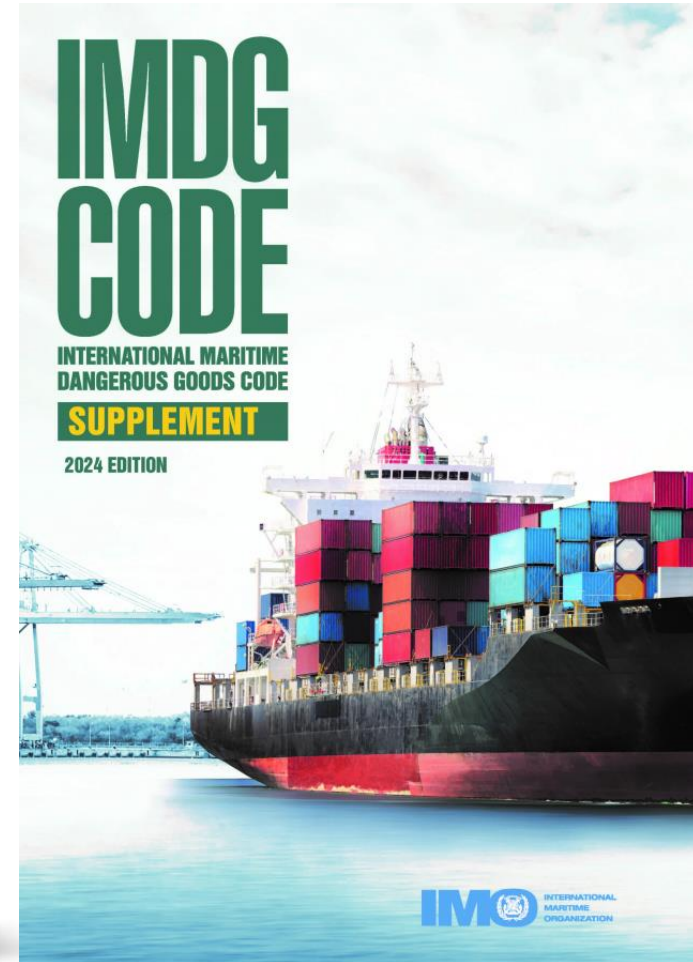




**CLLB SDN BHD**  
604256A

# Introduction on the International Maritime Dangerous Goods Code IMDG



# An Introduction to the IMDG Code

The objective of the International Maritime Dangerous Goods (IMDG) Code is to:

- Enhance the Safe Transport of Dangerous Goods
- Protect the Marine Environment
- Facilitate the Free Unrestricted Movement of Dangerous Goods



# MARPOL

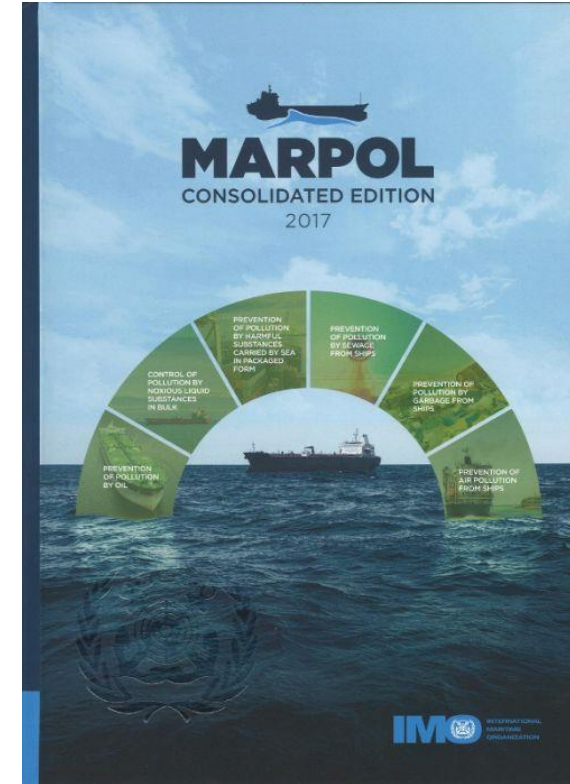
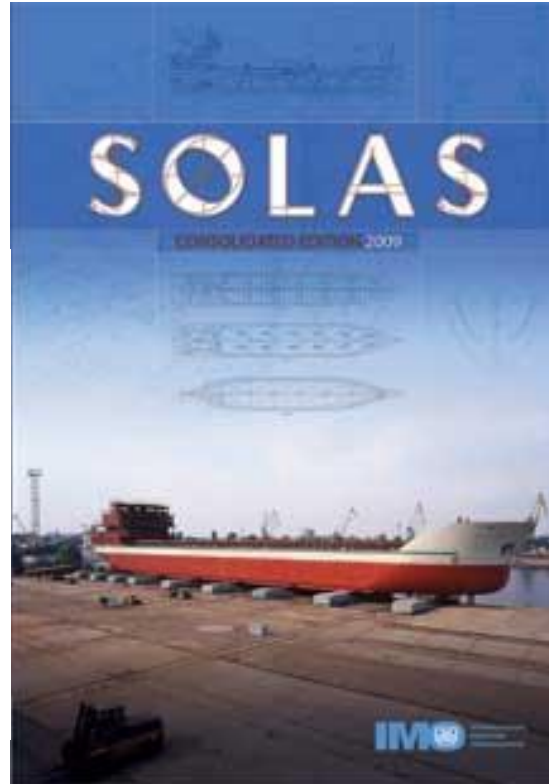
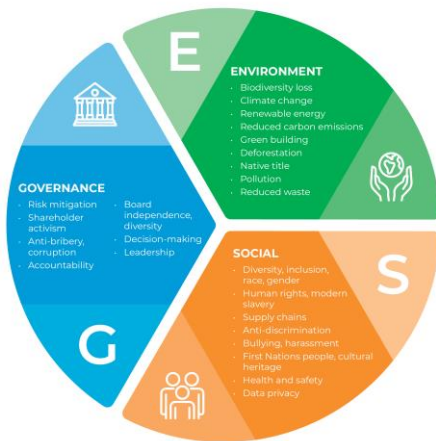
International Convention for the Prevention of Pollution from Ships



# The International Maritime Organization (IMO)

The IMO is a United Nations specialised agency which has developed international legislation dealing with two key issues for the maritime industry:

- The Safety of Life at Sea
- Prevention of Pollution from Ships



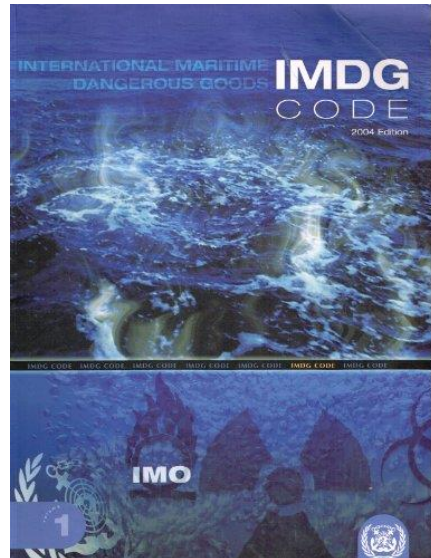


# The International Legal Framework

To supplement the principles laid down in the SOLAS and MARPOL Conventions, the IMO developed the **International Maritime Dangerous Goods (IMDG) Code**.

