Glossary

Adjacent spaces	Spaces bordering another space.
Administration	As used in international conventions, the government of the State whose flag the ship is flying.
Anti-static additive	A substance added to a petroleum product to raise its electrical conductivity to a safe level, above 50 picoSiemens/metre (pS/m), to prevent accumulation of static electricity.
Approved equipment	Equipment of a design that has been tested and approved by an appropriate authority, such as a government department or Classification Society. The authority should have certified the equipment as safe for use in a specified hazardous or dangerous area.
Auto-ignition	The ignition of a combustible material without initiation by a spark or flame, when the material has been raised to a temperature at which self-sustaining combustion occurs.
Ballast	Water ballast carried in ships' tanks designated for this purpose.
Barge	Barges can be self-propelled, towed or pushed, and may be used to carry or store liquid hydrocarbons, chemicals or liquefied gases in bulk. They may be employed in inland waterways or at sea outside port limits.
Berthing	Bringing a ship to her berth until the ship is made fast. A berth could be any facility where a ship moors alongside or anchors, including a quay, jetty, offshore buoy or facility.
Best practice	A method of working, or procedure, to aspire to as part of continuous improvement.
Bonding	The connecting together of metal parts to ensure electrical continuity.
Burst pressure	The actual pressure at which a prototype hose fails.
Cargo transfer	Operation when crude oil, Liquefied Petroleum Gas (LPG) or other hydrocarbon products are moved from either a ship to another ship, a ship to a terminal or a terminal to a ship, by means of pumping.
Cathodic protection	The prevention of corrosion by electrochemical, impressed current or cathodic protection techniques. On tankers, it may be applied either externally to the hull or internally to the surfaces of tanks. At terminals, it is frequently applied to steel piles and fender panels.
Charterers	An organisation/a company entered into a contract with owners for the use of a ship. May take the form of a demise or bareboat charter under which the charterer has the use of the ship and engages their own crew, or where the ship is let out to the charterer for either a defined period of time (time charter) or a specific voyage (voyage charter).
Clingage	Oil remaining on the walls of a pipe or on the internal surfaces of tanks after the bulk of the oil has been removed.

Closed operations	Ballasting, loading or discharging operations carried out without recourse to opening ullage and sighting ports.
Cold work	Work that cannot create a source of ignition.
Combination carrier (also referred to as Oil/Bulk/Ore (OBO), Oil/Ore (O/O))	A ship that is designed to carry either a petroleum cargo or a dry bulk cargo on separate voyages.
Combustible (also referred to as 'Flammable')	Capable of being easily ignited and of burning. For the purposes of this guide, the terms 'combustible' and 'flammable' are synonymous.
Combustible gas detector (also referred to as 'Explosimeter')	An instrument for measuring the composition of hydrocarbon gas/air mixtures, usually giving the result as a percentage of the Lower Flammable Limit (LFL).
Company	The owner of the ship or any other organisation or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the shipowner and who, on assuming such responsibility, has agreed to take over all the duties and responsibility imposed by the *International Safety Management (ISM) Code*.
Competent Person	A person who has adequate training and experience to undertake the tasks they are required to perform within their job description. For personnel in the shipping industry, they should be able to demonstrate this competence by the production of certificates recognised by the ship's administration.
Conventional tanker	An oil tanker equipped for regular trading and not specially designed or adapted for loading at offshore terminals requiring specialised mooring or bow loading equipment.
Crude oil	A liquid, occurring naturally in the earth and composed mainly of mixtures of chemical compounds of carbon and hydrogen.
Crude Oil Washing (COW)	A system whereby the tanks of a crude oil tanker are cleaned with processed crude oil.
Cryogenic	Cryogenic liquids are liquefied gases that are kept in their liquid state at very low temperatures.
Dangerous area	An area on a tanker which, for the purposes of the installation and use of electrical equipment, is regarded as dangerous due to the likelihood for an explosive atmosphere to be present. (For terminal, see 'Hazardous area'.)
Deadweight	Deadweight is the difference between the displacement and the mass of the empty ship (lightweight). It may be defined for any load waterline from the ship's tables, but is normally referenced for ship comparative purposes to the summer deadweight.
Designated area	An area or space that has been identified and dedicated for a specific purpose.
Displacement	The mass of water in tonnes displaced by a ship at a given draught.
Dry chemical powder	A flame inhibiting powder used in firefighting.

