Swedish Transport Agency-International regulatory aspects

Gabor Szemler

International liaison officer



Content

International aspects

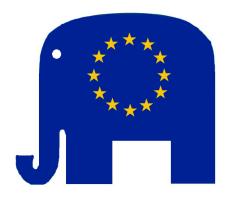
- Regulatory framework (FRP)

Conventions/Guidelines

- Experience



International arena









Thank you!

gabor.szemler@transportstyrelsen.se



Swedish national regulations based on functional requirements-TSFS 2017:26



This presentation will focus on newbuildings.

 In order to have a reasonable level of details, the presentation of the regulations is in some parts simplified and not exhaustive.



TSFS 2017:26

- The Swedish national regulations TSFS 2017:26 entered into force in 2017.
- These regulations are based on functional requirements.
- One of the intentions with these regulations is to enable alternative design, unconventional technical solutions and to be technology neutral.



Application

These regulations apply to:

- Passenger ships of less than 24 meters in length engaged on domestic voyage
- Passenger ships of 24 meters in length and above engaged on domestic voyage in sea area E



Application

These regulations apply to:

- Cargo ships engaged on domestic voyage
- Cargo ships of less than 500 gross tonnage engaged on international voyage



Application

These regulations apply to:

Fishing vessels of less than 24 meters in length



Functional requirements – fire protection

- separate potential sources of ignition from fuel and other flammable gases, liquids and materials,
- establish fire integrity of spaces with increased fire risk and otherwise create boundaries that can limit fire spread,
- 3. <u>limit the probability of fire growth and minimize the risk</u> of toxic gases being formed in the event of fire,



Functional requirements – fire protection

- load-bearing structures can withstand fire during the ship's evacuation time,
- 5. enable early detection of fire,
- 6. suitable fire-fighting equipment which can be used instantly in all spaces is available, and
- 7. safe escape routes to open deck are available from enclosed spaces where persons can stay.



Verification of conformity with the functional requirements

The functional requirements are to be met through three alternative methods or a combination of these:

- 1. Rules and regulations for ships
- 2. Risk management/Engineering analysis
- 3. Empirical data



1. Rules and regulations for ships

These rules and regulations contains detailed requirements, for example specific provisions for:

- Fire integrity of bulkheads and decks
- Fixed fire-extinguishing systems
- Fire detection and alarm systems



1. Rules and regulations for ships

Rules and regulations (in this context) can be developed by:

- National Administrations, not limited to the Swedish administration (STA)
- Classification societies
- Standardization bodies



2. Risk management/Engineering analysis

This method for verification shall be based on established scientific methods such as:

 ISO-standards for risk management – risk assessment techniques



2. Risk management/Engineering analysis

- IMO circulars such as:
 - MSC/Circ.1002 GUIDELINES ON ALTERNATIVE DESIGN
 AND ARRANGEMENTS FOR FIRE SAFETY
 - MSC.1/Circ.1212 GUIDELINES ON ALTERNATIVE DESIGN
 AND ARRANGEMENTS FOR SOLAS CHAPTERS II-1 AND III
 - MSC.1/Circ.1455 GUIDELINES FOR THE APPROVAL OF ALTERNATIVES AND EQUIVALENTS AS PROVIDED FOR IN VARIOUS IMO INSTRUMENTS

3. Empirical data

This method for verification shall be based on data gathered from:

- Experimentation
- Tests
- Experience from events that have occured



The shipowners responsibility

Before a ship is engaged in trade the shipowner shall:

 verify conformity with applicable funtional requirements in regulations TSFS 2017:26



The shipowners responsibility

- Compile a documentation that makes it possible to assess seaworthiness, maintain safe operation and perform maintenance, troubleshooting and surveys in an efficient manner
 - The documentation shall show how the functional requirements are met



Certification

To be engaged in trade, a ship shall have a trade certificate. This applies to all passenger ships and cargo ships of 15 meters in length and above.

The certificate shall show that the ship during a survey complied with the prescribed requirements.

The trade certificate is issued by STA.



Summary related to E-LASS

In the view of STA, shipbuilding in FRP is challenging.



Summary related to E-LASS

As mentioned by previous speaker, vessels constructed in material other than steel or equivalent and not covered by the standards concerning High Speed Craft (Resolution MSC 36 (63)) or Dynamically Supported Craft (Resolution A.373 (X)) are excluded from Directive 2009/45/EC on safety rules and standards for passenger ships.



Summary related to E-LASS

However, for ships where TSFS 2017:26 is applicable:

Any ship, for example a ship built in FRP, fulfilling the functional requirements of the regulations can be certified.