The IMDG code contains detailed technical specifications to enable dangerous goods to be transported safely by sea.

The IMDG Code became mandatory for adoption by SOLAS signatory states from **1st January 2004**.



## Chapter VII Carriage of dangerous goods

### Part A Carriage of dangerous goods in packaged form

#### Regulation 1 *Definitions*

For the purpose of this chapter, unless expressly provided otherwise:

- 1** *IMDG Code* means the International Maritime Dangerous Goods (IMDG) Code adopted by the Maritime Safety Committee of the Organization by resolution MSC.122(75), as may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Convention concerning the amendment procedures applicable to the annex other than chapter I.
- 2** *Dangerous goods* mean the substances, materials and articles covered by the IMDG Code.
- 3** *Packaged form* means the form of containment specified in the IMDG Code.

## Annex III

Regulations for the prevention of pollution by harmful substances carried by sea in packaged form

### Chapter 1 – General

#### Regulation 1

##### Definitions

##### Definitions

1 For the purposes of this Annex:

*Harmful substances* are those substances which are identified as marine pollutants in the International Maritime Dangerous Goods Code (IMDG Code)<sup>§</sup> or which meet the criteria in the appendix of this Annex.

2 *Packaged form* is defined as the forms of containment specified for harmful substances in the IMDG Code.

3 *Audit* means a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

4 *Audit Scheme* means the IMO Member State Audit Scheme established by the Organization and taking into account the guidelines developed by the Organization.<sup>¶</sup>

5 *Code for Implementation* means the IMO Instruments Implementation Code (III Code) adopted by the Organization by resolution A.1070(28).

6 *Audit Standard* means the Code for Implementation.

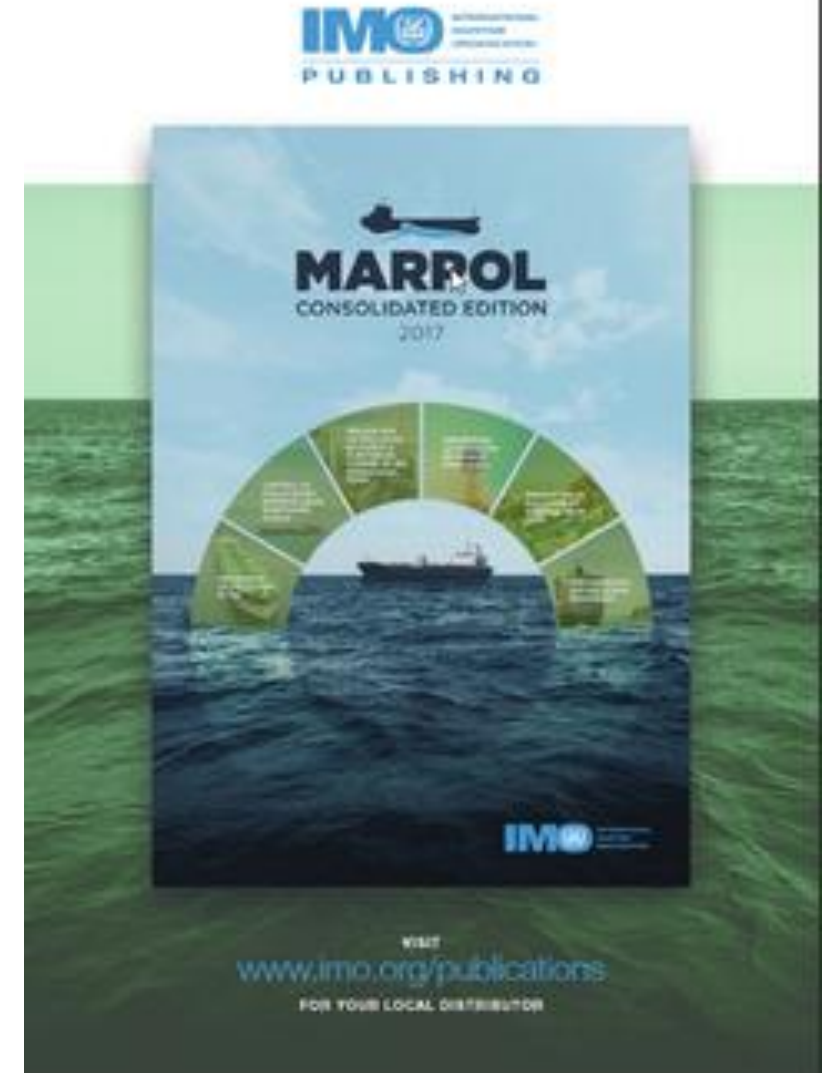
<sup>§</sup> As defined in the Code of Safe Practice for Cargo Stowage and Securing (resolution A.714(17), as amended).

<sup>†</sup> Refer to Revised guidelines for the preparation of the Cargo Securing Manual (MSC/Circ.1353/Rev.2).

<sup>‡</sup> Refer to the General principles for ship reporting systems and ship reporting requirements, including Guidelines for reporting incidents involving dangerous goods, harmful substances and/or marine pollutants (resolution A.851(20), as amended).

<sup>§</sup> Refer to the IMDG Code (resolution MSC.122(75), as amended).

<sup>¶</sup> Refer to the Framework and Procedures for the IMO Member State Audit Scheme (resolution A.1067(28)).



