

# SOLAS Ammendment

1 Jan 2024

## 1) Safe mooring operations:

SOLAS- Chap II-1 :

→ Additional requirement to selection, arrangement, inspection, measurement, maintenance and replacement of mooring lines & mooring equipment.

→ Design of Mooring eq & Selection of mooring eq will be provided as ship & has to be kept.

→ applied to new Cargo & passenger ship after 1 Jan, 2024  
> 3000 GT

## 2) Modernization of GMDSS:

→ Requirements made modernized for GMDSS.

→ Removed carriage requirements for obsolete Sys.

→ Requirement for LSA Comm system moves from Sub chap III to Chap IV (Radio) (LSA)

## 3) Watertight integrity: Solas chap II-1

→ To include "Probabilistic damage stability" approach in parts B-2 to B-4 (II-1 chap)

→ Ammendments also address: progressive flooding, Values in Collision B/4.

## 4) Solas II-1 : Requiring water level detectors on multiple class ships other than Bulk carrier & Tanker

# SOLAS

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↳ FSS Code:

1 Jan 24;

↳ Short circuit isolators do not need to be provided at each individually identifiable fire detector for Cargo ships and Passenger Ship Cabin balconies.

↳ For Cargo ships; 1 short circuit isolator per deck will be acceptable.

To be Continued.....

Latest FSS in force:  
Amendment (1 Jan 2020)

↳ Special attention to be paid to the specification of water quality provided by System manufacturer, to prevent internal corrosion of lines & nozzle.

↳ Helicopter facility Foam fire fighting appliances:

For Helicopter landing area; at least 2 portable foam applicators

or two hose reel foam stations to be provided. each capable of discharging a minimum foam solution discharge rate.

↳ Arrangement of Means of Escape: for Passenger ship > 36 passengers to be built with evacuation analysis to avoid congestion during an abandonment, due to normal movement of crew & passengers.

### In Public place:

Requirement is: ① → Passenger can occupy max<sup>m</sup>  $\frac{3}{4}$  of max<sup>m</sup> capacity.

(means 100 लोगों की जगह रहे  
but 75 ही रह सकते हैं)

→  ~~$\frac{3}{4}$  of max<sup>m</sup> capacity~~,  $\frac{1}{3}$  crew can occupy public place.

# for calculating width of stairway.

② Service space: can be occupied by  $\frac{1}{3}$  of crew

③ Crew accommodation: can be occupied by  $\frac{1}{3}$  of the crew.

Continued: Some more to come in 1, Jan, 2024:

→ To insure fire safety in Ro-Ro passenger ship:

→ Advanced fire security measure - advanced fire detection

→ CCTV & Monitors on weather deck for new ro-ro psg ships

→ Fixed CO<sub>2</sub> system:

→ To test Rest 90% cylinder after 20 years  
(10% after 10 yrs)

the also; → Check 10% after 10 yrs (Hydraulic Test + Inspection Internal)

→ if 1 one cylinder fails → Test 50%.

→ if now fails anyone → Test all cyl.

→ If bottles are removed for testing, Replaced to have min<sup>m</sup> req capacity to fire fight

→ At least once in five year, internal ins. of all control valves.

## SOLAS

↳ LSA Code:

1 Jan 2024 (for all Cargo & passenger ship)

→ The launching appliance of New rescue boats, less than 700 kg does not need to have stored mechanical power, but handling shall be possible by one person.

→ Free fall lifeboats will not need to be launched-tested with the ship making headway at speeds of up to 5 knots in calm water. (old requirement) → Now removed.

→ as there are no additional dynamic loads on launching arrangements

→ Lifeboats equipped with two independent propulsion systems do not need to be equipped with buoyant cars.

→ ~~In force~~ Ventilation of Survival Craft, particularly enclosed lifeboats.

→ Fall & hook systems with ~~no~~ ON-LOAD release capability.

↳ Ensuring adequate safety standards for lifeboats and rescue boats having single fall & hook systems with on load release capability.

# MARPOL

Annex-I: Adopted by MEPC 76.  
After 1 July 2024

① → Addition of New Regulation (43A)

→ Prohibition of use & carriage for use as fuel of HFO by ships in Arctic water on or after 1 July 2024

HFO → 900 kg/m<sup>3</sup> @ 15°C  
→ 180 mm<sup>2</sup>/s @ 50°C Kinematic Viscosity  
↳ Banned.

→ Safety search & Rescue vessel, oil spill preparedness & response ships would be exempted.

② Extend in force: 1<sup>st</sup> Nov, 2022

Annex I/IV/VI actually: Exemption of Unmanned non-self propelled (UNSP) Barges from Survey and certification requirements under marpol Convention.

