or International Commercial Terms are a series of pre-defined commercial terms published by the International Chamber of Commerce relating to international commercial law. Governments accept the Incoterms rules, legal authorities, and practitioners worldwide to interpret the most commonly used terms in international trade. They are intended to reduce or remove uncertainties arising from the differing interpretations of the rules in different countries. As such, they are regularly incorporated into sales contracts worldwide.
<b>ISO</b>	International Organisation for Standardisation
<b>KNFA</b>	Korean National Fire Agency



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<b>MRA</b>	Mutual Recognition Arrangement
<b>MSU</b>	Mobile Storage Unit
<b>NFI</b>	Non-Food Items
<b>OAOR</b>	One ASEAN One Response
<b>SOP</b>	Standards Operating Procedures
<b>WASH</b>	Water, Sanitation and Hygiene

---





# Unit Readings and Activities



**ASCEND**

**4.1****Element 1. Apply warehouse management****1.1 Identify basic storage and inventory management processes****A. Introduction**

Being able to respond quickly is a critical factor for ensuring the effectiveness of disaster relief efforts. One of the biggest challenges that supply chain managers face is how to store materials in convenient and cost-effective locations. Every logistician needs basic knowledge about proper warehouse management.

**B. What is warehouse management?**

A warehouse is a planned space for storing and handling supplies and equipment in different stages between item sourcing and end-use or distribution in a humanitarian context. It is also a point for stock status-related information sharing and reporting. A stock generally refers to all commodities stored in the warehouse except registered assets in the Asset List.

Warehouse management is the process, control, and optimisation of warehouse operations from inventory entry into a warehouse - or multiple warehouses - until the goods can be distributed to beneficiaries.

The two main functions involved in managing a warehouse are logistics and programs.

- **Logistics function** includes managing and documenting warehousing and transport-related parts of the supply chain pipelines from items acquisition through procurement, donation, or internal transfer.
- **Program function** refers to planning commodities distribution, stock replenishment, approving commodities released from stock, and managing distribution records.



In this section, we will focus on the logistics function of the warehouse.

## C. Logistics function in the warehouse

### 1. Staffing

Running a warehouse requires a team with clearly defined roles. There are tasks which, although they appear to be part of a warehousing operation, are not the responsibility of the warehouse team (as this will create a conflict of interest and overlapping activities with the program team):

- Authorising stock release (it is Stock Owner responsibility)
- Independent physical count or warehouse inspection (warehouse staff can only assist this process performed by a party external to warehouse operations)
- Stock disposition decision (Stock Owner and Senior Management responsibility)
- Transfer of stock from one project to another without authorisation from Stock Owner
- Staff involved in procuring items (received in a warehouse) cannot issue GRN (perform count, quality control) or be responsible for the custody of such items.

**There are two general staffing positions in warehousing:**

- **Warehouse manager**

Every warehouse must have a dedicated Warehouse Manager who is responsible for:

- Implementation of warehouse procedures in all warehouse operations.
- All commodities are stored in their respective storage/warehouse and accountable for keeping the correct quantity and preserving the condition of items during storage.
- Management of all staff, volunteers and casual labour working in the warehouse, including visitors.
- Safeguarding the warehouse key and restricting access to warehouses. A spare key is kept in the office safe in a sealed envelope in case of emergency.
- Ensuring the warehouse is kept secure at all times and adequately locked when leaving premises.
- Appropriate storage conditions for all commodities, including temperature and humidity control and isolation of dangerous goods and goods, no longer fit end-use (i.e. damaged/expired goods).
- Monitoring stored items shelf life, reporting stock level per item.



- Alerting Stock Owners of short shelf-life items through timely sharing of Stock Reports.
  - Maintaining accurate and up-to-date stock records by item and project for all commodity transactions and sharing Stock Report updates regularly and on-demand.
  - Ensuring the safety and security of staff in warehouse, warehouse operations, facilities, and commodities.
  - Availability and maintenance of appropriate handling equipment, packing materials, cleaning materials, and protective equipment and supplies.
  - They are conducting capacity building and training for warehouse staff to perform their duties safely and in line with warehouse procedures.
  - Ensuring warehouse is well-maintained, cleaned, disinfected, dry, well-organised and pest/rodents free.
  - Stacking and organising stocks properly and optimising warehouse indoor/outdoor space use.
  - Pack shipments with appropriate parking to reduce the risk of damage during transportation.
  - Receive goods physical count (preparation of GRN) and coordinate Quantity Control processes
  - Conduct Quality Control in the absence of technical staff.
  - Reporting any losses or damages of commodities, processing stock adjustments, and alerting stock owners on discrepancies should be investigated.
  - Release of goods in line with approved Goods Issue Orders (GIOs).
  - Liaise with Logistics to arrange goods in line with authorised stock releases and prepare appropriate documentation to escort shipment (Waybill, etc.).
  - Responsible for overseeing the loading of commodities and documenting cargo handover to transporter/recipient.
  - Stocks checks and control counts, verifying any impact on items quality/end-use suitability.
  - Management of warehouse staff.
- **Warehouse staff**  
Assist Warehouse manager in warehouse-related duties:
    - Implement warehouse policies and procedures.
    - Accountable for proper handling of commodities during warehouse operations.
    - Responsible for own safety during warehouse operations.



## 2. Stock management

In a warehouse operation, stock management will start planning until the goods leave the warehouse for distribution.

### Storage planning essentials:

- Commodities to be stored in the warehouse, including the quantity and physical form.
- The distribution pattern and ways it can develop.
- The organisation's equipment and infrastructure are owned and used for loading-unloading processes and storage.
- Staff needed to run this entire process (warehouse management staff, loaders, security, cleaners, etc.)

Logisticians have to ensure that there is enough space in the warehouse.

### What is warehouse space management?

Warehouse space management is a set of activities for arranging and planning for optimal utilisation of available storage space, facilitating the smooth handling and management of commodities, and ensuring staff safety.

### Several parameters/calculations to consider:

<b>Total warehouse surface:</b> Expressed in m <sup>2</sup> (Warehouse inner length x width)	<b>Average usable surface in %</b> 70-75% of the surface
<b>Total warehouse volume:</b> Expressed in m <sup>3</sup> (Warehouse inner length x width x height <sup>1</sup> )	<b>Average usable volume in %</b> 30-50% of the volume

Usable warehouse space is roughly 50% of the actual space in small warehouses (under 50 m<sup>2</sup>) and up to 70-75% in large warehouses. This will allow open space for ventilation, corridors, aisle, gangways between the stacks and the walls.

