



Conference

Lund, 5-6 December 2024



- Introduction
- Regulatory framework
- Challenges in Dangerous Goods Logistics
- Best practice example

About DGM



- ◆ **DGM (Dangerous Goods Management)** is a leading international organization acknowledged as experts in dangerous goods and hazardous materials.
- ◆ **37 years of experience.** Started the first office in The Netherlands (1987).
- ◆ A **total supplier** for all modes of transport and safe handling **of dangerous goods**.

CONSULTANCY**OPERATIONS****TRAINING****PRODUCTS**

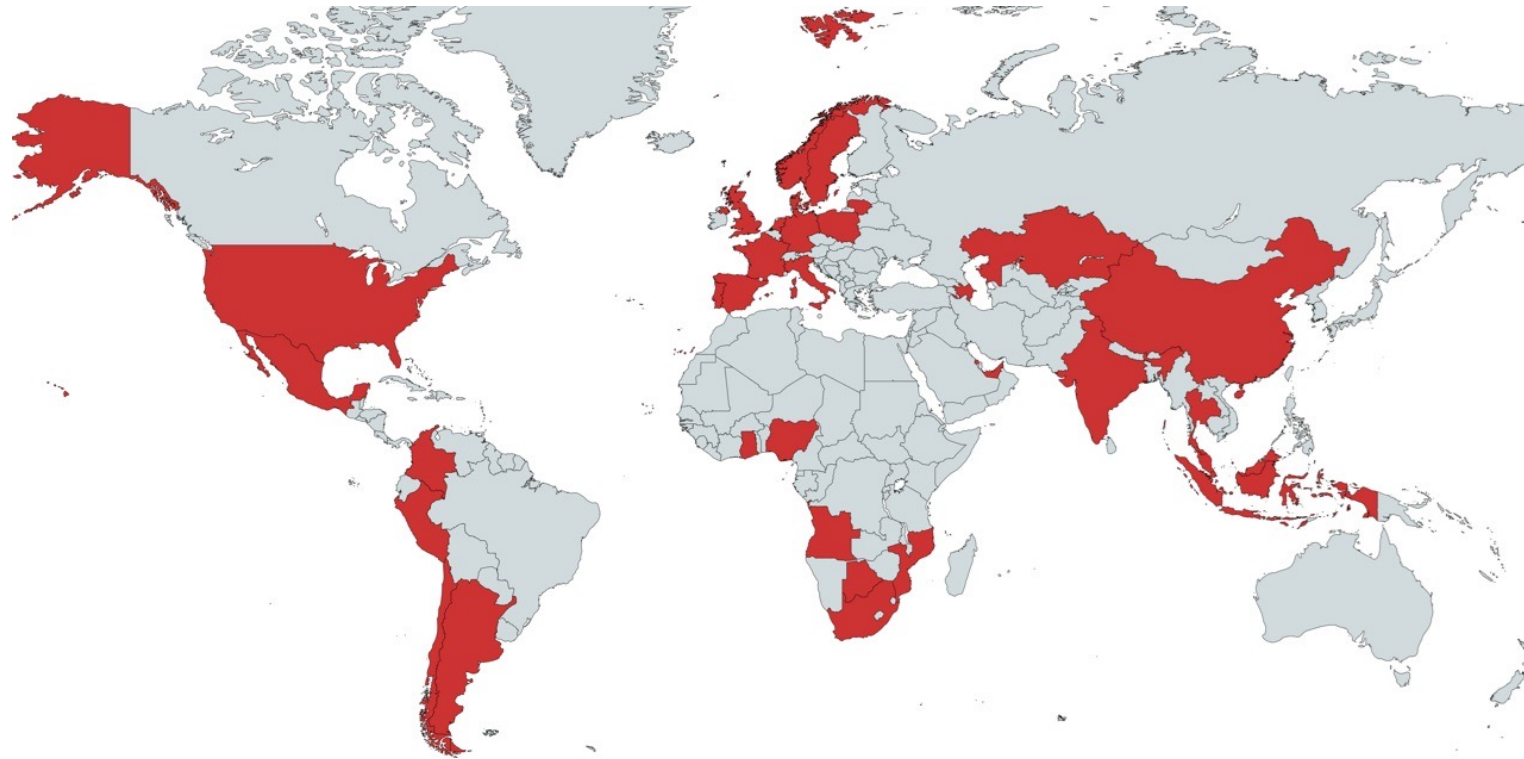
- ◆ Well **recognized** by **Governments** and International Organizations





Global presence

More than **60 locations** operating in **35 countries** all over the world



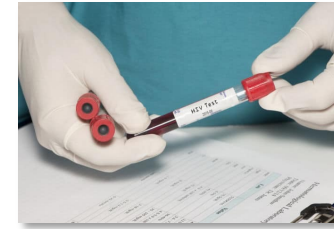
What is dangerous goods?