→ Administration may exempt a UNSP Barge for IOPP Certificate requirements of regulations 6.1 & 7.1 of Annex-I by giving IOPP Exemption Certificate to UNSP vessel, for a period of 5 yrs provided that UNSP barge have undergone a Survey to confirm that the certain regulations are met as of Annex-I

→ Reg 4.1 & 5.1 of Annex IV are exempted for UNSP Barge by achieving IOPP exemption Certificate

→ Reg 5.1 & 6.1 of Annex IV are exempted like wise.

जिसे Tow किया जाता है - By another Barge.

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UNSP Barges =>

A/c Maepol:

Annex I -> which is not propelled by mechanical means.

- > Carries no oil
- > has no machinery fitted that uses oil and generate sludge
- > No fuel oil Tank, lub oil Tank, OB Tank, Sludge Tank
- > Has neither persons, nor animals on board.

Annex IV Also: Not holds sewage during voyage. (No SHTank)

Annex VI Also Not generate emissions as per Annex VI.

\*\*\*

Nov 1<sup>st</sup>, 2022

ESPCode ANNEX-II

Min<sup>m</sup> req for thickness measurements at Renewal Surveys of Double Hull oil Tanker.

Annex VI :

1 Jan 2023

> On or before 1 Jan 2023, The ship E.E.M.P (SEEMP) shall include methodology for calculating the ship's "Attained Annual operational CII" and the "Required Annual operational CII".

(Implementation of CII & CII Rating)

> operational CII : 31<sup>st</sup> dec 2023 के बाद, और से से ही हर वर्ष के end में, ship  $\geq 5000$  GT, annual "attained CII" Calculate करेगी (पूरे साल का मिश्रक) 1 Jan - 31<sup>st</sup> Dec

> "Attained Annual operational CII" shall be verified & documented. Verified with "Req annual operational CII".

- > Rating की जायेगी Ships की :
- A - Major Superior
  - B - Minor Superior
  - C - Moderate
  - D - Minor inferior
  - E - Inferior

And all the thing related to CII

1 Nov 2022

> New Annex VI Regulation 23: Introduction of EEXI

Regulation 24: Introduction of CII (Carbon intensity Indicator)

(Only introduction of CII & CII Rating)

> to demonstrate operational Carbon intensity "red" through indicator CII :  
CII Rating : ABCDE

Tell all about EEXI & CII & CII Rating

From 1<sup>st</sup> April, 2022

1) New definitions added in Reg 2 (Annex VI)

New paragraphs added §2-56 after §1:

Definitions added:

- Sulphur Content (m/m) %
- Low flash point (as per SOLAS chap II)
- "Maepol derived Sample" →
- "In use sample" → जो use में है fuel
- Onboard Sample → जो long किया जा रहा for use.

Reg. 14:

Procedures for Sampling & Verification of Sulphur Content of fuel oil.

→ For testing of in use or onboard sample by competent authority; (whose procedure given in Appendix VI of this annex)

→ Sampling shall be sealed by representative competent authority with a unique means of identification in presence of ship reps.

→ For Sampling point:

→ Sampling point must be fitted for the purpose of taking representative fuel oil sample. as to guidelines.

→ जो fuel का flash point low है, 3#11 Sampling of fuel oil

→ Sampling fast to avoid undue delay to ship.

Reg-18:

↳ Fuel oil availability & Quality:

↳ This paragraph replaced by:

(8.2) : अगर कोई party requires representative sample to be analysed, तो वो Annex VI के (appendix VI) के हिसाब से की करें।

Reg-21

↳ "कुछ ships" (Bulk carrier) के Reg. में change हुआ है  
 Regarding time period & Red" rules of EEDI phase 2 & 3.

Appendix I ;

Amendment in IOPP Certificate:

→ add Refue of Sampling points

→ also add note, if there is exemption

to for low fuelport fuel.

Note: Polar Code Comes under STCW "Solas" & "Naipol"  
like ISPS/LSA/FFA Comes under Solas  
STCW-2010 Amendment included STCW Polar Code

STCW:

In Force: 1 Jan 2023

STCW Convention: Add<sup>n</sup> of Definition of "High Voltage" in Reg I/1

High Voltage means: Any AC Voltage or DC Voltage > 1000V

STCW Code: Amendment to Sec A-I/1, including the Capacity "Electo Technical officer" in the definition of "operational level" as a consequential amendment to the introduction of "this capacity" as part of 2010 vanilla amendment.