# Principles of the IMDG Code

- Groups dangerous goods together based on the hazards they present in transport (classification)
- Contains the dangerous goods in packagings/tanks which are of appropriate strength and which will prevent the goods escaping
- Uses hazard warning labels and other identifying marks to identify dangerous goods in transport
- Requires standard documentation to be provided when dangerous goods are being transported
- Lays down principles for ensuring that dangerous goods which will react dangerously together are kept apart
- Lays down principles for where to place dangerous goods on board ship to ensure safe transport
- Provides emergency response advice for dangerous goods involved in a fire or spillage on board ship.

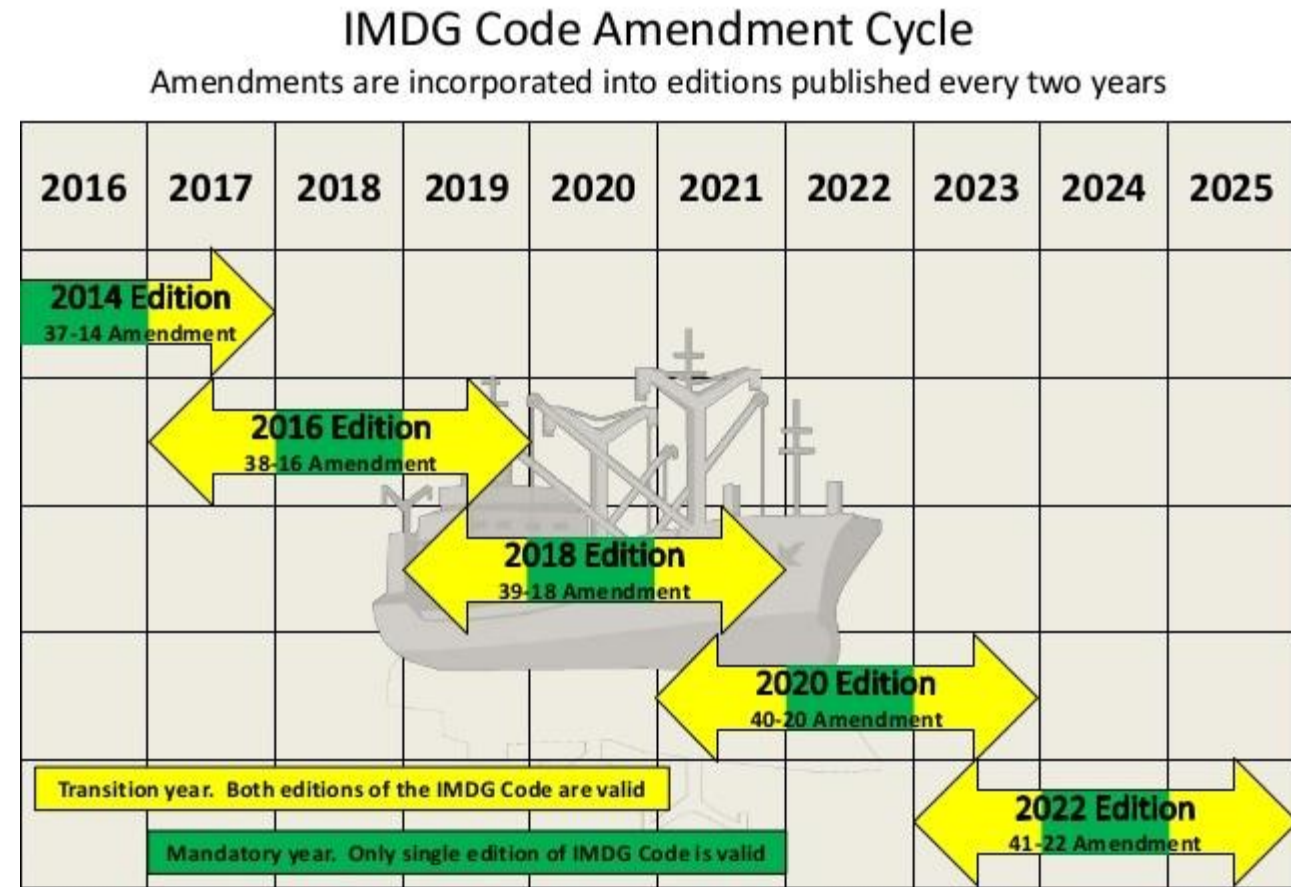
Classes

Class 1	Class 2			Class 3	Class 4.1	Class 4.2	Class 4.3
	2.1 	2.2 	2.3 				

# Updating of the IMDG Code

The IMDG Code is evolving and is updated every two years to take account of:

- New dangerous goods which have to be included
- New technology and methods of working with or handling dangerous goods
- Safety concerns which arise as a result of experience

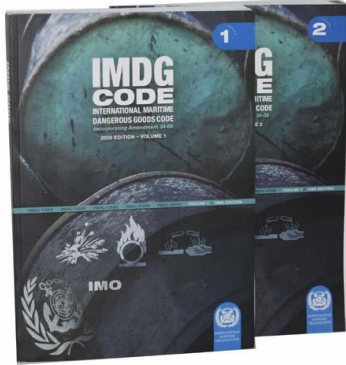


Daniels Training Services / 815.821.1550 / Info@DanielsTraining.com

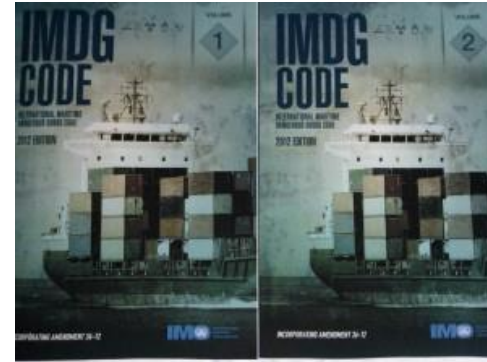
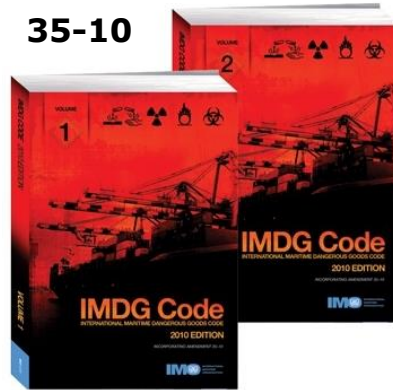
Each version of the Code is given an Amendment number to signify how many times it has been updated.