Earthing (also referred to as 'Grounding')	The electrical connection of equipment to the main body of the 'earth' to ensure that it is at earth potential. On board ship, the connection is made to the main metallic structure of the ship, which is at earth potential because of the conductivity of the sea.
Elasticity	The elastic (non-permanent) elongation of a unit length of an element caused by a unit load. May refer to a material or a composite structure such as a mooring line.
Emergency Release System (ERS)	A system for quickly and safely disconnecting the cargo transfer connection (e.g. loading arm or hose) from a ship with minimal product spillage. It consists of an emergency release coupler between two interlocked block valves.
Enclosed space	A space that has limited openings for entry and exit, unfavourable natural ventilation, and where it is foreseeable that a risk of death or serious injury may exist making it unsuitable for continuous worker occupancy. It is not possible to include a comprehensive list but includes cargo spaces, double bottoms, fuel tanks, ballast tanks, pumprooms, cofferdams, void spaces, duct keels, inter-barrier spaces, engine crankcases and sewage tanks.
Entry permit	A document issued by a Responsible Person on completion of all required preparation and testing allowing entry into a space or compartment during a specific time interval.
Explosimeter	See 'Combustible gas detector'.
Explosion-proof (also referred to as 'Flame-proof')	Electrical equipment is defined and certified as explosion-proof when it is enclosed in a case that is capable of withstanding the explosion within it of a hydrocarbon gas/air mixture or other specified flammable gas mixture. It must also prevent the ignition of such a mixture outside the case either by spark or flame from the internal explosion or as a result of the temperature rise of the case following the internal explosion. The equipment must operate at such an external temperature that a surrounding flammable atmosphere will not be ignited.
Fatigue	A state of physical and/or mental impairment resulting from factors such as inadequate sleep, extended wakefulness, work/rest requirements out of sync with circadian rhythms and physical, mental or emotional exertion that can impair alertness and the ability to safely operate a ship or perform safety related duties.
Fibre	A long, fine, very flexible structure that may be woven, braided, stranded or twisted into a variety of fabrics, twine, cordage or rope.
Flame arrester (also referred to as a 'flame trap')	A permeable matrix of metal, ceramic or other heat-resisting materials that allow gas to pass through but stop the propagation of flame through cooling of the combustion products to below the temperature required for the ignition of the flammable gas on the other side of the arrester.
Flame-proof	See 'Explosion-proof'.

Flame screen	A portable or fitted device incorporating one or more corrosion resistant wire-woven fabrics of very small mesh, which is used for preventing sparks from entering a tank or vent opening or, for a short time, preventing the passage of flame. (Not to be confused with 'Flame arrester'.)
Flammable (also referred to as 'Combustible')	Capable of being ignited and of burning. For the purposes of this guide, the terms 'flammable' and 'combustible' are synonymous.
Flammable atmosphere	An atmosphere that contains 10% or more of the Lower Flammable Limit (LFL) of a substance that is capable of ignition and burning.
Flammable range	The range of hydrocarbon gas concentrations in air between the Lower and Upper Flammable (Explosive) Limits. Mixtures within this range are capable of being ignited and of burning.
Flashlight	See 'Torch'.
Flashpoint	The lowest temperature at which a liquid gives off sufficient vapour to form a flammable gas mixture near the surface of the liquid. It is measured in a laboratory in standard apparatus using a prescribed procedure.
Flow rate	The linear velocity of flow of liquid in a pipeline, usually measured in metres per second (m/sec). The determination of the flow rates at locations within cargo pipeline systems is essential when handling static accumulator cargoes.
Foam (also referred to as 'Froth')	An aerated solution that is used for fire prevention and firefighting.
Foam concentrate (also referred to as 'Foam compound')	The full strength liquid received from the supplier, which is diluted and processed to produce foam.
Foam solution	The mixture produced by diluting foam concentrate with water before processing to make foam.
Free fall	An unrestricted fall.
Freeboard	The vertical distance between the ship's deck and the waterline at the amidships location. On ships with manifolds not amidships, it may also be provided separately for the manifold location.
From the top (or overall)	See 'Loading over the top'.
Gas free	A tank, compartment or container is gas free when it has been adequately cleaned and sufficient fresh air has been introduced into it to lower the level of any flammable, toxic or inert gas to that required for a specific purpose, e.g. hot work, entry etc.
Gas free certificate	A certificate issued by an authorised Responsible Person confirming that, at the time of testing, a tank, compartment or container was gas free for a specific purpose.
Grounding	See 'Earthing'.