**Calculation of volume and available space:** Volume of a box = Length x Width x Height

### Example (IFRC kitchen set):

- L = 30 cm (= 0.3 m); W = 30 cm (= 0.3 m); H = 27 cm (= 0.27 m)

<sup>1</sup> Height is measured by "clear ceiling height", which is the distance from the floor to the level of the lowest obstruction, such as light fixtures, ducts, or sprinklers



- Unit volume of 1 kitchen set =  $0.3 \times 0.3 \times 0.27 = 0.0243 \text{ m}^3$
- Total volume of 50 kitchen sets =  $0,0243 \text{ m}^3 \times 50 = 1,215 \text{ m}^3$
- Total volume of all your items = sum of all total volumes per item
- Available space = length x width x height of the empty space in your storage area
- An example: internal of a 20 ft. container: L = 5.87 m; W = 2.33 m; H = 2.35 m
- Total available space =  $5.87 \times 2.33 \times 2.35 = 32.14 \text{ m}^3$  (This is completely Filled)
- Total space for storage = 70% of  $32.14 \text{ m}^3 = 22.49 \text{ m}^3$
- Total space available in a half-filled container:
  - Sum of the volume of the empty spaces you can use for storage.
  - Or total space for storage minus the volume of space already occupied.
- The same rules apply when using feet, yards, and cubic yards.

### 3. Goods reception process

Goods Reception is one of the main activities in a warehouse that involves receiving incoming shipments/consignments into the warehouse for storage. The most important feature of the goods reception process is receiving, checking, and stocking commodities properly in the allocated warehouse as quickly and efficiently as possible. Sharing information at all levels helps ensure that this process is conducted efficiently, minimising demurrage charges incurred for unnecessary delays.

There will be a system where deliveries are allocated time slots for arrival at the warehouse in an ideal situation. The warehouse manager will plan the space and people required to achieve orderly handling and storing of the goods. However, goods can arrive without warning and at unexpected times. This often happens at the logistics hubs. Staff needs to be ready to handle such scenarios.

#### Document inspection:

Documents that are usually attached to shipments of goods:

- Consignment Note (Air Waybill, Bill of Lading)
- Delivery Order (Dispatch Notes)
- Packing List (List of Package Contents)
- Other supporting documents (Contract, Invoice, etc.)

What is important to check:

- Document date
- Document Number to be inputted into the General Ledger
- Status of goods (Procurement, Donation, Borrowing, etc.)



- When procuring, the name of the company/vendor that delivers the goods
- The name of the shipping company, if different from the procurement company/vendor
- The descriptions of the items delivered
- Specifications of goods shipped
- The number of items shipped, complete with the units

**Goods inspection:**

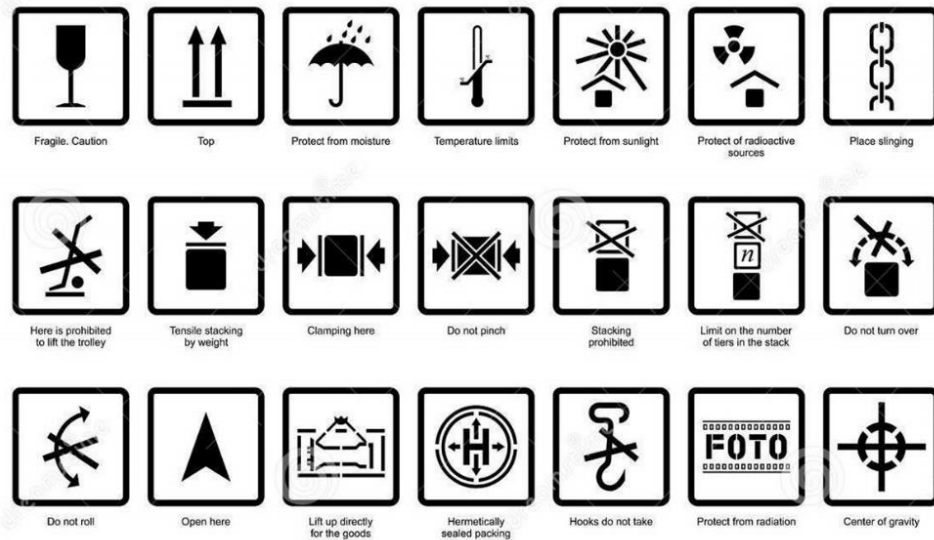
- The warehouse staff will start the receiving process in the warehouse after establishing the correct unloading area and ensuring that it is safe and suitable for the exercise
- Check the goods quantity, condition, possible damage, and where appropriate, carry out required quality checks and immediately report any anomalies for corrective action
- Complete the Waybills/consignment notes of the incoming trucks and report to the storekeeper in case of discrepancies in quantities
- Count the packages/bags as they are unloaded- write the details of the tally on the delivery note or waybill and ask the truck driver to countersign.
- The physical inspection process includes the following conditions:
  - Damaged packages, torn sacks
  - Split paper sack
  - Collapsed boxes
  - Wet or water-stained packages
  - Unsewn sacks
  - Open cartons
  - Leakages & spillages
  - Damaged packages inside cartons
  - Dented and buckled tins
  - Swollen (blown) cans
  - Insect on the surface of packages
  - Underweight bags
- If any of those issues are detected on the commodities:
  - Separate the damaged goods from the rest of the delivery
  - Record the number of damaged packages
  - Stack the defective packages separately
  - Do not mix different types of damaged goods
  - Deal with the wet packages
  - Then, as soon as possible, complete the tasks below:
    - Repair damaged packages
    - Mend sack by sewing
    - Use tape on cartons



- Repack split bags or place the split bag inside another sack
- Re-stack repaired packages separately
- Report discrepancies and condition/quality problems at once.

### Checking the international packing symbol on the package:

Checking the symbols on the outer packaging is very important to help know how to handle, store and distribute the goods on the packaging.



## 4. Storage

Storage is an activity of warehouse management referring to the movement of the commodities from the receiving area and placing them in a pre-defined location within the warehouse either on the floor (with pallets or plastic sheeting), shelf or rack. Well-organised storage with good storage conditions helps preserve the quality of stored items, avoid unnecessary safety and security risks, and organise the flow of commodities in and out of the warehouse.

- Storage space must be carefully planned to accommodate maximum expected stock levels and contingency stock.
- Goods must be segregated and reported by the project.
- Donated and purchased items must be segregated physically and documented separately.
- Transactions must be documented as they occur to maintain up-to-date records
- Observe what commodities must be stored separately (i.e., dangerous or high-value items).
- Fast-moving goods should be easy to pick up and kept close to the exit. To optimise handing, slow-moving goods are placed at harder to reach areas away from the exit.



- Damaged and expired items intended for safe disposal must be separated from the good stock. The disposal of goods require approval and is recorded on a file.