# Updating of the IMDG Code

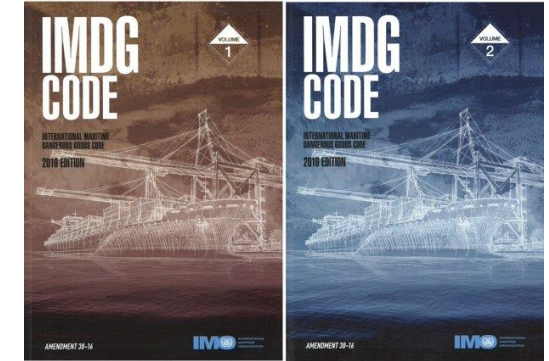
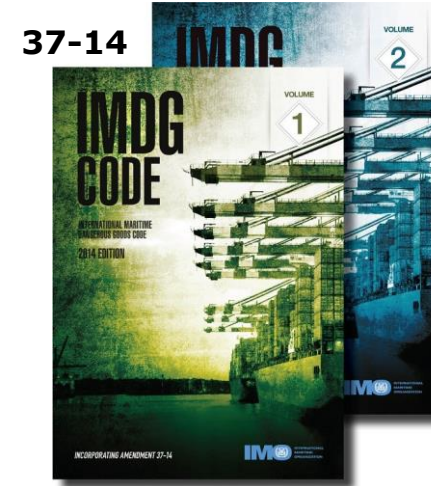
This number appears at the bottom of each page together with the year of the Amendment.



34-08



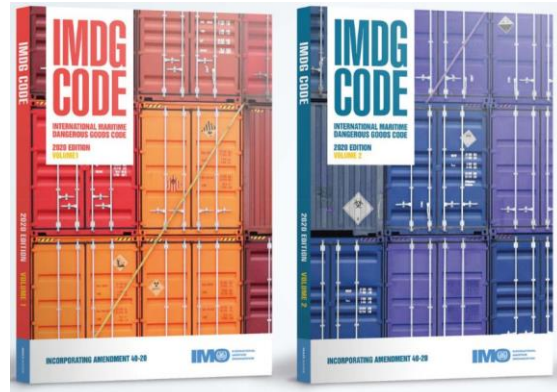
36-12



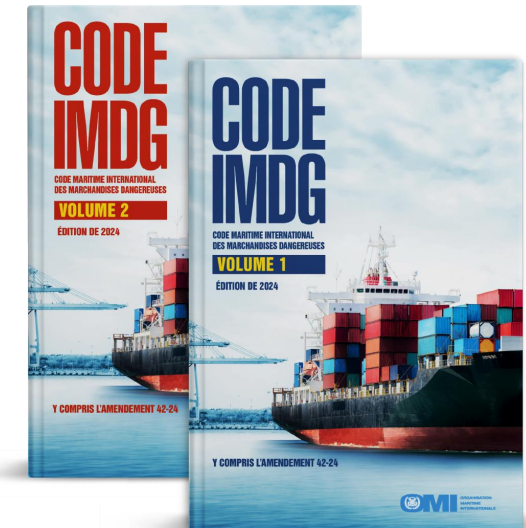
38-16



39-18



40-20



The Amendment 42-24 enforced from January 1<sup>st</sup>, 2026 until December 31<sup>st</sup> 2027.

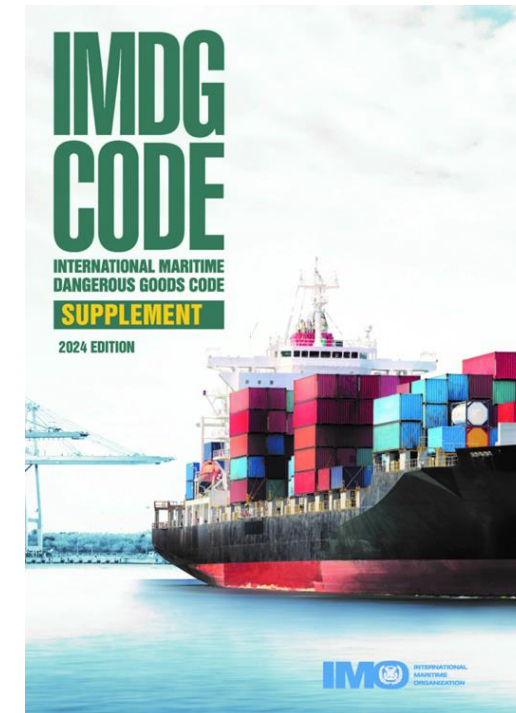
# Layout of the IMDG Code

**The Code comprises 7 parts.**

It is presented in two books; Volume 1 and Volume 2.

It is necessary to use both books to obtain the required information when shipping dangerous goods by sea.

The Code also contains a Supplement Guide for emergency management and medical first aid on board ships



# Layout of the IMDG Code

**Volume 1** (Parts 1-2 & 4-7 of the Code) comprises:

**Part 1** General provisions, definitions and training

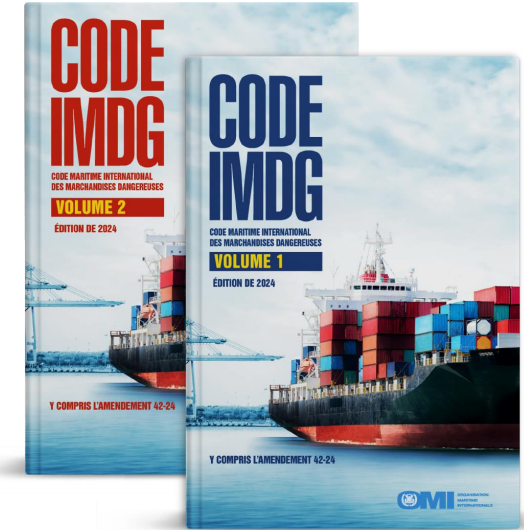
**Part 2** Classification

**Part 4** Packing and tank provisions

**Part 5** Consignment procedures

**Part 6** Provisions for the construction and testing of pressure receptacles, aerosol dispensers, small receptacles containing gas (gas cartridges) and fuel cell cartridges containing liquefied flammable gas