Guidance	Provision of advice or information by OCIMF/ICS/IAPH.
Halon	A halogenated hydrocarbon used in firefighting that inhibits flame propagation.
Hazard	Any event/object that could cause harm.
Hazardous area	Any place in which a sufficiently explosive atmosphere may occur to require special precautions to protect the safety of workers (for ships, see 'Dangerous area').
Hazardous situation	A situation that may directly cause an accident that causes harm to people or the environment.
Hazardous task	A task other than hot work that presents a hazard to the ship, terminal or personnel, the performance of which needs to be controlled by a risk assessment process such as a permit to work system or a controlled procedure.
Hazardous zone	A hazardous zone is a classification designation found within a hazardous area and is determined by an assessment based upon the frequency of the occurrence and duration that an explosive gas atmosphere may be present.
High Modulus Synthetic Fibre (HMSF)	Manmade, continuous filament synthetic fibre with modulus in the range of 50–150Pa.
Hot work	Work involving sources of ignition or temperatures sufficiently high to cause the ignition of a flammable gas mixture. This includes any work requiring the use of welding, burning or soldering equipment, blow torches, some power driven tools, portable electrical equipment that is not intrinsically safe or contained within an approved explosion-proof housing and internal combustion engines.
Hot work permit	A document issued by a Responsible Person on completion of all required preparation and testing that permits specific hot work to be done during a particular time interval in a defined area.
Hydrocarbon gas	An organic chemical gas compound composed entirely of hydrogen and carbon atoms.
Incident	Any unplanned event, including accidents or near-misses, that may result in injury or ill health of people, damage or loss to property, plant, materials or the environment.
Inert condition	A condition in which the oxygen content throughout the atmosphere of a tank has been reduced to 8% or less by volume by the addition of inert gas.
Inert Gas (IG)	A gas or a mixture of gases, such as exhaust flue gas or nitrogen, containing insufficient oxygen to support the combustion of hydrocarbons.
Inert gas plant	All equipment fitted to supply, cool, clean, pressurise, monitor and control the delivery of inert gas to the cargo tank systems.

Inert gas system	An inert gas plant and inert gas distribution system together with means for preventing backflow of cargo gases to the machinery spaces, fixed and portable measuring instruments and control devices.
Inerting	The process of introducing inert gas into a tank with the object of attaining the inert condition.
Insulating flange	A flanged joint incorporating an insulating gasket, sleeves and washers to prevent electrical continuity between pipelines, hose strings and Marine Loading Arms (MLAs).
Interface detector	An electrical instrument for detecting the boundary between oil and water.
International Safety Management (ISM) Code	The International Management Code for the Safe Operation of Ships and for Pollution Prevention.
Intrinsically safe	An electrical circuit, or part of a circuit, is intrinsically safe if any spark or thermal effect produced normally (i.e. by breaking or closing the circuit) or accidentally (e.g. by short circuit or earth fault) is incapable, under prescribed test conditions, of igniting a prescribed gas mixture.
Loading over the top (or loading overall)	The loading of cargo or ballast through an open-ended pipe or by means of an open-ended hose entering a tank through a hatch or deck opening, resulting in the free fall of liquid.
Loading rate	The volumetric measure of liquid loaded within a given period, usually expressed as cubic metres per hour (m^3/hr) or barrels per hour (bbls/hr).
Lower Flammable Limit (LFL)	The concentration of a hydrocarbon gas in air below which there is insufficient hydrocarbon to support and propagate combustion. Sometimes referred to as Lower Explosive Limit (LEL).
Manifold	The flanged pipe assembly mounted on board ship to which the presentation flange of the Marine Loading Arm (MLA) or spool piece connects.
Marine terminal (or terminal)	For the purposes of this publication, a marine terminal is defined as a place where ships are berthed or moored for loading or discharging cargoes that include crude oil and products, chemicals and liquefied gases.
Marine terminal manager	The person, or management team, having overall responsibility for the safe and efficient operation of a marine terminal.
Master	The Master is responsible for the safe and efficient operation of the ship (including its seaworthiness, safety and security, cargo operations, navigation, crew management, and legal compliance) and for the persons and cargo on board.
Material Safety Data Sheet (MSDS)	A document identifying a substance, and all its constituents, and occupational health and safety information. It provides the recipient with all necessary information to manage the substance safely. The format and content of an MSDS for *International Convention for the Prevention of Pollution from Ships (MARPOL)* Annex I Cargoes and Marine Fuel Oils are prescribed by the IMO and follow the Globally Harmonized System (GHS).