**Several commodities require special handling. These are goods that are or may have:**

- Chemicals
- Explosive
- Hazardous
- Magnetised
- High-value
- Sensitive to the weather

**Handling techniques:**

- Handle all commodities with care - do not throw or drop
- Carry commodities - do not drag
- Do not use hooks
- Do not handle commodities in the rain
- Create “stairs” to facilitate stacking and loading
- Add a cushion to the floor when loading from high stacks
- When operating equipment, think safety first

**Process of proper storage arrangement:**

- Plan appropriately on where to put the goods
- The warehouse manager, together with the staff, supervise the offloading process
- The warehouse manager supervises the stacking formation in agreement with the labour foreman before offloading begins
- Before deciding where to put the commodities, calculate the volume of the incoming commodities against the available space to ascertain whether available space is adequate
- Separate different items and packaging
- Do not store fuel, chemicals, cement, pesticides in the same warehouse where food commodities are stored. Separate storage space should be identified, preferably outside the warehouse
- Supervise the storing process to ensure good, countable, and secure stacking is created and achieved
- Record the quantity of the commodity stored in each stacking and attach different stack cards for each stack
- Leave a corridor of about 1 meter between different stacks, conduct regular inspection of the commodities stored



- Perform daily warehouse inspection, walk around the warehouse, and inspect each stack every morning
- Remove/ segregate damaged goods from sound stacking
- Report the damaged goods and proceed to carry out the reconstitution process and produce a reconstitution report showing losses incurred, if any
- Immediately after offloading, the storekeeper should update their stack/bin card and the ledger

## 5. Kitting and dispatching

### What is Picking? Are you kitting and repacking?

- Picking, kitting and repacking refers to warehouse activities that bring different items from different locations into one location. It also involves assembling the items to make up consignments ready to be transferred to the dispatch area.
- This operation is often labour-intensive, involving handling individual items, whereas other activities often involve bulk handling. It is also one of the activities that entail the highest cost to conduct.

### Picking, kitting and repacking – How to do it:

- Make sure you have clear instructions of what items need kitting (detailed information on the kit)
- Organise labour and allocate equipment (gloves, masks etc.) to do the work
- Prepare and clean the processing area
- This process must be supervised by at least one storekeeper and tally clerk
- Take note of damaged goods/discrepancies in quantities and replace such items
- The completed kits need to be moved to a dedicated dispatch area and attach a stack/bin card to it

### What is goods dispatching?

Dispatching is a warehouse activity that involves moving or transporting the commodities out of the warehouse to the final discharge point or the beneficiaries.

### Goods dispatching - How to do it:

- Ensure you have official requisition/instruction for dispatch: type of commodities, number of items to dispatch, and the transport order. You can find detailed instructions on the GIO prepared by the stock owner.
- The warehouse manager to contact the transporter



- The warehouse staff will only release commodities from the warehouse after receiving an official requisition/official instruction from management
- If the instruction is unclear, the warehouse staff should immediately seek clarification from the warehouse manager
- Mobilise labour for the planned dispatch(es)
- On the dispatch day, requested trucks will be registered at the gate by the security guards
- The freight order which the truck drivers carry will be given to the warehouse staff for dispatch purposes
- The warehouse staff supervise the loading process tallying the commodities as they get loaded onto the truck
- Warehouse staff will also fill in the offloading form once the loading is completed, then submit the offloading form to the storekeeper
- Finally, the warehouse staff will fill in the dispatch waybill based on the loading form
- Trucks should be clean before loading
- Clean tarpaulins should be made available to collect spillages and also cover the food in case it rains while loading
- After loading and waybill is issued to the driver, the stack/bin cards and stock ledger should immediately be updated

## E. Summary

- Warehouse management is the process, control, and optimisation of warehouse operations from inventory entry into a warehouse - or multiple warehouses - until the goods can be distributed to beneficiaries.
- The two main functions involved in managing a warehouse are logistics and programs.
- Logistics function includes managing and documenting warehousing and transport-related parts of the supply chain pipelines from items acquisition through procurement, donation, or internal transfer.
- Program function refers to planning commodities distribution, stock replenishment, approving commodities released from stock, and managing distribution records.
- Warehouse space management is a set of activities for arranging and planning for optimal utilisation of available storage space, facilitating the smooth handling and management of commodities, and ensuring staff safety.
- There are four stages of stock management: storage planning, goods reception process, storage, and kitting and dispatching.



## 1.2 Identify logistics hub operations, it's costing and risks

### A. Introduction

Logistics hubs affect transportation network distribution patterns since they are network structures that facilitate the movement of goods in the supply chains. A logistics hub is an area where all the activities relating to logistics: transport, storage, handling, and goods distribution are centralised in a strategic location(s).

The purpose of a logistics hub is to make commodities available to different distribution locations through the best possible connections, allowing for better use of available logistical services and transportation infrastructure. Logistics hubs significantly impact the efficiency of transportation systems since they are directly involved in the flow of goods. It is necessary to position these hubs on a network correctly to increase the efficiency of logistical services.

#### **The typical activities of the logistics hub include:**

- Coordination
- Transport
- Storage
- Handling
- Distribution
- Information management
- Reporting

There are different kinds of logistics hubs to support various functions and locations, such as:

#### **1. Global/Regional hub**

- To support other global/regional hubs
- To support in-transit hubs
- To support staging locations (depending on staging location)

#### **2. In-transit hub**

- To support other in-transit hubs
- To support global/regional hubs
- To support staging locations
- To support main warehouses
- To support field warehouses (directly, in a few cases)



### 3. Staging location

- To support in-transit hubs
- To support main warehouses
- To support field warehouses
- To support Final Delivery Points-FDPs (directly, in a few cases)

### 4. Main warehouse

- To support in-transit hubs
- To support other branch or field warehouses
- To support FDPs (directly, in a few cases)

### 5. Field warehouse

- To support other field warehouses and to run the field warehousing operation
- To support FDPs

## B. Factors to be considered before establishing a field logistics hub

### Benefits of having a field logistics hub:

- For buffer stock location
- For stock preposition location
- For staging location
- For transit point location
- For breaking bulk location
- For kitting & repacking location
- For FDP location (in a few cases)

### How to set up a field logistics hub:

#### 1. Determining needs

- Purpose of the logistics hub
- Type of goods to be stored
- Service required

#### 2. Selecting a suitable location

- There is a range of aspects to consider when deciding on the location of a Logistics Hub. These may vary depending on whether you are selecting a new temporary site or from one of several existing buildings.
- An in-depth assessment should be conducted to determine the strategic location. The assessment may include:



- Land size available
- Geographic location; surface, elevation level, site location (mountainous, shore), ground condition (swamp, bumpy).
- Natural aspects; hazard risks, climate, temperature, and humidity range (in a few cases).
- Supply chain aspects, such as accessibility, distance from the main roads, proximity to ports or airports of entry, the existing capacity of the closest port and airport, distance from IDPs camps and beneficiaries, and existing transport corridors in the region (land, sea & air), suitable supply routes, availability of labours for handling, availability of local transporter, etc.
- Safety aspects: soil condition (contaminated with industrial waste, minefield area).
- Security aspects; existing security level, close to Police/Military base, crowded area, black zone area, fencing
- Other elements; include existing telecommunications network (GSM/CDMA), HF and VHF blank spot, electricity supply, fuel supply, water supply, etc.