**Part 7** Requirements concerning transport operations



# Layout of the IMDG Code

**Volume 2** (Part 3 and the Appendices of the Code) comprises:

**Part 3** Dangerous Goods List (DGL), Special Provisions Limited Quantities Exceptions and Exceeded

**Appendix A** List of Generic and N.O.S. (Not Otherwise Specified) Proper Shipping Names

**Appendix B** Glossary of terms

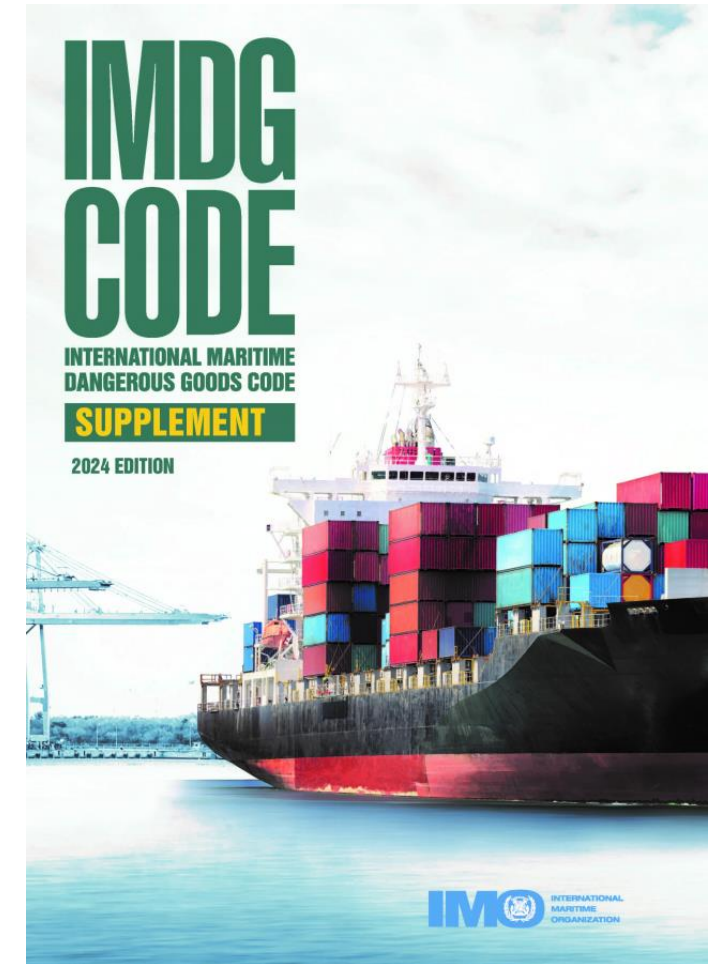
**Alphabetical Index**



# Layout of the IMDG Code

## The supplement contains the following texts related to the Code:

- Emergency Response Procedures for Ships Carrying Dangerous Goods
- Medical First Aid Guide
- Reporting Procedures
- IMO/ILO/ECE Guidelines for Packing Cargo Transport Units
- Safe Use of Pesticides in Ships, Cargo Holds and CTUs
- International Code for the Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships



# Training Requirements

In the **2002 edition of the IMDG Code, training was introduced for the first time.**

The IMO Member Governments recognised that the safe transport of dangerous goods by sea is dependent upon the appreciation, by all persons involved, of the risks involved and on a detailed understanding of the IMDG Code requirements.

The **training requirements became mandatory with Amendment 34-08.**



## 1.3.1 Training of shore-side personnel

1.3.1.1 Shore-based personnel<sup>1</sup> engaged in the transport of dangerous goods intended to be transported by sea shall be trained in the contents of dangerous goods provisions commensurate with their responsibilities. Employees shall be trained in accordance with the provisions of 1.3.1 before assuming responsibilities and shall only perform functions, for which required training has not yet been provided, under the direct supervision of a trained person. Training requirements specific to security of dangerous goods in chapter 1.4 shall also be addressed.

Entities engaging shore-based personnel in such activities shall determine which staff will be trained, what levels of training they require and the training methods used to enable them to comply with the provisions of the IMDG Code. This training shall be provided or verified upon employment in a position involving dangerous goods transport. For personnel who have not yet received the required training, the entities shall ensure that those personnel may only perform functions under the direct supervision of a trained person. The training shall be periodically supplemented with refresher training to take account of changes in regulations and practice. The competent authority, or its authorized body, may audit the entity to verify the effectiveness of the system in place, in providing training of staff commensurate with their role and responsibilities in the transport chain.

1.3.1.2 Shore-based personnel such as those who:

- classify dangerous goods and identify proper shipping names of dangerous goods;
- pack dangerous goods;
- mark, label or placard dangerous goods;
- load/unload cargo transport units;
- prepare transport documents for dangerous goods;
- offer dangerous goods for transport;
- accept dangerous goods for transport;
- handle dangerous goods in transport;
- prepare dangerous goods loading/stowage plans;
- load/unload dangerous goods into/from ships;
- carry dangerous goods in transport;
- enforce or survey or inspect for compliance with applicable rules and regulations; or
- are otherwise involved in the transport of dangerous goods as determined by the competent authority

shall be trained in the following:

# Training Requirements

## 1.3.1 Training of shore-side personnel

1.3.1.1 Shore-based personnel<sup>6</sup> engaged in the transport of dangerous goods intended to be transported by sea shall be trained in the contents of dangerous goods provisions commensurate with their responsibilities. Employees shall be trained in accordance with the provisions of 1.3.1 before assuming responsibilities and shall only perform functions, for which required training has not yet been provided, under the direct supervision of a trained person. Training requirements specific to security of dangerous goods in chapter 1.4 shall also be addressed.

Entities engaging shore-based personnel in such activities shall determine which staff will be trained, what levels of training they require and the training methods used to enable them to comply with the provisions of the IMDG Code. This training shall be provided or verified upon employment in a position involving dangerous goods transport. For personnel who have not yet received the required training, the entities shall ensure that those personnel may only perform functions under the direct supervision of a trained person. The training shall be periodically supplemented with refresher training to take account of changes in regulations and practice. The competent authority, or its authorized body, may audit the entity to verify the effectiveness of the system in place, in providing training of staff commensurate with their role and responsibilities in the transport chain.

1.3.1.2 Shore-based personnel such as those who:

- classify dangerous goods and identify proper shipping names of dangerous goods;
- pack dangerous goods;
- mark, label or placard dangerous goods;
- load/unload cargo transport units;
- prepare transport documents for dangerous goods;
- offer dangerous goods for transport;
- accept dangerous goods for transport;
- handle dangerous goods in transport;
- prepare dangerous goods loading/stowage plans;
- load/unload dangerous goods into/from ships;
- carry dangerous goods in transport;
- enforce or survey or inspect for compliance with applicable rules and regulations; or
- are otherwise involved in the transport of dangerous goods as determined by the competent authority

shall be trained in the following:

# Steps in Obtaining Full Competency

## Step 1: IMDG Code: General Awareness

### 1.3.1.2.1 *General awareness/familiarization training:*

- .1 each person shall be trained in order to be familiar with the general provisions of dangerous goods transport provisions;
- .2 such training shall include a description of the classes of dangerous goods; labelling, marking, placarding, packing, stowage, segregation and compatibility provisions; a description of the purpose and content of the dangerous goods transport documents (such as the Multimodal Dangerous Goods Form and the Container/Vehicle Packing Certificate); and a description of available emergency response documents.

