MINISTERUL TRANSPORTURILOR ŞI INFRASTRUCTURII
AUTORITATEA NAVALĂ ROMÂNĂ

minimum criteria

For vessels navigating in the Romanian waters.

POLICY

It is ROMANIAN NAVAL AUTHORITY (RNA) POLICY to monitor activities correlated with the operation of ships and the sea transportation of dangerous products so it will be carried out in a SAFE and ENVIRONMENTALLY RESPONSIBLE manner.

APPLICABILITY

The terms "vessel" or "ship" used throughout this document refer to all seagoing vessels
involved in the carriage of liquid dangerous cargoes in bulk.
"Dangerous cargoes" are those petroleum products with any flash point listed in the Marpol
Convention 73/78 Annex I as amended, noxious and chemical liquid substances listed in
Appendix II and III of Marpol Convention 73/78 Annex II, as amended and liquefied gases among those listed in the Chapter XIX of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk.

VESSELS APPRAISAL AND ACCEPTABILITY PROCESS

Tankers calling Romanian waters are inspected each and every time they are due to cargo operations . vessels calling for second time are screened based on previous RNA reports.
In the evaluation process, owners corrective actions are taken in account and improvement of the ship performance is recorded.
The "consideration for acceptability" of the vessel is based on her compliance with the Minimum Safety and Operating Requirements described herewith.
Operators ability to perform and maintain a credible ship management standard and to comply with the requirements described throughout this document will be verified as a part of a systematic monitoring process.
Third party audits and independent auditors may be used to ascertain such a capability.

STANDARDS

Vessels intend to enter Romanian waters must comply with all applicable International Convention and Regulation, Flag State, Classification Society, Port

State and local requirements and the additional minimum safety criteria outlined herewith.
Vessels must operate in accordance with the provisions contained in the latest edition of ICS/OCIMF/SIGGTO "International Safety Guide for Oil Tankers and Terminals", "Tanker Safety Guide for Liquefied Gases", "Tanker Safety Guide for Chemicals", whichever is applicable and with the other recognized industry publications and guidelines.

SAFETY MANAGEMENT SYSTEM
The Shipboard Management System, as far as Safety and Prevention of pollution are
concerned must comply, as a minimum, with the standards defined in the IMO ISM Code.
Shipboard Safety Management System documentation (Ship Operation Manual, Company
instructions, Safety Manuals, Bridge Organization Manual, Cargo Handling Manual, Machinery Operation Instructions, Equipment Maintenance Procedures, Training and Emergency Manual, Reporting Forms, records of drills and test, and everything required) must confirm a satisfactory implementation of a reliable Safety Management System.
Ship-specific Technical Manuals should be available on board, detailing how to use, maintain and operate the ships and its equipment. Essential operating instructions and warnings should be repeated as labels or charts to be located on, or in the immediate vicinity of, the operating stand.
The File of Enhanced Survey Program must be properly maintained on board in a standard format) requirements.
Emergency Procedures must be available on board covering, as a minimum, steps to be taken in the event of pollution, collision, fire, grounding, explosion, flooding, toxic cargo spill and vapor emission.
An adequate recording of onboard events must be maintained in appropriate Deck and Engine
Log Books. Events registration should be such to consent the reconstruction of on board
activities either at sea or alongside.
A copy of all ISM Documentation, Manual, Procedure and operating instruction in English language must be available on board.

BRIDGE MANAGEMENT

Bridge Management and Organization shall reflect, as a minimum, the standards defined in the STCW Convention and in the recognized industry recommendations and publication.

Clear evidence must be provided on how watches are organized for the different sailing and maneuvering scenarios at sea and in port. Company Instructions should be available for the planning and execution of the voyage, the updating of charts and publications, the recording of data and events, the execution of the prescribed tests and maintenance of bridge equipment.

MANNING

Vessels must be adequately manned for the intended trade so that a safe continuous watch or watches appropriate to the prevailing circumstances and conditions are maintained on board at all times.

The required Minimum Hours of rest for the watch-keeping personnel must be monitored to assure that the efficiency of all watch-keepers is not impaired by fatigue or workload.