### 3. Designing the space layout

- General storage areas include:
  - Space for food commodity
  - Space for Non-Food Items (NFI)
  - Space for special handling goods (if any)
  - Space for damaged goods
  - Space for reconstitution, repacking and kitting of goods
  - Main gangways
  - Warehouse equipment area, including pallets area
  - Space for working station inside the warehouse
- Other areas for supporting storage and office activities include:
  - Administration or office area
  - Gateway for entry and exit
  - Equipment maintenance/workshop area
  - Non-Food Items (NFI) / equipment area outside the warehouse.
  - Goods spoiled area outside the warehouse
  - Manoeuvres and parking areas for the trucks and other fleets
  - Washroom/toilet area, including septic tank area
  - Garbage area, including landfill area
  - Back-up generator area
  - Security guard post area



#### 4. Setting up the hub & provide equipment

There are many factors to consider when setting up the Logistics Hub in the field. These may vary depending on whether you are selecting a temporary site or from one of several existing buildings. These include:

- Erecting Mobile Storage Unit (MSU) and Prefabricated Office Unit in selected location; empty land/yard.
- Renting a vacant building or other facilities (if available)
- Joining the storage facility of local government or organisation.
- Joining the storage facility provided by the cluster leads; UN or Government agency (if any)
- Constructing a permanent building (if necessary)
- Using public facilities as a temporary solution; schools, government offices, hospitals, mosques, churches, shelter tents/IDPs camps, etc.

#### 5. Establish the system, procedures & business flow

The last stage for establishing a field logistics hub is putting the system, procedures, and business flow in place. Systems may include receiving and dispatching mechanisms, inventory systems, recording systems, stacking systems, tracking systems, documentation, etc.

Procedures may include SOP for field logistics hub management, storage and commodity management, handling procedure, disposal procedure, reconstitution, repacking procedure, etc.

The business flow of a logistics hub consists of:

- Upstream pipeline - the origin of goods (sources of supply), transport process up to receiving areas at the hub/warehouse.
- Downstream pipeline - dispatching to beneficiaries, transport process up to receiving at Final Discharge Point or the FDP.

### C. Cost and Risk Analysis

Cost is embedded also in risk. Risk does not always simply synonymous with monetary losses. It can mean cost to human health and wellbeing for responders and disaster survivors and communities. Lower direct cost option does not always mean overall lower risk.

Logistics and supply chain risk encompasses various disruptions and uncertainties that can impact the efficiency and effectiveness of supply chain operations. Humanitarian and disaster management logistics often operate in already vulnerable conditions. These risks can come from unreliable suppliers, demand variability, process inefficiencies,



infrastructure failures, currency fluctuations. Political and regulatory changes, cybersecurity threats, terrorism and theft also contribute to the complexity of managing supply chains.

To mitigate these risks, disaster management responders must employ strategies such as (whenever possible) diversifying suppliers, maintaining appropriate inventory levels, early warning system, fostering strong collaboration with suppliers and other response agencies, and developing contingency plans. Additionally, tools like risk maps and scenario analysis help in identifying and prioritizing potential risks.

It is important to ensure that there is a process in place to detect and monitor risks and prioritise the risk based on the hierarchy of risk e.g. from high to low vulnerability supply chains; Identifying need to manage the risk and vulnerability based on risk priorities.

There are many rating scales. However, creating a simple rating system can help with decision making (e.g. Rating 5 to 1 to reflect the levels from extremely high-risk to moderate to none).

## D. Summary

- A logistics hub is an area where all the activities relating to logistics: transport, storage, handling, and goods distribution are centralised in a strategic location(s).
- The activities of the logistics hub include coordination, transport, storage, handling, distribution, information management, and reporting.
- It is important to establish a sound risk management practice in logistics and supply chain. Identifying risk factors and mitigating risk is key to the humanitarian supply chain from procurement, preparation, transport, and handling/distribution of relief goods amid disaster.



**4.2****Element 2. Apply transport management****2.1 Identify characteristics of each transport mode (road, rail, water, air, and multi-modal transport)****A. Introduction**

Humanitarian and disaster management agencies seek to maximise the impact of emergency response by meeting urgent needs and preventing further damage. Response or lead time reduction is an important consideration. Any reduction in the lead time can significantly positively impact the beneficiaries. Determining the quickest way, the correct type of transportation to distribute aid and managing vehicle routing is critical to any emergency response.

The primary challenge in vehicle routing is finding the shortest time path between origin and destination. Unlike the usual vehicle routing problems, the emergency vehicle routing problem minimises the sum of arrival times instead of minimising the cost.

Network design includes defining the routes and allocating the available resources (primarily vehicles and tasks such as structure stabilisation and roadway repair). The network's performance is evaluated by network vulnerability analysis and reliability analysis. Vulnerability analysis examines the connectivity between all origin-destination pairs following a disaster. Network reliability analysis evaluates the stability of a transportation network under different circumstances.

**B. Major transport considerations**

- Major points, border crossings, transport routes (road, rail, river), and trans-shipment points (airports, landing strips, helipads) serve the emergency zone. Review the compensations to consider and whether the trans-shipment points have sufficient capacity.
- Mountain ranges, flood-prone areas, damaged or vulnerable bridges, ferry crossings, or routes susceptible to landslides or security problems. Consider when you intend to move through a route (i.e. the height of the river, road conditions).



- Expected seasonal effects on transport, storage and handling operations. Does the vehicle fleet have the capacity for seasonal conditions? Does the warehouse have the capacity to withstand heavy winds, rain, and snow?
- The security situation in the area of operations and along the relevant road, rail and river corridors. Current and potential security measures to protect stocks, transport, and warehouses.
- Political or military affects transport, storage and handling, operations and capacity. If the military is conducting operations in a particular area, you may not want to go into that area simultaneously.

### **Parameters to assess when selecting a mode of transport:**

#### **1. Speed**

The mode of transportation determines the speed at which goods can be moved. However, the modal infrastructure's nature can impact the relative speed of that mode. Environmental factors, such as congestion on roads and adverse weather conditions, can impact the ability of transportation to move at the optimal modal speed.

#### **2. Reliability**

The reliability of the mode of transport lies in its ability to fulfil service requirements. The reliability of a transport service to deliver the correct goods, in the suitable condition at the required time, every time, is critical. Unreliable service in terms of planned aid delivery can have a critical impact on the ability of a program team to meet its humanitarian objectives.

