

Vessels Classification Documentation

Overview

This document provides a comprehensive classification system for vessel types, organized into general categories (type) and specific vessel subtypes (type_specific). The system appears to be used for maritime navigation, vessel traffic services, and regulatory purposes.

Type Categories

1. Anti-Pollution

Vessels involved in pollution prevention, control, and cleanup operations.

Specific Vessel Types:

- Anchor Handling Vessel
- Anti-Pollution
- Bunkering Tanker
- Buoy-Laying Vessel
- Crew Boat
- Drilling Jack Up
- Fire Fighting Vessel
- Fish Carrier
- Fishery Patrol Vessel
- Fishing Vessel
- General Cargo
- Inland, Maintenance Craft, Cableschip, Dredger
- Inland, Motor Tanker
- Inland Passenger Ship
- Inland Supply Vessel
- Inland Tanker
- Motor Hopper
- Multi Purpose Offshore Vessel
- Naval Patrol Vessel
- Offshore Supply Ship
- Oil Products Tanker

- Passenger or Cargo Ship
- Patrol Vessel
- Platform
- Pollution Control Vessel
- Research or Survey Vessel
- Special Vessel
- Supply Vessel
- Tender
- Trawler
- Tug
- Tug or Supply Vessel
- Utility Vessel
- Water Tanker
- Work Vessel

2. Navigation Aids (Beacon Types)

Cardinal Marks

- Beacon, Cardinal E (with associated vessel types)
- Beacon, Cardinal N (with associated vessel types)
- Beacon, Cardinal S (with associated vessel types)
- Beacon, Cardinal W (with associated vessel types)

Other Navigational Marks

- Beacon, Isolated danger
- Beacon, Port Hand
- Beacon, Preferred Channel Port hand
- Beacon, Preferred Channel Starboard hand
- Beacon, Safe Water
- Beacon, Special Mark
- Beacon, Starboard Hand

3. Cargo Vessels

General cargo carriers and specialized cargo vessels.

Main Categories:

- Cargo (General)

- **Cargo - Hazard A (Major)** (High-hazard cargo)
- **Cargo - Hazard B**
- **Cargo - Hazard C (Minor)**
- **Cargo - Hazard D (Recognizable)**
- **Cargo: Hazardous category A-D** (Categorized by hazard level)

Specific Vessel Types (under general Cargo):

- Accommodation Barge/Vessel
- Aggregates Carrier
- Anchor Handling Vessel
- Asphalt/Bitumen Tanker
- Bulk Carrier/Bulker
- Bunkering Tanker
- Buoy-Laying Vessel
- Cable Layer
- Cement Carrier
- Container/Container Ship
- Crane Ship
- Crew Boat
- Crude Oil Tanker
- Dredgers (various types)
- Drilling vessels
- Fishing-related vessels
- Heavy Lift/Load Carrier
- Inland vessels (multiple subtypes)
- LNG/LPG Tanker
- Offshore vessels
- Passenger vessels
- Reefer
- Ro-Ro vessels
- Specialized carriers (timber, vehicles, etc.)
- Tugs and support vessels

4. Special Operations Vessels

Dive Operations

- **Dive Ops** (general category)

- **Dive Vessel** (specific vessels supporting diving operations)

Dredging Operations

- **Dredger** (various dredging vessel types)

Fishing Operations

- **Fishing** (commercial fishing and support vessels)

5. High-Speed Craft

- **High Speed Craft** (general)
- **HSC** (High-Speed Craft)
- **Hydrofoil**

6. Law Enforcement & Security

- **Law Enforce/Law Enforcement**
- **Patrol Vessels**
- **Military Ops** (military operations vessels)

7. Navigation & Pilotage

- **Leading Light Front/Rear**
- **Light Vessel**
- **Light, without/with Sectors**
- **Local Vessel**
- **Manned VTS** (Vessel Traffic Service)
- **Pilot Vessel**

8. Medical & Emergency

- **Medical Trans** (Medical Transport)
- **SAR** (Search and Rescue)
- **Search and Rescue Aircraft/Vessel**

9. Passenger Vessels

- **Passenger** (general passenger transport)
- **Pleasure Craft** (recreational vessels)

10. Tankers

Specialized liquid cargo carriers.

Hazard Classification:

- **Tanker - Hazard A (Major)**
- **Tanker - Hazard B**
- **Tanker - Hazard C (Minor)**
- **Tanker - Hazard D (Recognizable)**
- **Tanker: Hazardous category A-D**

11. Tugs & Support Vessels

- **Tug** (general towing and pushing vessels)
- **Port Tender**
- **Supply Vessel**

12. Special Categories

- **OffShore Structure**
- **Sailing Vessel**
- **Special Craft**
- **WIG/Wing In Grnd** (Wing-in-Ground effect vessels)
- **Other** (miscellaneous vessels)
- **Reserved** (reserved categories)
- **Spare** (spare/backup designation)
- **Unspecified** (unspecified vessel types)

Notes on Classification System

Inland Vessel Notation

The system includes specific notations for inland waterways vessels:

- **Inland, [vessel type]** prefix indicates inland waterways operation
- Special combinations like "Inland, Motor Freighter Pushing Freighter(s)" indicate pushtow configurations
- Hazardous cargo types are specified (type C, type N, etc.)

Hazard Classification

Both cargo and tanker vessels include hazard classifications:

- **Hazard A (Major):** Most hazardous
- **Hazard B-D:** Decreasing hazard levels
- **Hazardous category A-D:** Similar but with "category" designation

Multi-Role Vessels

Many vessels serve multiple purposes, indicated by "or" combinations:

- Tug or Supply Vessel
- Ro-Ro or Passenger Ship
- Passenger or Cargo Ship

Industry-Specific Vessels

The system includes specialized vessels for:

- Offshore oil & gas industry
- Fishing industry
- Dredging and construction
- Research and survey
- Naval and military operations

Usage Considerations

1. **Traffic Management:** Used in Vessel Traffic Services (VTS) for identifying vessel types and their operational characteristics.
2. **Safety & Regulation:** Hazard classifications help in determining safety requirements and operational restrictions.
3. **Navigation Aids:** Beacon types are integrated with vessel types for navigational purposes.
4. **Emergency Response:** SAR and medical transport classifications facilitate emergency coordination.
5. **Port Operations:** Local vessel and pilot vessel classifications support port management.

This classification system provides a comprehensive framework for maritime operations, safety management, and regulatory compliance across various vessel types and operational scenarios.