For all vessels, in addition to the compliance with their Safe Manning Certificate, the manning level shall be not less than:

Deck: Master plus 2 deck officers

Engine: Ch. Eng. plus 2 engineers

Different manning arrangement may be considered/required for vessels operated on short haul coastal trade and for the engine department on the basis of the engine room automation level.

Watch-keeping personnel must possess the required STCW Convention certifications and

endorsements for the required level of responsibility covered and the type of cargoes and

trades the vessel is dedicated.

Where crew of different nationalities are employed on board, the number of nationalities

should be kept to the minimum in order to reduce the possibilities of communication difficulties and incomprehension, especially when performing critical operations or when dealing with emergencies.

NAVIGATING EQUIPMENTS

All vessels (regardless the size and the year of built) in addition to meeting the requirements of Solas Chap. V Reg 19 and 20, must be provided with two radars, two GPS, a course recorder, a depth finder with recording capabilities and a standard magnetic compass with offcourse alarm indication.

The course recorder and the recording capabilities of the depth finder may be waived in case of vessels fitted with a Voyage Data Recorder..

Vessels above 3000 GRT must be provided with an ARPA with speed input obtained from the ship's automatic speed log.
The above bridge equipment must be maintained in a good operational status at all times.

VOYAGE DATA RECORDER
The voyage data recorder system, including all sensors, must be subjected to an annual
performance test.
The test shall be conducted by an approved testing or servicing facilities and the relevant
certificate of compliance shall be retained on board. (The VDR is requested for all vessels 3000 GRT or greater built on or after 1 JULY 2002. (Solas).
The European Directive 2002/59/EC 27 JUNE 2002 requires all ships built before 1 JULY
2002 to be fitted with VDR as follow:
- cargo ships of 20,000 DWT and upwards not later than 1 January 2007.
- cargo ships of 3,000 GRT and upwards but less than 20,000 GRT not later than 1 January 2008.

SHIP SURVIVAL CAPABILITY
Chemical Ships and Gas Ships must comply with the survival requirements defined in the IBC and IGC CODES respectively, regardless of the year of built of the vessel.
The condition of stable equilibrium during the flooding and the final condition after the flooding should satisfy the requirements defined in the above respective International Codes of Construction.

SHIP INTACT STABILITY
Vessels must possess positive inherent stability capabilities to consent the concurrent transfer operations of cargoes and ballast when alongside, taking into account the negative effect on stability produced by the maximum hypothetical free surface produced when all CARGO and BALLAST compartments are simultaneously slacked.
The initial metacentric height corrected for free surfaces in any condition of cargo and ballast and calculated at 0° heel shall be not less that 0.15 m. The area under the righting lever curve must be not less than the value indicated in of the Intact Stability Code
. If operational restrictions or critical conditions are envisaged for the vessel to comply with the above requirements, a notice must be given to RNA.
Any such restrictions shall be evaluated on a case by case basis.
Vessels with length in excess of 120 meters must be provided with a loading computer for the calculation of stress and stability. The software used must be

approved by the Classification Society and its operating instruction must provide information for the calibration checks of the software.
For Chemical and gas carriers the approved loading computer is requested when the length of the ship exceeds 65 meters.

CARGO TANK VENTING SYSTEM
*The venting system of ships carrying oil must comply at least with the requirements of Solas 74/78 as amended, Each cargo tanks must be provided with " **independent "** P/V or H/V valves to take into account the effects of temperature variations (breathing system) and " **independent** or **common "** venting arrangements designed and operated as to ensure the passage of large volumes of vapour mixtures during loading, discharging or ballast handling. The two functions can be combined in one single system, as in the case of independent high velocity valves.*
In chemical carriers venting during loading and discharging operations of those products requiring a "controlled venting system" has to be carried out through automatic devices (P/V or High Velocity valves) capable of:
• Maintaining an adequate vapor pressure in the tank (or vacuum during discharging for non-inerted tanks).
• Assuring that the tank design maximum pressure and vacuum are never exceeded.
P/V and H/V valves should be bench tested for maximum pressure and vacuum setting and venting capacity at least every 60 months and a certificate should be issued by the classification society.
Oil and chemical carriers must be provided with a secondary means for the full flow relief of vapour during loading and discharging, to prevent over-pressure or under-pressure of cargo tanks in the event of failure of the primary venting arrangements.
*The provision of providing a pressure sensor with a monitoring and alarm system for all cargo tanks can be accepted as an alternative to the duplication of the system only in the case the vessel is fitted with a centralized cargo control room from where the whole of the cargooperations can be monitored and an alarm for high or low pressure can immediately be picked up and the interested tank identified. The pressure alarm shall be set at a pressure slightly **above** the tanks relief valves setting and the vacuum alarm shall be set at a pressure slightly **below** the setting of the tanks vacuum relief valves so that the pressure and vacuum alarm will not be activated while the tanks are within the normal operating pressure range as determined by the setting of the tanks relief valves of the "controlled venting system".*