#### **3. Cost**

The cost of a mode of transport is often expressed in terms of unit costs for transporting the goods or materials rather than an absolute figure. It could be expressed as a cost per sack, per ton, per pallet or similar. The distance the goods have to travel must also be considered. Therefore, the modal cost can also be expressed as a value per ton kilometre. For instance, transport could be quoted as a cost per 24-ton load from point A to B.

Understanding costs at this level of detail allows for more precise comparison of different modes. If the goods are in the form of a full load and there is a choice of available modes for the consignment size, the total cost for transportation could be compared.

#### **4. Flexibility**

Flexibility relates to the scope for variation in a mode of transport. The infrastructure within which a mode has to operate will affect the flexibility of that mode. Comparatively speaking, road transport is a very flexible mode



due to the road infrastructure in most countries. Rail, for example, is less flexible, being constrained by the available fixed infrastructure.

## C. Transport mode

### 1. Road transport

#### Road transport options:

- Vehicles: Cars, 4 Wheel Drives, Trucks (small/large), Trailers, Bicycles, Hand carts
- Animals: Camels, Donkeys, Mules, Yaks, Horses, etc
- People: Porters, Locals, etc.

#### Road transport considerations:

- Primary, secondary, village roads and tracks
- Security concerns and measures for particular routes or locations. Would the routes become impassable due to floods, snow, landmines or insecurity?
- The types and sizes of cargo trucks that can pass on each road type/route (noting seasonal variations)
- Bridges: types and capacities, weight limits
- Fuel
- Potentially dangerous overhangs: Steep hills, tunnels
- River crossings or ferries with expected delays, tolls, etc.,
- Present and foreseeable bottlenecks and possibilities to overcome them to increase the efficiency of the operation

### 2. Rail transport

#### Rail transport considerations:

- Condition of rail tracks
- The present level of cargo movement: any anticipated changes
- Major transit points: location, wagon capacity, sidings, storage capacity
- Reliability and security of cargo movements
- Type and number of usable cargo rail-wagons
- Type and number of usable locomotives
- Rate of through-put from points of origin to storage facilities
- Procedures at transit points
- Security concerns and measures for specific routes or locations
- Type and access to fuel
- Present and foreseeable bottlenecks



In many countries, existing transport services do not have a large spare capacity or may not serve the area where IDPs are located. Where a suitable rail network exists, this can be an effective way of moving supplies. However, many railway systems are either congested or short of rolling stock (the locomotives and carriages used by railways), resulting in long delays. In most cases, onward movement by road to the final destination will be necessary.

### 3. Water transport

As soon as details of the arrival of relief supplies by sea are known, arrangements should be made for clearance and priority cargo handling. In principle, relief supplies should be loaded only on vessels with the capacity for self-discharge directly onto trucks. Arrangements for onward movement of the supplies and any interim storage necessary must also be made well in advance of the estimated time of the ship's arrival.

#### Water transport considerations:

##### Port

- Permissible vessel specifications for bulk and bagged cereal
- Cargo handling equipment – numbers and capacity of cranes and forklifts
- Discharge rates to warehouses, trucks, rail wagons, barges
- Location, number of quays
- Present level of functioning
- Superintendence, shipping and forwarding agencies present and their fee rates
- Current and foreseeable bottlenecks, possibilities to overcome them and increase efficiency
- Customs procedures, handling costs, taxes
- Security concerns

##### River corridors

- Draught, speed of current, permissible vessel specifications and carrying capacity (with seasonal variations), tides
- Customs and other considerations where a river mark an international frontier
- Local norms/practices for contracting river transport
- Available boats, barges, tugs, canoes
- River width, length, hazards (rapids)



#### 4. Air transport

When no road infrastructure is in place or the existing road infrastructure is severely damaged or destroyed by a disaster, humanitarian logistics operations may use air transport.

##### **Types of air transport often used in humanitarian operations:**

- Aeroplanes
- Fixed-wing, Cargo planes, Water Planes
- Helicopters
- Airdrop, External Lift

##### **Air transport considerations:**

- Runway length, width, surface, load classification and orientation
- Location and height of any obstructions along the runway or in approach/departure zones
- Present and potential weather constraints (e.g., fog, strong winds)
- Aircraft types that can operate
- Available navigation aids and support
- Availability of night lighting and the reliability of power supplies
- Operating hours: the level of sustainable activity, times when relief aircraft can be best be accommodated
- Air operations that are present and occur regularly
- Customs procedures

#### 5. Other modes of transport

- In some emergency operations and situations, the only possible means of transport is by an animal, for example, the final transportation to very remote villages.
- Managing a caravan of animals is not easy; the best way to deal with this is to rent them from an owner. Therefore, the owner will be in charge of all logistical aspects of the “convoy”.
- Ensuring sufficient feed, food, and water are available en route is essential.

The goods being moved must be packaged concerning the weight that a particular animal can carry. These may vary locally because of climatic or other local conditions.



## D. Summary

- Determining the quickest way, the correct type of transportation to distribute aid and managing vehicle routing is important in humanitarian operations.
- Speed, reliability, cost, and flexibility are the four (4) main perimeters when selecting transportation mode.
- Speed and reliability will significantly impact the ability to deliver humanitarian aid effectively and efficiently to where it is needed

## 2.2 Identify transport management challenges, and typology of transport network, and consideration factors

### A. Introduction

Logistics and supply chain officers must understand how the transport units are managed, the types of transport available, and the geographical conditions their chosen mode of transportation will operate in.

### B. Transport management objective

Transport is the link in the logistics chain that makes it possible for emergency humanitarian assistance to reach its destination. When designing an emergency supply transport strategy, it is not enough to consider in the abstract the best means of transport or the resources needed to mobilise supplies from destination A to B. Alternative means, methods, and routes should be considered. The challenge is ensuring that goods arrive safely and on time in target locations.

The movement of supplies within the country or area of operations is only one part of the process. The arrival of goods from abroad—donated by the international community or acquired by a disaster relief organisation—has its logistical challenges.

Getting emergency supplies from their point of origin to their final destination involves using different means of transport over air, land, or water.

The various means of transport have advantages and disadvantages ranging from the cost of operations to their transport capacity and speed. There are



two main issues when deciding which means of transportation to use: the needs on the ground and feasible forms of transport.

### **The needs**

- How urgently are the supplies needed?
- What type of supplies have to be shipped?
- How large and heavy is the shipment going to be?
- What is the destination?
- What distances must be traversed?

### **Feasible forms of transport**

- What means of transport are available?
- How much do they cost?
- How much can the organisation afford?
- How hard is it to reach the intended destination, given the weather and the state of available routes?

