**DNV-GL** 

**MARITIME** 

## National Transportation Safety Board REGULATORY FRAMEWORK

**Role of Class** 

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What is a classification society and what functions are performed by these organizations upon passenger vessels

#### What is a classification society

- An organization which:
  - publishes its own classification Rules (including technical requirements) in relation to the design, construction and survey of ships, and has the capacity to apply, maintain and update those Rules and Regulations with its own resources on a regular basis;
  - verifies compliance with these Rules during construction and periodically during a classed ship's service life;
  - publishes a register of classed ships;
  - is not controlled by, and does not have interests in, ship-owners, shipbuilders or others engaged commercially in the manufacture, equipping, repair or operation of ships; and
  - is authorized by a Flag Administration as defined in SOLAS Chapter XI-1,
    Regulation 1 and listed accordingly in the IMO database, Global Integrated
    Shipping Information System (GISIS).

#### The History of classification Societies



- Societies was set up by marine insurers
- To meet the need of marine insurers
- Rating of the ships to be covered by hull insurance

- First class societies
  - Lloyd's Register (1760)
  - Bureau Veritas (1828)
  - American Bureau of Shipping (1862)
  - Det Norske Veritas (1864)



#### **History of Classification Societies**

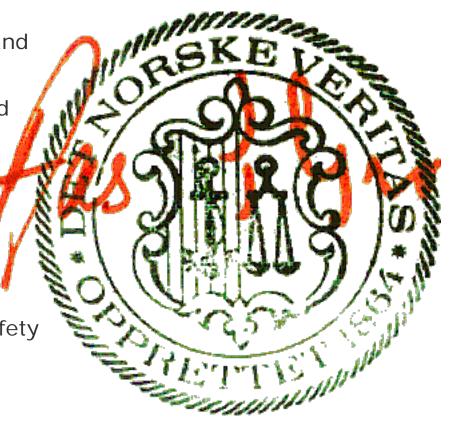
- The term "classification" comes from classes of safety standards
  - Typically for the hull: A, B, C, etc.
  - For the Equipment (machinery): Good, Middling, Bad (later changed to 1, 2, 3)
- Classification is a 3rd Party Service
- Balance the interests of all parties and set acceptance levels according to societal expectations.

#### **Class Concept Today**

Set quality standards for hull, machinery and equipment

 Verify that ships are built and maintained according to these standards

- Additionally Roles:
  - When delegated by Flag authorities
    - Verify that ships are designed, built, operated and maintained according to international and national maritime safety conventions



#### **Short overview of Class Rules and International Legislation**

#### **Class rules covers:**

- Ship Structures
- Ship Systems
- Ship Equipment
- Procedures

#### **International Legislation covers:**

- Life saving appliances
- Navigation
- Fire protection and extinction
- Load Line, Stability
- Radio Communication
- Carriage of dangerous goods and chemicals
- Safety Management (ISM Code)
- Security (ISPS Code)
- Pollution Prevention
- Accommodation
- Manning
- Working conditions (ILO MLC)

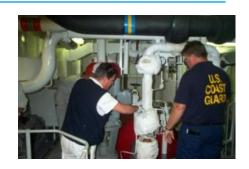


#### Scope of classification – short version...

- Technical review of the design to verify compliance
- Follow up that the vessel is build according to the approved plans and class rules
- Follow up that components conforms with the applicable rule requirements
- Verify during sea trail and other trails that the vessel and equipment comply with the relevant rule requirements
- Issue classification certificate when the above is satisfactory
- Follow up that the vessel is in compliance with the relevant rules requirements during operation

#### **Common Misunderstandings**

- We are not a Police Force and we don't want to be one
- We cannot assume the responsibility of the owner to maintain the vessel
- We cannot tell a ship owner how to repair the vessel
- We cannot exempt a vessel from complying with international requirements (SOLAS < MARPOL, etc)</li>