## Step 2: IMDG Code: Function-Specific

- 1.3.1.2.2 *Function-specific training:* Each person shall be trained in specific dangerous goods transport provisions which are applicable to the function that person performs. An indicative list, for guidance purposes only, of some of the functions typically found in dangerous goods transport operations by sea and training requirements is given in paragraph 1.3.1.6.



# ***International Maritime Dangerous Good: IMDG Code Training***

The IMDG Code was developed as an **international code for the maritime transport of dangerous goods in packaged form**, in order to enhance and harmonize the safe carriage of dangerous goods and to prevent pollution to the environment. The Code is amplified in the SOLAS Chapter VII and MARPOL Annex III for all packaged dangerous goods intended for sea transportation, stating the mandatory compliance to the provisions and guidelines and full compliance of the IMDG Code.

In **Part 1.3 of the IMDG Code** it states the all 'Shore-Based' personnel involved in the transport of dangerous goods by sea have to be trained and certified in the provisions and guidelines of the code. This training is certified by the National Competent Authority (NCA) in Malaysia, **the Malaysian Marine Department and The Chartered Institute of Logistics and Transport, CILT International**

This training covers:

- The Entire: IMDG Code: Volume 1, 2 and Supplement Guide
- CTU Code
- GHS
- All 3 conventions mentioned in Chapter 1, Volume 1 of the IMDG Code



**The Chartered  
Institute of Logistics  
and Transport**

# ***International Maritime Dangerous Good: IMDG Code Training***

## **OBJECTIVES**

**By the end of this training, you should be able to:**

- Understand the role of IMO and the provisions of the IMDG Code provides for the safe movement of dangerous goods in packaged form
- Identify the nine (9) hazard classes
- Demonstrate the ability to read the dangerous goods list and to navigate through the volumes 1, 2 as well as the supplementary guide
- Explain the need for proper packaging, marking, labeling, placarding, declaring, and certifying the dangerous goods for shipment by sea
- Analyze the Safety Data Sheet- SDS and its content to understand if the product is dangerous as well as its chemical and physical characteristics.
- Implement the correct procedures on the Packing / Securing Dangerous Goods in Cargo Transport Units (CTUs)
- **Sign the container packing certificate form (CPC)**
- Understand the significance of Classification, Documentation, Identification, Labeling / Placarding, Product containment (Packaging) for the safe handling of packaged dangerous goods in port
- **Segregation in Cargo Transport Units**
- Upgrade the control and supervision whilst handling dangerous goods

# ***International Maritime Dangerous Good – IMDG Code Training Series***

## **General Awareness Training**

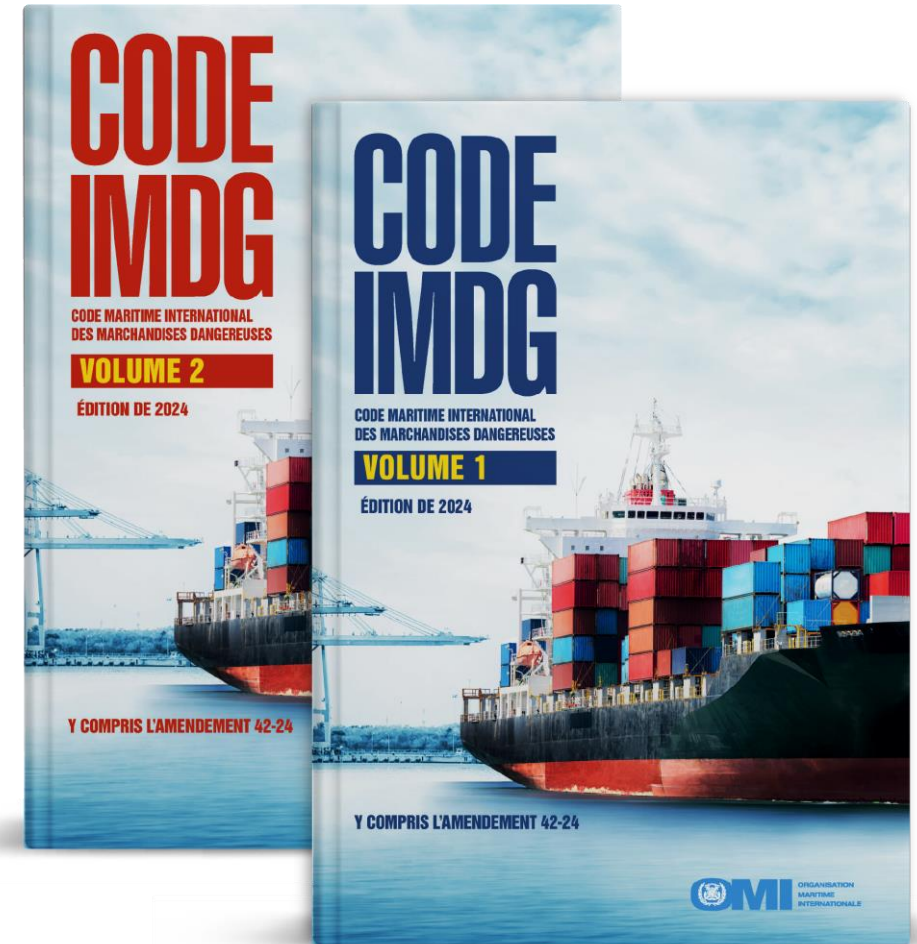
This is the 1<sup>st</sup> step towards competency and certification for all shore-based personnel involved in the transportation of packaged dangerous goods by sea.

The training spans over three (3) days coupled with the competency test which upon passing offers a certification from the Malaysian Marine Department.

## **Function-Specific**

There are a total of thirteen (13) functions listed in Chapter 1.3 of Vol.1 of the IMDG Code. We offer five (5) of the functions covering:

1. Stuffing dangerous goods into containers
2. Storing & handling dangerous goods at warehouses
3. Carrying dangerous goods – road/rail
4. Preparing dangerous goods loading/ stowage plans.