Resources might not always be available to obtain the ideal form of transportation. Even when there are enough resources, the chosen mode of transport may not always be available. Or conditions in the field may rule out its use.

It is not enough to determine what mode of transport is needed. It is also crucial to assess whether it is feasible to use it. There should be an alternative for every means of transport chosen should circumstances prevent its use.

### **Determining the type of transport needed**

Certain factors must be kept in mind when determining the types of transport needed:

- The nature of the supplies to be transported
- The weight and volume of the load
- The destination: distance, access to the delivery point (by air, water, land), and the condition of the access routes
- The urgency of the delivery.



## C. Typology of transportation movement

Based on the category of transportation in humanitarian logistics, it is often categorised into simple groups: domestic and international movement.

### 1. National movement

Challenges in national goods movements:

- The use of more than two modes of transport
- Delays at the modal interchanges where goods are moved from one mode of transport to another mode of transportation may affect the humanitarian operation in assisting the beneficiaries
- Geographical challenges
- Lack of modes of transport (e.g., use of donkeys, elephants, horses, small boats), the challenges of using the animals, and minor modes of transport to deliver the assistance.

Some solutions to tackle the challenges in the national goods movement:

- Employ experienced logistician in Transport, Warehousing, Contracting
- Appoint experienced transport or freight forwarder
- Provide training for the logistics staff.

### 2. International movement

Challenges in international goods movement

- The use of more than two modes of transport
- Delays at the modal interchanges where goods are moved from one mode of transport to another mode of transportation in which may affect the humanitarian operation in assisting the beneficiaries
- Lack of knowledge in international commodity movement such as customs clearance process, port regulations, contracting transport for international transport.

Some solutions to tackle the challenges in the international goods movement:

- Employ experienced logistician in Transport, Warehousing, and Contracting
- Appoint a professional customs clearance agent
- Appoint experienced transport, freight forwarder and Shipping Agent Company
- Provide training for the logistics staff.



## D. Other categories

Other typology of disaster response and humanitarian transportation movement encompasses various classifications based on the mode of transport, purpose, and network structure. Depending on the context, the modes of transport include road (cars, trucks, buses), rail (trains, trams), air (airplanes, helicopters), water (ships, ferries), and pipeline (for liquids and gases like oil and natural gas).

Based on the general category, transportation can be categorized into passenger transport (e.g. for disaster responders), which involves the movement of responders and communities or people in general through public and private means, and freight transport, which focuses on the movement of goods and commodities using cargo ships, freight trains, and trucks.

Network structure distinguishes between direct or point-to-point transport, where goods or passengers travel directly from origin to destination, and hub-and-spoke transport, where a central hub consolidates and redistributes cargo or passengers.

## E. Summary

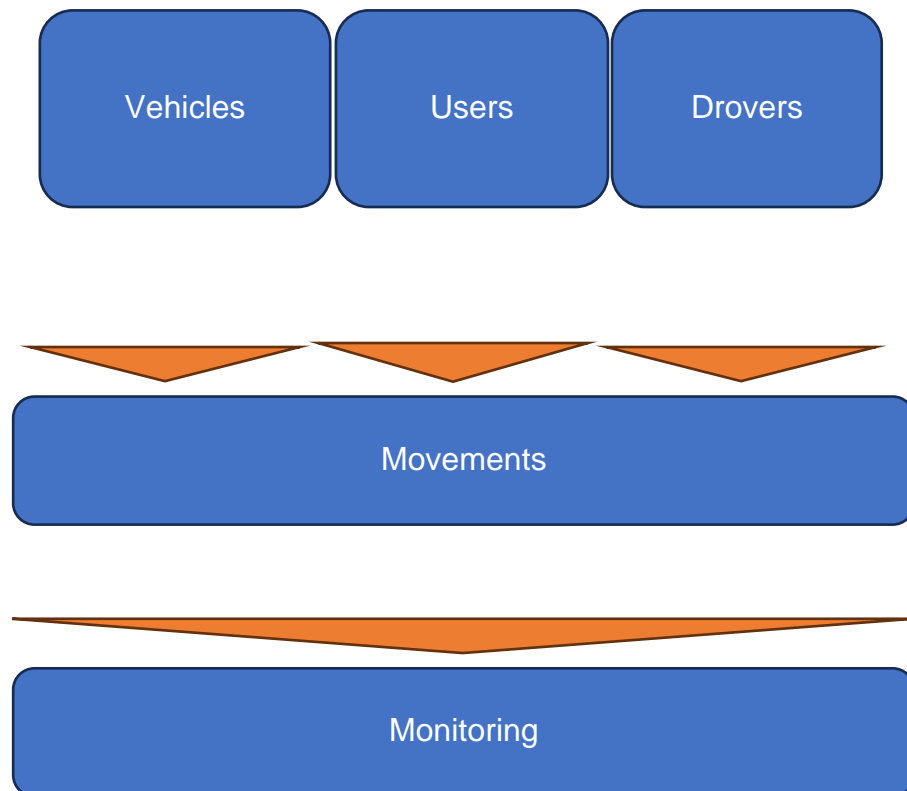
- Transport management aims to ensure that aid and relief commodities and items are transported in the most effective, timely & cost-effective manner.
- The various means of transport have advantages and disadvantages ranging from the cost of operations to their transport capacity and speed. There are two main issues when deciding which means of transportation to use: the needs on the ground and feasible forms of transport

## 2.3 Identify Fleet Management Process

The concept of Fleet management in disaster management involves a range of processes aimed at ensuring the efficient operation, maintenance, and control of a fleet of vehicles. In business context, primary objectives include optimizing vehicle use, reducing costs, ensuring compliance with regulations, and enhancing overall fleet performance. However, in humanitarian context, the objective of fleet management is to save lives in a way that can be more sustainable to reach most vulnerable survivors.



Here is a detailed overview of the fleet management process. Fleet management can be broken down into basic components:



Following this logic, vehicle fleet management can also be looked at as several work streams that are simultaneously executed by one or several people.

1. **Managing Vehicles** - Ensuring vehicles are available and fit for purpose, performing regular checks, maintenance and repairs, administrative clearances, etc.
2. **Managing Drivers** - Ensuring drivers are available and fit for purpose, organising the roster, providing training, sharing relevant information, obtaining medical clearance, etc.
3. **Managing Users** - Ensuring that the users can access the fleet services in a timely and safe manner. This includes understanding user needs and dealing with requests, allocating the pertinent resources, providing the required information for the movement to be duly accomplished and collecting feedback on the service provision.