For oil tankers fitted with a "free flow venting system" the pressure alarm for each tank shall be set at a pressure slightly below the max tanks design pressure. nformation should be available and posted in the cargo control room to confirm cargo tanks venting capabilities and maximum admissible cargo loading and discharge rate for each tank.

INERT GAS SYSTEM

Vessels carrying flammable petroleum products must be fitted with an inert gas system in
compliance with Solas Cap. II-2) regardless, and shall operate at all times with inerted tanks whenever:

- *The DWT of the vessel is 20,000 Tons or greater, or*
- *The capacity of any tank used for the carriage of the cargo exceed 3,000 cubic meters,*

or

- *The individual nozzle capacity of a tank washing machines exceed 17.5 cubm/hour or the total combined throughput from the number of machines in use in a cargo tank at any*
one time exceed 110 cubm/hour.

Notwithstanding the above, RNA is Strongly recommending to operate with inerted cargo tanks
*whenever the flash point of the oil products is below 60° C**, regardless of the size of the ship**.*

CLOSED LOADING SYSTEM

Vessels which are loading or discharging a volatile, flammable, toxic or noxious cargo must operate at all times in the "Closed Operation Mode".
Closed operation refer to the procedures whereby tankships conduct cargo transfer and ballast operations into cargo tanks, with tank apertures closed and with vapour being emitted only by means of a dedicated venting system which is designated to disperse the vapour clear of working areas and possible ignition sources or to convey it to the shore vapour collection
system.
The operations related to cargo tanks ullage measurements, sampling, water and temperature detection and dipping should be carried out under closed system, by means of the fittings described below.

At least one dipping points fitted with vapour lock should be available in the aft part of each cargo tank.
Whereas the terminal requirement is for the cargo vapour to be routed back to shore, the ships venting system should be approved by the Classification Society. As an alternative the design Vapour Return System should meet the requirements of 46 CFR Part 39 (except item 39.40) while the Cargo Transfer Procedures should meet as a minimum the requirements contained in 33 CFR Part 155.750(d).
To the extent of the application of this requirement, fuel oils, heavy fuels and similar cargoes are to be regarded as noxious cargoes.

CLOSED OPERATION
Vessels carrying volatile, flammable, toxic or noxious cargoes must be provided with ***fixed***
closed *ullage gauges in all cargo tanks with local or remote indication.*
In addition, in oil and chemical carriers, vapour locks must be fitted on each cargo tank to consent sampling, dipping, water and temperature detection without need of opening the cargo tanks. The use of portable hermetic tapes as primary gauging system is not accepted. The following fixed closed ullaging devices are deemed acceptable: mechanically operated floating gauges, electrical capacitance gauges or electronic probes, ultrasonic and sonic methods.
In case of break down of any cargo tank fixed ullage gauge, ullage operations can temporarily be performed by means of portable hermetic tapes through the vapour locks; correction factors for the UTI readings should be available and certified by the ship's Classification Society, so that ship's original tanks calibration table may be used.
The number of portable hermetic tapes available on board should be in accordance with the provisions, taking into account the foregoing.
Slip tubes in gas tankers are not accepted.

SAMPLING OF GAS TANKS.
Gas carriers should be provided with a sufficient number of gas sampling points in each cargo tank. Gas sampling connections and fittings should comply with the design standards specified in the SIGTTO Publication "Report of Working Group on Liquefied Gas Sampling Procedures", 1989. All gas sampling connections on deck must be maintained valved and capped when not
in use.