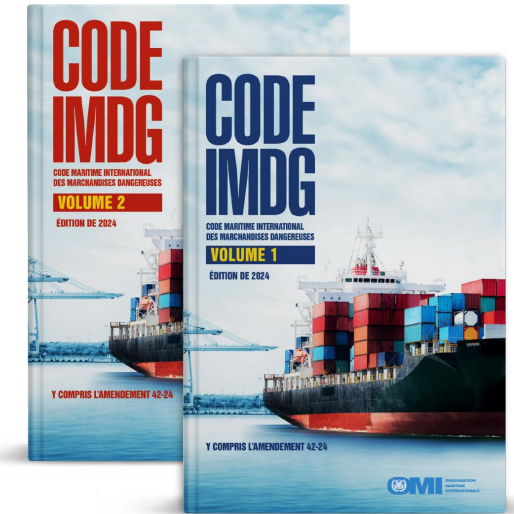
# ***International Maritime Dangerous Good: IMDG Code Training: General Awareness***

## **Overview**

This 3-days training programme incorporates an examination on the 3<sup>rd</sup> day of the course. This is a competency assessment established by the Malaysian Marine Department – Mardep in order to certify shore-based personnel handling dangerous goods in packaged form by sea, on the Mandatory training requirement as indicated in Chapter 1, Volume 1 of the IMDG Code, version 37-14.

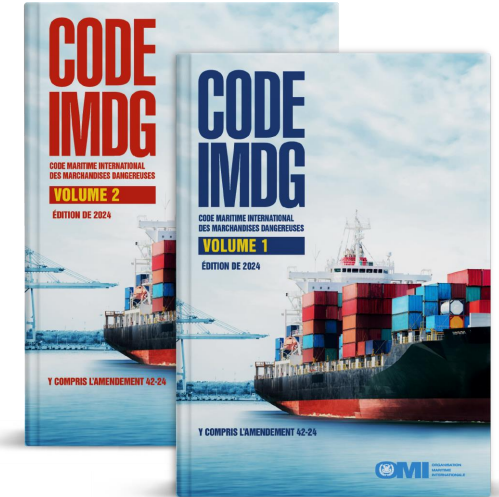
## **Outline**

- Structure of the IMDG Code
- Background covering **SOLAS 74 & MARPOL Convention**, as well as other such conventions amplifying the Code
- Hazard Classes & Divisions
- Exploring & Understanding the Dangerous Goods List- DGL
- Learning to Navigate the code book through each column of the DGL
  - PSN
  - Packing Groups
  - Special Provisions
  - Limited & Excepted Quantity Provisions
  - Packing Instructions – Types and Tests
  - Consignment Procedures – Marking; Labeling; Placarding; Declaring; Surveying & Certifying



- Stowage & Segregation
- International Convention for Safe Containers 1972
- IMO/ILO/UNECE Guidelines on Safe Packing of CTUs
- Security Provisions
- Emergency Response Planning
- Local Port By-Laws

# IMDG Code Training: Function-Specific: Load/Unload Cargo Transport Units



## Overview

This 3-days training programme incorporates an examination on the 3<sup>rd</sup> day of the course. This course can only be attempted once the 1<sup>st</sup> level, general awareness has been completed and certified. This programme covers functions specific to **Load/unloading Dangerous Goods into Cargo Transport Units- CTUs**. Cargo Transport Units are shipping containers; portable tanks; freight trucks; rail wagons; tank trucks as well as multi-compartment tank vehicles.

## Outline

- Brisk overview of hazard Classes & Divisions & consignment procedures
- Stowage consideration
- Segregation of incompatible dangerous goods
- Exploring the types of CTUs and their characteristics
- Cargo securing requirements (as contained in IMO/ILO/UNECE CTU Code)
- Emergency Response Procedures

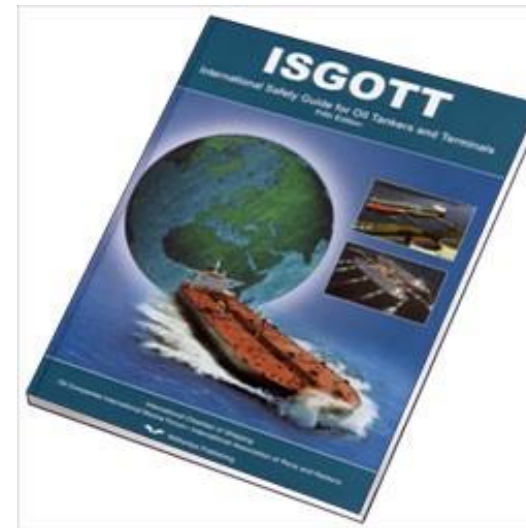


# International Maritime Organization-IMO Courses:

## Overview

As a specialized agency of the United Nations, **IMO** is the global standard-setting authority for the safety, security and environmental performance of international shipping. Its main role is to create a regulatory framework for the shipping industry that is fair and effective, universally adopted and universally implemented. The following guidelines are available as training courses to develop competencies of those involved in the operations of:

- Handling of Dangerous Goods at Port/Terminal Areas –**IMO Guidelines**
- Ship Shore Safety Checklist - **ISGOTT - International Oil Tanker and Terminal Safety Guide**
- Solid Bulk Sea Transportation – **International Maritime Solid Bulk Code**
- Port Safety, Health & Environment Management System Training & Consultancy Services –**IMO Guidelines**



# *International Maritime Organization-IMO Courses: Handling Dangerous Goods at Port/Terminal Areas*

## **Overview**

This two-day programme provides a comprehensive introduction to the Recommendations on the Safe Practice of Dangerous Goods in Ports and Harbours.

First issued in 1973, these recommendations have evolved alongside advances in shore and ship operations, and now cover dangerous goods in packaged form, liquid and solid bulk cargoes, and liquefied gases.

Aligned with key IMO instruments—including the IMDG Code—the recommendations emphasize the need for consistent, harmonised rules between ship and shore to ensure safe, efficient port operations and prevent operational misunderstandings.