4. **Managing Movements** - Ensuring that movements are achieved satisfactorily, organising movements according to the needs expressed by users, monitoring of movements to ensure they are performed according to the plan, and ensuring standard working and security procedures.
5. **Monitoring Workflows**- individually and as a whole (fleet) - ensuring due performance, proper balance and adjusting when required. Overuse of resources and mechanical failure, burnout of drivers and bad behaviour, or discontent among the passengers are typical symptoms of fleet dysfunctions that should be addressed.

Fleet management can be looked at as a sequential set of steps. This overview is especially advisable when the scale of a fleet is large and when an agency owns most of the fleet related assets and services.

Fleet management also involves processes such as fuel management and technology (e.g. telematics and tracking use GPS technology to monitor vehicle locations in real-time, analyse performance data, and enhance route planning and security planning). Safety and compliance involve implementing safety programs, regular training, vehicle inspections, and staying updated with relevant laws and regulations.

## 2.4 Identify customs clearance mechanism

### A. Introduction

Conducting and sustaining humanitarian assistance programs rely on transporting goods and services for operations. Commercial service providers usually carry out international transportation services in a stable environment. Transportation services in crisis areas are subject to security and safety constraints. Transportation costs in emergency and disaster contexts can be very high. Sometimes these costs exceed the purchasing price of aid and relief goods.

One of the logisticians' most significant challenges when delivering aid and relief is gaining customs clearance. The customs clearance process tends to be complex and differs in each country. For this reason, this section provides an overview of the customs clearance process for humanitarian logisticians.



## B. International transportation

The international transportation process has three phases:

- **Pre carriage**  
Pre-carriage covers packing and marking, issuing packing lists, loading consignments on vehicles at the supplier, international or regional distribution centre, (domestic) transport to the port of loading, and unloading vehicles at the seaport or airport. Pre-carriage may be the supplier's responsibility depending on the purchase contract and Incoterms.
- **Main carriage**  
The main carriage covers transportation from the loading port to the final airport or seaport. The main carriage involves selecting freight forwarders, carriers, possibly chartering vessels or aircraft, contracting marine surveyors, transportation from the loading port to the final airport or seaport, and unloading.
- **On-carriage**  
On-carriage, or downstream carriage, covers inland transportation in the recipient country from the airport or seaport to the logistics hub or main warehouse or directly to the distribution centre. This third phase involves port operations (docking and unloading), customs clearance, storage at ports, assessment of damages and claims, and inland transportation to the final destination.

Because of the often poor quality of port and transportation infrastructure and possibly inefficient customs clearance in the destination country, the on-carriage is usually the phase where the security of consignments, the effectiveness of transportation, and operational cost matter most.

### Shipping documents

Documents for international shipping are usually far more complex to process than domestic documentation. The requirements differ according to the country to where goods are exported to. Providing freight forwarders, carriers, and offices in charge of importation with complete and accurate shipping documents is essential to avoid unnecessary delays and penalties while crossing international borders.

Often original shipping documents or copies must be sent to the receiving country operation for customs clearance, obtaining import



permits, and possibly an exemption from taxes and duties before the arrival of goods. In some countries, detailed documents must be submitted to specific regulatory bodies (for example, the national drug regulatory authority of the Ministry of Health), in addition to customs clearance, for obtaining an importation permit before the arrival of goods.

- **Packing list**

A detailed packing list with the description, quantity, country of manufacture, manufacturer, expiry date (where applicable) and batch number of each line item is the basis of all documents. In addition, the value of consignments is essential for insurance purposes, for calculating taxes and fees and filing claims.

- **Shipper's export declaration**

The shipper's export declaration may be a legal requirement for any consignment above a particular value.

- **Waybill**

Waybills are used for road transportation. They indicate the type of goods, number of parcels, weight, volume, and value.

- **Air waybill**

Although the format and numbering system of air waybills are standardised, each airline has its own air waybill, which serves as a contract of carriage between shipper and carrier. The shipper prepares the air waybill and indicates details of the consignment, route, carrier, and transportation charges.

- **Ocean bill of lading**

Each carrier has its own bill of lading (B/L) form that serves as a contract of carriage between the carrier and shipper. It spells out all parties' legal responsibilities and liabilities to the shipment. A "straighten bill of lading" (non-negotiable) confers the title to the goods only to the named party and is not transferable to anyone else. Only an "order bill of lading" is "negotiable" and allows transferring the title to the goods to another party. This means that the person holding the bill of lading owns the consignments and can claim them upon the vessel's arrival.

- **Commercial invoice**

Commercial invoices may be needed for clearing goods through customs at the destination.



- **Certificate of origin**  
Some countries may require the certificate of origin for assessing duties and sometimes for statistical purposes.
- **Insurance certificate**  
The insurance certificate proves that a contract of insurance has been obtained and indicates the type, extent, level of cover (among others, whether war risks are covered), value of insured goods, limitations and exclusions of coverage.

## C. Customs clearance

Humanitarian organisations are subject to national laws and regulations and must therefore clear goods for exportation and importation like any other (commercial) organisation. National customs authorities may grant temporary or permanent exemption from duties, taxes, and fees for importing humanitarian assistance goods. Still, humanitarian organisations are by no means entitled to this preferential treatment.

Effectively managing the customs clearance process is critical for any humanitarian organisation as any delays or failures can stop entire humanitarian assistance programs. It may even prevent them from starting altogether.

There are several challenges that humanitarian logisticians need to deal with in the customs clearance process:

CHALLENGES WITH CUSTOMS	DESCRIPTION
Bureaucratic and overly complex procedures	Overly complex and bureaucratic procedures are a common complaint, especially when authorisations and approvals must be sought from many government agencies in a short time. Bureaucracy works against the interest of the affected population.
Capacity constraints	Customs administrations can be short in staff, infrastructure or equipment, especially during the initial phase of a sudden onset disaster. Subsequently, the processing of large volumes of relief consignments becomes problematic.
Hastily developed ad hoc customs measures	Normal customs measures may not favour the requirements of an emergency response.



	However, hastily developed customs measures can cause confusion, tensions, and indecisions (i.e., decision-makers and operators “no longer know what is required to clear goods at the border”).
Corrupt customs practices and bribery	Corruption amongst customs officials is a common concern amongst humanitarian responders. An emergency or disaster disorder can cause many opportunities for corrupt practices. The most common form of this corruption is demanding for bribes in exchange for clearing consignments held by customs.
Missing, erroneous or wrong documentation	Delays are inevitable. Inappropriate or incomplete documents make it difficult for officials to clear goods. Officers are obliged to follow procedures. A better understanding and awareness of donor customs requirements could help overcome such hurdles.
The nature and end-use of aid goods	Certain types of goods are sensitive, such as those with dual-use applications (i.e., can be used by both civilians and the military). Such goods include electronics, personal armour, and communications equipment. Export approval to ship such goods to where they are needed can be challenging to obtain. Other goods, such as pharmaceuticals, may be subject to additional control requirements.
Inspections	Although a humanitarian effort calls for the quick clearance of relief goods through customs, certain types of controls may remain necessary and require attention.
Exemptions and simplified customs measures for relief consignments	Implementing special customs relief measures that exempt import taxes are not guaranteed.
Lack of clear jurisdictions	A lack of clear jurisdiction between the different agencies and governmental and non-governmental entities working in a complicated humanitarian space can often lead to confusion and unnecessary delays in customs processing.