In Force: 1 July 2018 — (Called as 2016 Amendments of STCW)

Amend to STCW Convention — by MSC.416(97)

Amend to STCW Code — by MSC.417(97)

Above Amendments developed to support the requirement for training in the "International Code for ships operating in Polar water" (Polar Code)

Amended with a New Regulation STCW V/4 According to which two main trainings are defined.

- The Basic Training
- The advanced Training

STCW Code Section A-V/4 Polar Code (Nov 2016 proposed amendment)

Mandatory minimum requirements for the training and qualifications of Master & deck officers on ships operating in polar waters.

→ Demonstrate the Competence of "Basic Training" to undertake the tasks, duties and responsibilities mentioned in table A-V/4-1 (Column-1)

→ Provide evidence of having achieved the minimum level knowledge & proficiency listed in A-V/4-2 (Column-2)

→ " " " " in table A-V/4-2

→ " " " " in table A-V/4-2

As per A-V/4/2 Table (Basic Training)

Knowledge required :

- Ice physics, ice terms, growth, stages of melt
- ice types and "COT"
- friction from snow covered ice
- implications of spray icing
- Knowledge of differential moment of ice berg
- knowledge of Current & Tide & ice
- Basic knowledge of Vessel performance of in low temp

Table-AV/A-2 (For Advanced Training)

What need to know: → Knowledge of Voyage planning & Reporting

- 1) Reporting regimes in polar water
- 2) development of safe routing

- Knowledge of Equipment limitations;
- Knowledge of operating vessel in ice
- Abandoning the ship & Survival on ice & ice covered water.

As per Polar Code:

1) Ice free water → water where no ice of any kind is present.

No Polar Code Training & Certifications required for vessel operating in polar ice free water.

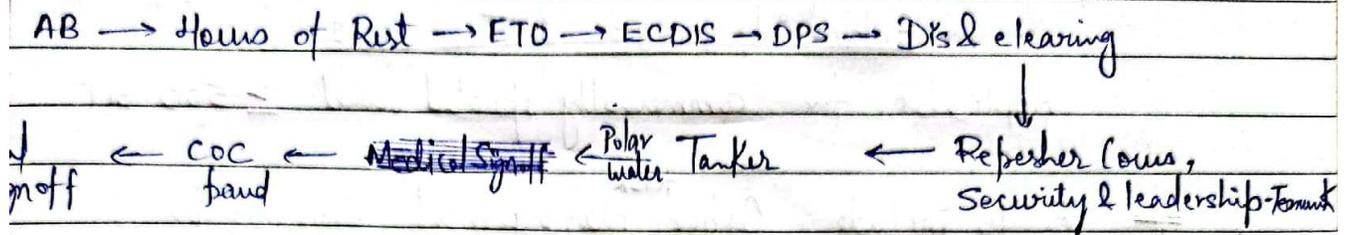
2) Open water → defined as a large area of freely navigable water in which sea ice is present in concentrations less than  $\frac{1}{10}$  & no ice of land origin is present.

Tanker & Pass-ship - Deck officers must hold Basic Training Certificate.

3) Other water → These with more than  $\frac{1}{10}$  ice cover or with any ice of land origin.

All ships Masters & Chief off must have Basic + Advanced

## Manila Amendments (2010) Imp



- 1) New certification requirement for able seafans, deck & engine
- 2) Revised requirements for Hours of Rest (matching with <sup>new</sup> MLC-2006)
- 3) New training & Certification req for ETO & ETO rating.
- 4) New requirement for training in ECDIS
- 5) New training guidance for personnel operating Dynamic Positioning System.
- 6) Inclusion of Modern training methods Distance & e-learning
- 7) Refresher Training module every five years : for PST, PFFF, AFF, PSCRB
- 8) New requirements for Security Training for all Seafans. (STSDSD course)
- 9) updating Competence requirements for all types of Tankers  
NEW req for LNG Tankers
- 10) New Training Guidance for Persons in Ships in Polar Waters :  
PARTA → Mandatory Reg
- 11) Measures to prevent COC fraud.
- 12) Strengthened provisions on Medical Standards.

## ISM Code:

Adopted in 16 June 2017:

↳ Entered into force: 1 Jan 2021

Applicable for commercially operated vessel  $\geq 500$  GT

# ' To include Cyber <sup>RISK</sup> Management System in  
Company's Safety Management System (SMS).

> In practice it means, Company has to assess their IT systems including systems used to operate the vessel and issue procedure to manage all cyber security Risk.

> All Risks assessments, procedures and training needs to be completed by by company no later than first annual verification of Company's DOC after 1 Jan 2021  
For Company itself + Ships

> Even PSC can ask for evidence of compliance with cyber security best practices during PSC inspections.

History: NotPetya ransomware attack on Maersk in June 2017 cost the Company US \$ 900 million.