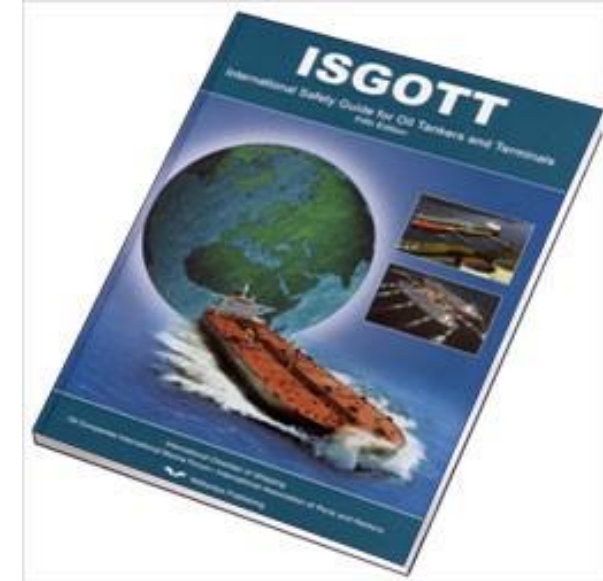
# ***International Maritime Organization-IMO Courses: Ship Shore Safety List: International Oil Tanker and Terminal Safety Guide- ISGOTT***

## **Overview**

This two-day programme provides practical guidance for tanker and terminal personnel involved in the safe carriage and handling of crude oil and petroleum products. Developed from the combined content of the Tanker Safety Guide (Petroleum) issued by the International Chamber of Shipping (ICS) and the International Oil Tanker and Terminal Safety Guide published for OCIMF, these recommendations offer clear operational direction to support safe, coordinated, and efficient tanker-terminal activities.

## **Outline**

- Hazards of Petroleum
- General Precautions on Tankers
- Arrival in Port
- General precautions while tanker is at a Petroleum berth
- Tanker & Terminal Liaisons
- Handling of cargo & ballast
- Double hull operations
- Tank cleaning & Gas freeing
- Technical Information



# *International Maritime Organization-IMO Courses: Maritime English- Based on Model Course 3.17*

## **Overview**

The course is designed by the International Maritime Organization (IMO) to help seafarers meet the English-language proficiency requirements under the STCW Convention (as amended).

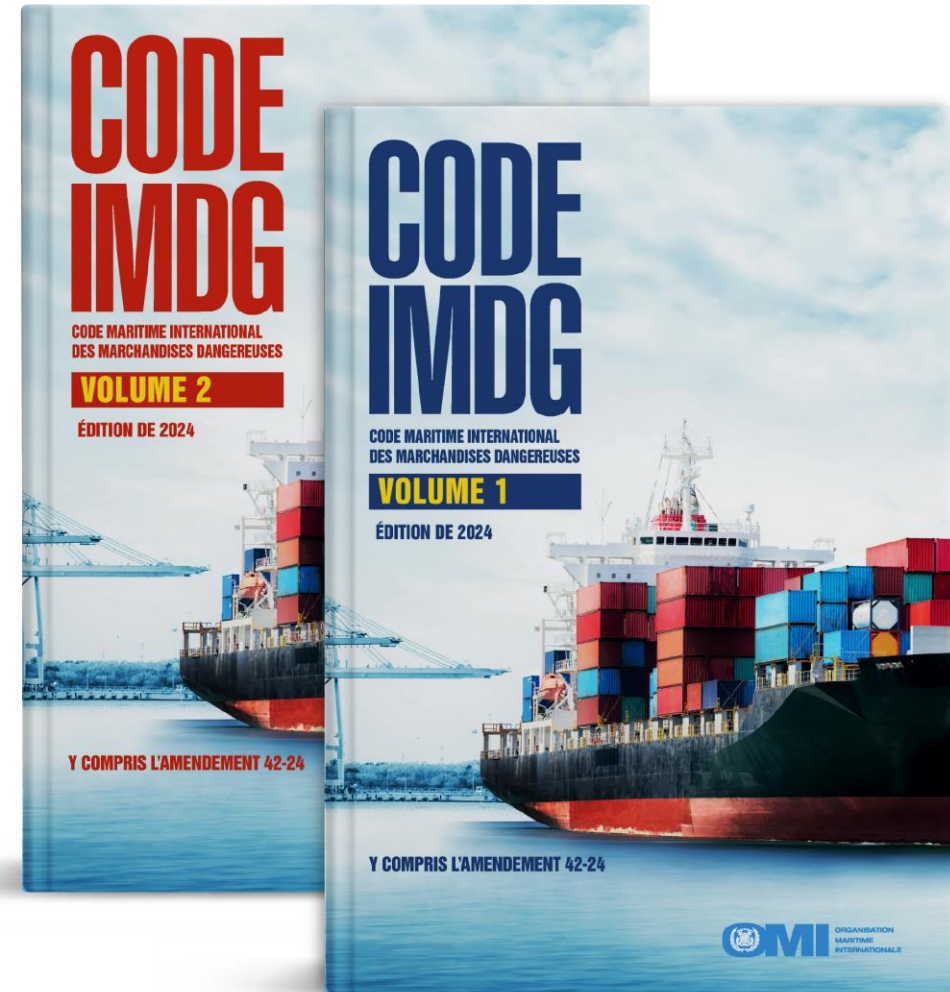
It is split into two core sections:

**Core Section 1 – General Maritime English (GME):** foundational English language and general maritime communication skills.

**Core Section 2 – Specialized Maritime English (SME):** maritime-specific tasks, terminology, Standard Marine Communication Phrases (SMCP), shipboard operations and the like.



# Get Started with your ESG initiatives through Compliance



We provide specialised consultancy and training services for organisations whose operations influence the safety of personnel, environmental protection, cargo integrity, and overall operational resilience. Our approach is built on recognised international management standards and global best practices, ensuring a structured and effective framework for improving performance across all functional areas.

Our methodology integrates key principles from:

- **ISO 9001** – Quality Management
- **ISO 14001** – Environmental Management
- **OHSAS 18001 / ISO 45001** – Occupational Health & Safety
- **ESG Best Practices** – Governance, sustainability performance, operational transparency, and stakeholder accountability

Through this integrated system, we help organisations strengthen regulatory compliance, raise operational excellence, and embed a culture of safety, sustainability, and responsible governance.

## Scope of Services

- Recognition of Compliance,
- Proficiency & Performance Excellence
- ESG Alignment and Sustainability Integration
- Status Review and Comprehensive Gap Assessment
- Strategic Planning and Systems Development
- Development of Manuals, Procedures, and Management Documentation
- Implementation Support and Performance Monitoring
- Internal Auditing, Assurance, and Management Review
- Continual Improvement and Long-Term Capability Building.

**CLLB SDN BHD**  
604256A



***Thank you***