Especially in acute emergencies, staff and procedures must be in place before shipments arrive to ensure that they can be cleared from border crossing points, airports, and seaports without delay.

Consignments may be pre-cleared in the country of importation with customs authorities in advance to avoid damage during storage or additional fees for storing consignments at ports. Cold chain consignments should always be given priority and should, wherever possible, be pre-cleared with customs.

Organisations can either hire staff with good knowledge of importation procedures or hire experienced clearing agents who process documents to clear goods. To ensure safe and appropriate storage at ports during customs clearance, clearing agents must be reliable and competent in the handling of humanitarian aid goods as well as have the proper storage facilities for those goods.

At seaports, various dues and charges may be levied. Stevedoring is the movement of goods from the ships held to the first resting point on the quay. The port authorities collect wharfage charges like fees for using the port infrastructure and facilities. Other charges may be accrued for handling and moving goods, heavy lifting equipment for handling ISO shipping containers, and temporary storage at customs warehouses.

The customs authorities may levy customs verification charges for stripping and re-stuffing containers in order to verify their contents.

Consignments should be picked up from ports and transported directly to medical distribution centres by dedicated staff members as soon as customs clearance has been completed. Demurrage can be charged for covering the cost of storage at ports and is due if goods are not collected within a defined period.

Organisations must maintain complete and detailed files on every importation if questions arise with the customs authorities.

## **D. Summary**

- Custom clearance is part of the logistics process that involves many stakeholders and national and international regulations.
- One of the biggest challenges logisticians faces when delivering aid and relief is gaining customs clearance. The customs clearance process tends to be complex and differs in each country.



- The effective management of the customs clearance process is critical for any humanitarian organisation as any delays or even failures can stop entire humanitarian assistance programs. It may even prevent them from starting altogether.
- Understanding the existing regulations, both from the country of origin and destination, is necessary before carrying out international orders to fulfil humanitarian program needs.





# Self-assessment Checklist



**ASCEND**



## Self-assessment Checklist

Please use the checklist below to help you determine whether you are prepared to be assessed in this unit of competency. The boxes without tick mark indicate that there may be some areas you need to work on to become ready for assessment.

<b>Instructions</b> Please tick (✓) the box if your answer is yes	<b>Questions</b>
<input type="checkbox"/>	Have I read the Learner Guide and understood its contents?
<input type="checkbox"/>	Have I attended, participated in, and completed all training sessions and activities?
<input type="checkbox"/>	Have I reviewed the learning resources to reinforce what I've learned in training?
<input type="checkbox"/>	Am I able to demonstrate my understanding of each element and performance criteria of this unit of competency by writing a summary in my own words?
<input type="checkbox"/>	Am I able to communicate how my experience, knowledge, skills-sets, and attitudes make me qualified and competent enough to perform the job related to this unit of competency?





# Oral Interview and Written Test Guide



**ASCEND**



## Oral Interview and Written Test Guide

This section guides candidates on how to communicate, demonstrate, or present evidence, responses, and their work in a professional manner. There are three primary ways the candidates will be assessed: through observation, oral interview, and written test. But the assessor will determine the final assessment methods and tools depending on several factors like the local context, professional needs, and the like.

### On observations

Assessors will observe the candidate over a period of time to collect evidence of their capability to meet the required standards and performance criteria. Assessors may attend selected learning sessions, if any, to witness how candidates complete their activities and participate in exercises. In doing so, assessors can get a sense of the candidate's key strengths and areas for improvement concerning the unit of competency. It will benefit candidates to ensure their work is always complete and presentable.

### On oral interview

Assessors will conduct oral interviews to confirm and evaluate the candidate's experience, knowledge, skills, and attitudes regarding the unit of competency under assessment.

Please review the Unit Readings and complete the Self-assessment Checklist in this document. It may include verification questions about what you learned from the training content and material. It may also include competency questions about your knowledge and skills. Assessors may ask you what knowledge or skill you will use or apply to address a specific occupational issue or problem. Candidates need to think about how they will carry out their critical job functions in a defined work setting.

Finally, the interview may also include behavioural questions that focus on attitudes. Assessors may ask for examples of what you will do when a particular situation happens or when circumstances change. Candidates will need to support their answers with reflections on their own or other's experiences and the lessons learned from those.



## On written tests

Assessors will also present a written test to candidates to confirm whether candidates learned and understood the training content and material concerning the unit of competency under assessment.

Accuracy, brevity, and clarity are the ABCs of good writing. The first thing candidates are suggested to do is answer the questions as accurately as possible. It helps structure your response and sharpen your main points in an outline before writing them down. Candidates are advised to use short and simple sentences and paragraphs. Your answers need to be easy to read and understand. It includes removing and leaving out irrelevant material. Candidates are also expected to write coherently and logically so that readers can follow their thought. The key messages and transitions between your sentences and paragraphs must be clear.

Proofread and correct errors in your work before submitting it. How you format your work also matters. If you are using a computer, please check whether your indentions, margins, spacing, listings (bullets, numerical sequencing), and page numbers are in order.





# Recommended Readings



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## Recommended Readings

The AHA Centre. (2018). *ASEAN-ERAT Guidelines*. Accessible [here](#)

McGuire, G. (2015). *Handbook of Humanitarian Care Logistics (3<sup>rd</sup> ed.)*. Accessible [here](#)



## Learning Resources

Fisher, D. (2007). *Domestic Regulation of International Humanitarian Relief in Disasters and Armed Conflict: A Comparative Analysis*. *International Review of The Red Cross*. Accessible [here](#)

French Red Cross, Australian Red Cross, ECHO. (2012). *A Logistics Handbook: For disaster preparedness and response*. Accessible [here](#)

Grainger, A., Ahsen, S.R. & Rundle, J.M. (2019). *Custom and Humanitarian Logistics*. Accessible [here](#)

The World Bank Group, Global Facility for Disaster Reduction and Recovery. (2014). *A Survey of Trade Policy Issues Affecting Disaster Response, Recovery & Reconstruction*. Accessible [here](#)





# ASCEND

ASEAN Standards and Certification for Experts in Disaster Management

**THE AHA CENTRE**

Graha BNPB, 13<sup>th</sup> Floor | Jl. Pramuka Kav. 38 Jakarta-13120 | INDONESIA

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