Dangerous goods refer to substances or articles with properties that can cause harm to people, property, or the environment during transport.



What can be classified as dangerous goods?

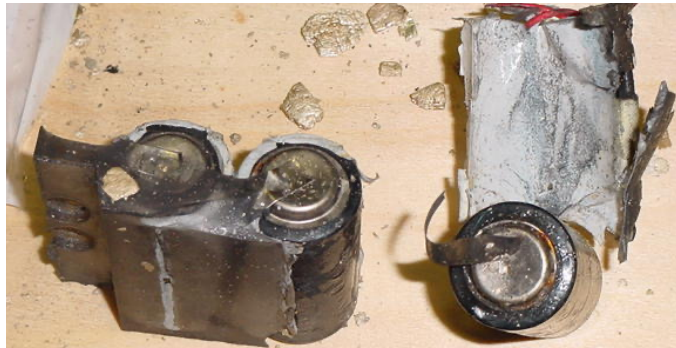
- Chemicals
- Biological samples
- Gases
- Explosives
- Batteries
- Equipment



Example of accident

Example of accident with damaged batteries (Gothenburg-Landvetter)

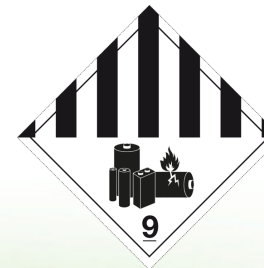
=> A return shipment with defective batteries was on their way to the manufacturer for further analysis. The batteries exploded during handling at the freight terminal. As the batteries was packed in a vermiculite, a further fire was prevented.



Example of accident

Example of accident during freight transport (Dubai)

=> A fire started because of short-circuit in lithium batteries in the cargo compartment.
The fire could not be fought with ordinary extinguishing agents.



Example of accident

Example of accident during road transport (Romania)

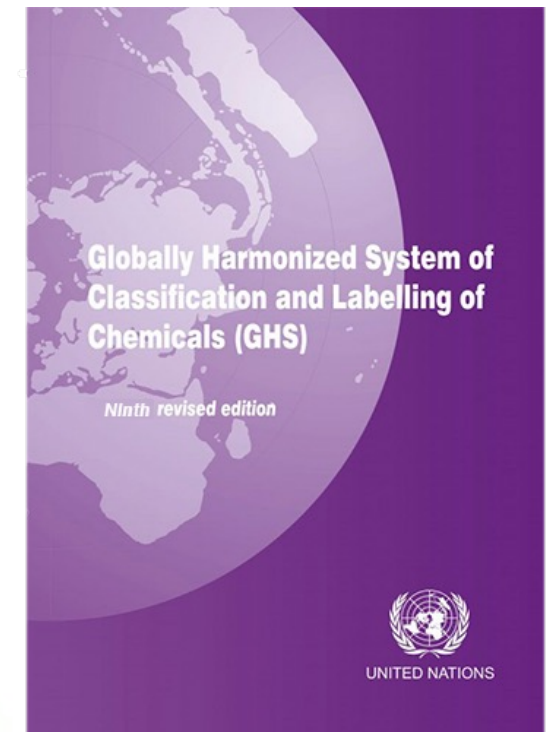
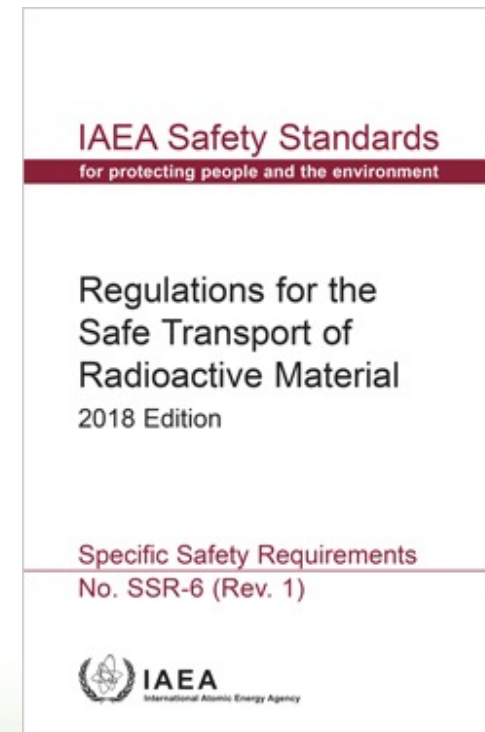
Occurred when a truck carrying ammonium nitrate was involved in a collision, leading to a massive explosion, which killed 18 people and injured another 13.