HIGH LEVEL ALARMS and OVERFLOW CONTROL SYSTEM

Oil, Chemical and Gas Ships must be provided with HIGH LEVEL ALARM (HLA) and
OVERFLOW CONTROL SYSTEM (HHLA or OCS) in all cargo and slop tanks; the sensing devices in the tanks must be independent from the tanks ullage gauges and there should be the possibility of testing the devices from outside the tanks before cargo transfer operations begin.
For gas tankers the operation of the O.C.S. must activate the alarm, stop all cargo pumps and compressors and close the tank filling valves.
The HLA and the O.C.S. alarm indications should be of audible and visual type with alarm indication in CCR or on main deck in case of ships without cargo control room. In both cases there should be the possibility of identifying the alarmed tanks.
Slip tubes for cargo measurement are not allowed at all.

FILLING LIMITS

Cargo tanks shall not be loaded above 98% volume or above the Overflow Control System sensor level.
For gas tankers the maximum filling limits of the tank for each product carried and for each MARVS settings of the tank relief valves must be indicated on a list approved by Administration
(IGC). The application of the increased filling limits, (max 98%) pursuant to IGC shall have to be authorized by the Administration. A certificate of approval shall be maintained on board the ship.

DRAINING OF CARGO MANIFOLDS IN GAS TANKERS.

Suitable means must be provided to relieve the pressure and remove gas contents from cargo loading/discharging manifolds section between the outboard valves and the shore
hoses/hardarms connection, prior to disconnecting the cargo hoses/harms.
Purged liquids and gases should be conveyed to the cargo tanks or to the vent risers.

PREVENTION OF POLLUTION

All Vessels must be provided with Segregated Ballast Tanks.
Segregated ballast, as defined in Marpol 73/78 Annex I,), should be in such a quantity to consent the safe navigation and the ship maneuverability without the need of

introducing additional ballast in the cargo tanks (with the exception of the heavy-weather ballast). The segregated ballast departure and sailing condition must be authorized and approved in the ship's Loading and Stability manual as meeting the requirements for the safe navigating condition in port and at sea.
All vessels must be provided with a deck peripheral fishplate enclosing the main deck area from bow to stern and including a transverse coaming positioned aft of the last cargo tank.
The coaming should be at least 100 mm in height except in the aft corners and the athwartship coaming where it should progressively rise to 300 mm.
Relaxation from this requirement may be considered for gas tankers.

CARGO PUMP-ROOMS
Vessels fitted with cargo pump-room located below the main deck will not be taken into
consideration for the carriage of Marpol Annex II toxic cargoes.
Cargo pump rooms must be fitted with a fixed gas monitoring system capable of continuously monitoring the compartment for presence of flammable gases. Furthermore, the compartment must be provided with fixed bilge draining arrangement operable from outside the compartment, bilge high level alarms and adequate ventilation systems with capabilities of air extraction from the lower part of the compartment.
To the extent of the application of this requirements, pipe tunnels are to be regarded as cargo pump rooms.

CARGO PUMPS
Cargo pumps in pump room must be fitted with bearing and casing remote indicating high temperature alarm.
Electrical driven deep-well pumps in oil and chemical ships should be fitted with impeller speed regulator (one frequency converter for each pump should be installed), under-load protection or dry run trip, overload protection or over-current protection.
In oil and chemical carriers, electrical driven deep well pumps driving shaft bearings must be of the type operating in oil bath. An alarm system visible and audible in CCR should be installed to indicate a low lubricating oil level in the pump reservoir.
Electrical driven deep-well pumps in gas ships should be fitted, as a minimum, with LOW
POWER ABSORBTION protection.
A record must be maintain on board of periodical testing of mentioned pumps safety and

protection devices. Instructions on how to perform the test should be available on board.
Alternative and equivalent pumps safety and protection devices may be taken into
consideration.
For deep-well pumps, a records of pumps cofferdam purging and glands tightness checks
should be maintained on board to the extent required by the pumps manufacturers.