Applied to fields of:

Bridge Systems

Cargo Handling Systems

ECR Systems for propulsion control

crew welfare systems.

In Force from 1 Jan, 2015

→ Paragraph 6.2 Amended: Requiring Company to insure that each ship is:

→ manned by qualified, certified & medically fit seafarers.

→ appropriately manned ships (No of seafarers) to maintain safe operation on board.

New paragraph added 12.2:

Periodically verify if all those people who has ISM Undertaking are performing as per Company's response abilities under the Code.

AFS:

Convention

Entering into force:

1 Jan 2023

> From this date application or reapplication of Cybutryne will be prohibited.

> Also International Antifouling System Certificate will have provision to indicate this.

> Ship with AFS that contains Cybutryne in external coating or external parts shall either: remove the the coating or apply a barrier coating.

Applicable to all ships except fixed floating platforms, FSU, FPSO (existing) only

new → ते मानना ई पडता

> Also ships not engaged in international voyages

+

Ships < 400 GT are exempted.

## BWM Convention

In Force: 1 June 2022

Adapted by MEPC 75:

- > Commissioning Testing of Ballast water Management Systems is mandatory
- > Changes in form to declare the commissioning Testing in International Ballast water Management Certificate.

↳ To confirm that system's method of treatment is effective in the installed configuration. Testing by flag force 13<sup>th</sup> October 2019: (Sampling also) <sup>administration</sup>

> Aimed at preventing the spread of potentially invasive species in ships ballast water.

① → Amendment to Regulations A-1 & D-3 of BWM Convention to make BWMS code (a new code row) mandatory  
Resolution MEPC.296(72)

② → Amendment to Regulation B-3 of BWM Convention, governing the implementation Schedule of Ballast water Management for ships  
↳ for D2 standard

③ Amendment to Regulation, concerning endorsement of additional Survey on Int-BWM Certificate

④ MEPC adapted BWMS code  
(72)

↳ Tells how Ballast water Management Systems used to achieve D2 standard have to assessed & approved.

IMDG Code:

Adopted by MSC 102

1 June 2022

for ships carrying IMDG Code

(Called as amendment 40-20)

1) Segregation requirements for Alcohols

2) A new special ~~provision~~ and handling code for medical waste.

3) Amendment to UN1362 PG II and UN1362 to clarify the differences between Carbon related substances specially with regard to charcoal.

{ ie Classification & Transport of large Carbon, following incidents involving the spontaneous ignition of charcoal. }

4)

Segregation in relation to liquid organic substances.

5) New provisions for Labels

## Life Jackets:

In force 2010.

- > Each shall be fitted with whistle firmly secured by lanyard.
- > Shall be provided with releasable buoyant line or other means to secure it to a lifejacket wearer by another person in water.
- > shall be provided with suitable means to allow a rescuer to lift the wearer from water to survival/craft.
- > life jacket & whistle shall be selected and secured to the life jacket so that their performance in combination is not degraded.

Passengers

- > On all ships are to be provided with life jackets for infants.
- > on all ships where adult lifejackets are not designed to fit persons weighing up to 140 kg with chest girth of up to 1750 mm, suitable accessories are to be provided that allow the lifejacket to be secured to six persons.

## IG Systems :

Force from 1 January 2016

### Oil & Chemical Tankers:

> SOLAS requires that an inert gas system to be fitted on all new oil and chemical tankers of  $\geq 8000$  dwt (when transporting low flash point cargo  $< 60^\circ\text{C}$ )

Oil tankers above 20,000 dwt were already required to install such system -

> For tankers fitted with exhaust gas incinerating system, the applications of inert gas must be carried out during loading, on passage, unloading, tank cleaning and prior to gas freeing.

However, for Chemical tankers, the application of inert gas may take place after cargo has been loaded, but before the commencement of unloading (only if  $\text{N}_2$  is used as inert gas) and shall continue to be applied until that cargo tank has been purged to all flammable vapours before gas freeing.

> Oxygen limit (all tankers) for inert gas supplied to cargo tanks has also been lowered from 8% to 5% for new systems.

## Chemical Tankers:

The exemption for existing chemical tankers with tank volumes not exceeding  $3000 \text{ m}^3$ , fitted with tank cleaning machine with a throughput not exceeding  $110 \text{ m}^3/\text{h}$ , does not apply to chemical tankers delivered after 1 Jan 2016

→  $17.5 \text{ m}^3/\text{h}$  (per nozzle) and a Total Combined throughput not exceeding  $110 \text{ m}^3/\text{h}$

Related draft amendments to FSS code were also agreed, resulting in complete replacement of Chapter 15 (Inert gas system).