The truck did not have the necessary warning signs or labels indicating the presence of hazardous materials, and it lacked proper documentation or permits for the transportation of such dangerous substances.



Global frameworks

United Nations (UN) have developed standards and recommendations on safe transport and handling of dangerous goods.



International regulations

The regulations for each mode of transport are based on the UN recommendations.

It is important to acknowledge that the regulations include specific requirements for each mode of transport.

Radiation Protection Regulation
Local permit required

All regulations are updated every second year (odd years)

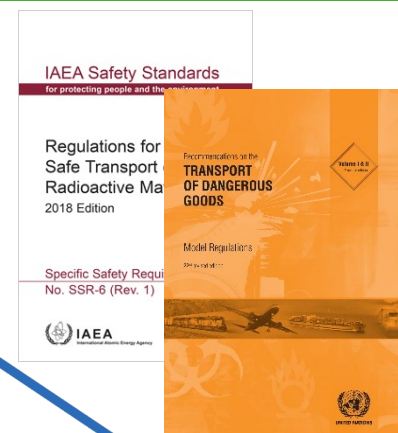
2021, 2023, 2025...

Hazardous Waste
Local permit required

IMDG Code

Handling of...
Local permit required ?

Transport of Explosives
Local Permit required





Challenges in DG Logistics

- Who is Who? - Responsibilities and obligations in the transport chain

Example: A scientist want to ship a sample that is classified as corrosive

- Awareness and knowledge

Example: A scientist want to ship computers containing lithium batteries

- Specific regulations

Example: Shipment of radioactive material or hazardous waste

Best practice example

1. Organization and internal standards

Terminology that is consistent with the regulations

Functions and tasks are specified

It is ensured that dispatch of dangerous goods must pass an internal checkpoint

Recommendation -> Specialized group in logistics



Best practice example

2. Communication of internal rules

Top management are aware of the obligations and responsibilities

Best practice example

3. Training and assessment program

Based on functions and tasks a training and assessment program has been developed

Job function	Task	Sub-task	Knowledge	Skills	Attitude	Level of proficiency
Personnel responsible for the classification of Dangerous goods for outbound shipments	Ensure that articles has the correct classification	Classify substances and articles	Classification criteria. The difference between CLP/IGHS and transport classification.	Able to set the correct UN number, PSN, PG for a substance or article	Being motivated to ensure safety and to comply with applicable regulations. Asking relevant questions and want to increase his/her competence. Appreciating feedback from other team-members or other teams within xxx.	***
	Ensure that the shipment are prepared according to set limitations	Set the correct limitations for the substance or article	Ensure the limitations for applicable mode of transport. If shipped by air, know if the substance or article may be shipped as EQ, LTD QTY, on PAX aircraft or limited to CAO. When an article is forbidden. The difference between sections in PI for lithium batteries.	Able to set the limitations for the applicable shipment and communicate to personnel responsible for preparation of packages and documentation		***
	Collect safety data	Ensure that dangerous goods accidents, incidents and other occurrences are reported and recorded	The provisions to report and to follow up according to the internal and external rules for transport of DG.	How to report within ESS and how to communicate and follow up. Including whom to be responsible for reporting.		*
Personnel responsible for the preparation of packages	Ensure that the shipment are prepared according to set limitations	Set the correct limitations for the substance or article	Ensure the limitations for applicable mode of transport. If shipped by air, know if the substance or article may be	Able to set the limitations for the applicable shipment and communicate to personnel responsible for preparation of	Being motivated to ensure safety and to comply with applicable regulations. Asking relevant questions	***


A
Introduction & Legislation



Objectives
Introduction & legislation



In this section you will learn more about

- The background and the basis for the framework regulations.
- Regulations and legislation.
- Responsibilities and our rules to comply with current legislation.
- Training requirements for personnel.



What is dangerous goods?

Dangerous goods refer to substances or articles that have the potential to cause harm to people, property, or the environment. Dangerous transport These goods possess characteristics such as flammability, explosiveness, toxicity, corrosiveness, or reactivity, which make them potentially dangerous if not handled, stored, and transported properly.

Thank you!



Visit www.dgm.world for further information

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