FIRE FIGHTING SYSTEM
Chemical and oil carriers must be provided with a fixed deck foam system capable of
delivering the foam to the entire cargo deck area as well as into any cargo tank.
The main control station for the foam must be located outside the cargo area, adjacent to the accommodation spaces and readily accessible and operable in the event of fire in the areas protected.
The effectiveness of the foam fire-extinguishing system in chemical carriers should, as a
minimum, meet the requirements of the BCH Code for vessels

STRUCTURAL CONDITION
No structural outstanding items or areas of degraded steel condition or areas of extensive coating breakdown (for those compartments required to be coated) should be reported in the ESP Condition Evaluation Report OR in the Class Structural Survey Records.
Copy of the Condition Evaluation Report or the Class Structural Survey Record should be provided on request.
Areas of substantial corrosion or structural breakdowns reported in the Class Survey Report could represent ground for the rejection of the ship.

USE OF FLEXIBLE HOSES
Flexible hoses should be used as less possible on board of the vessel when alongside in terminals, unless previously agreed with the RNA inspector.

STEERING GEAR
Steering gears must be of fully duplicated system with possibility of starting the standby power unit from the navigating bridge, regardless of the size and the year of built of the ship.

Alarms must be given in the navigating bridge in case of power failure of the steering unit under service or in case of low liquid level in steering gear service tank.
For all vessels, must be provisions for the automatic power supply of at least one steering gear power unit from the emergency source of electrical power, so that the steering capabilities can be maintained in case of loss of the main generating set in operation.

GENERATING SETS
a) *All vessels must be fitted with at least two main diesel generators, each capable of*
supporting the full electrical load of the ship and to ensure the propulsion, steering, and the ***safety of the ship****.*
b) *For gas and chemical tankers where the carriage of certain cargoes has been granted in virtue of the fact that the vessel is fitted with a cargo refrigerating plant capable of controlling the maximum pressure of the cargo vapours in the tanks, the refrigerating plant is to be regarded as essential to the* ***safety of the ship****. For these vessels the refrigerating system (compressors and cooling water pumps) should be included in the ship's electrical balance calculation.*
c) *For automated vessels where only one generating set is normally to be in operation, there must be provisions for automatic starting and connection to the main switchboard of a standby generator of sufficient capacity to permit propulsion and steering and to ensure the* ***safety of the ship*** *in case of loss of the generating set in operation.*
Where more than one generating set is normally to be in parallel operation, there must be provisions (by load shedding for instance) to ensure that, in case of loss of one of these generating sets, the remaining one(s) continues to operate without overload to consent the propulsion and steering and ensure the ***safety of ship.*** *An additional standby generator should be ready for automatic starting and connection to the main switchboard.*
d) *For non-automated vessels, the operational requirements of keeping two generators running in parallel operation while navigating in restricted waters, may be considered as satisfying this requirement, provided that each of the generators is meeting the requirements of point*
a) above, having regard to starting currents and transitory nature of certain loads. A
declaration to this effect should be obtained by the Classification Society. Where more than one generating set is normally to be in parallel operation, an additional generator should backup the parallel operation while maneuvering or navigating in restricted water, so that in case of loss of one of the generators the remaining ones will be able to support the full electrical load of the ship and to ensure the propulsion, steering, and the ***safety of the ship****.*

LIFTING APPLIANCES.
Vessels must be provided with midship lifting appliances as follows:
up to 5 KTDWT not less than 1.5 tons SWL
from 5 to 16 KT DWT not less than 3 tons SWL
from 16 KTDWT upward As per OCIMF Recommendations for oil tanker manifolds and Associated Equipment (Ed..1991)
All ship lifting appliances must be regularly tested and inspected according to ILO Convention requirements. Tests and inspections records and overweight test certificates issued by the Classification Society must be maintained with the Cargo Gear Book.

DRUGS AND ALCOHOL POLICY
A drug and alcohol abuse policy meeting at least the standards defined in " OCIMF
GUIDELINES FOR THE CONTROL OF DRUGS AND ALCOHOL ON BOARD SHIP" , must be established and implemented on board.

ADDITIONAL REQUIREMENT

Vessels intend to enter Romanian waters must comply with Order- OMTI 245/2022 and the additional minimum safety criteria .local requirements and all applicable International Convention and Regulation, Flag State, Classification Society, Port State .