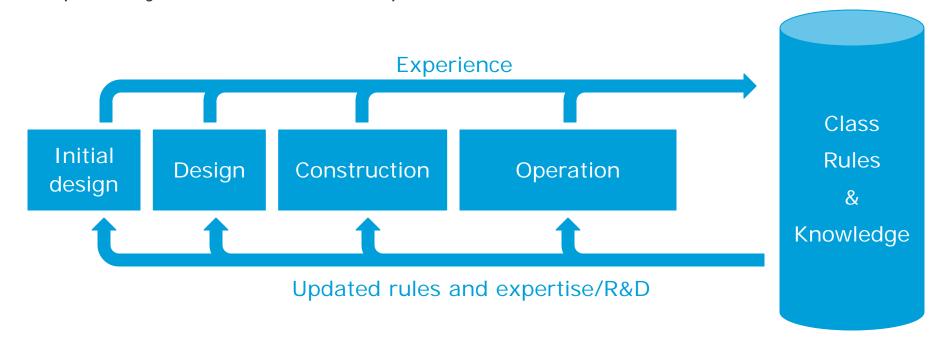




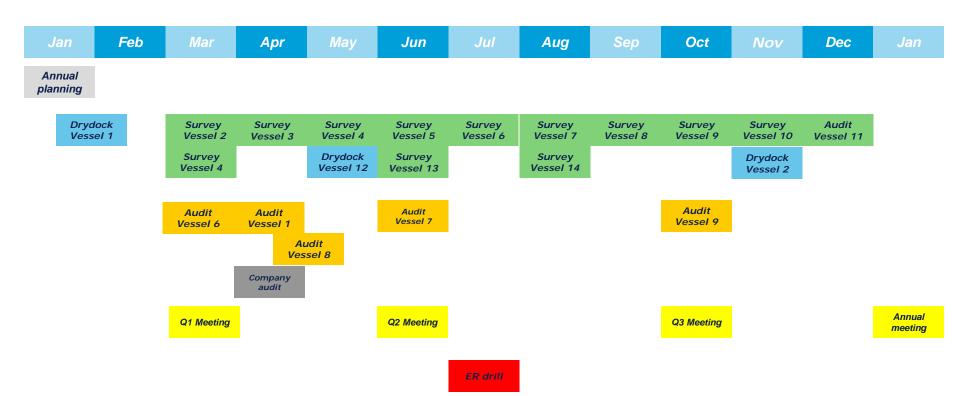
# Benefits to safety provided by the classification process

#### Key benefits to safety provided by the classification process

- 3rd party verification and follow up of the standard of the vessel
- Global network to follow up global operation in a consistent way
- Class is a competence organization that contributes significantly throughout the ships life cycle, to assure that requirements are met



### A year with DNV GL (Vessels in operation) - more than a single survey or audit



Regular follow up beyond surveys and audits

Measures are in place to prevent the owner of a substandard passenger vessel from changing class to obtain a relaxation of standards

#### Strict procedural requirement is implemented

- PR1A Procedure for Transfer of Class (IACS) sets requirement to how to manage this process
- To illustrate the process:
  - The gaining society is not to issue an interim Certification of Class, or other documents enabling the vessel to trade:
    - Until all overdue surveys and all overdue recommendations / conditions of class previously issued against the subject vessel as specified to the Owner by the losing society, have been completed and rectified by:
      - The gaining society, for vessels less than 15 years of age
      - The loosing society, for vessels 15 years of age and above

#### Mechanisms that prevents owner seek relaxation of standards

### Classification Societies are subject to oversight from:

- IACS
  - Audits
- Flag Authorities
  - Audits and performance monitoring
- Port State control
  - The reputation of the different class societies is carefully monitored and the statistics are official

#### Commercial mechanisms:

- Relaxation of standards leads to increased risk for insurance. Increased risk for insurance leads to higher premiums.
- Cruise vessel owners, in general, wants a thorough class partner to reduce their business risk (Operational interruption is way to expensive)

There is always competition between the class societies. Based on my experience the appraisal is based on service, quality and fee.

#### Process for withdrawal of class

#### Basis for maintenance of class

#### **General requirements:**

- Valid statutory certificates
- Maintenance of the ship and its equipment
- Handling of the ship The vessel shall be adequately manned, and the hull, machinery, systems and equipment shall be competently handled at all times. Class conditions regarding the use of the ship are to be observed.
- Ref. DNV Rules Pt.1 Ch.1 Sec.3 A100 (July 2010)

#### **Obligations:**

In order to **retain a ship's class** with the Society, the owner is to:

- submit complete and correct information
- subject the ship to
  - periodical and renewal surveys,
  - surveys of damage,
  - repairs,
  - conversions and alterations
- subject the ship to unscheduled surveys when deemed necessary by the Society
- rectify deficiencies and carry out Conditions of Class within the given time limit
- pay all fees and expenses due to the Society
- Ref. DNV Rules Pt.1 Ch.1 Sec.3 A100 (July 2010)

Failure to meet any of these requirements may lead to suspension or withdrawal of the class and thereby invalidation of all class and statutory certificates

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## International Association of Classification Societies (IACS)

#### The International Association of Classification Societies (IACS)

#### IACS:

- Is a NGO (non-governmental organization)
- Is a technically based organization consisting of thirteen marine classification societies headquartered in London
- Provides a forum within which the member societies can discuss, research and adopt technical criteria that enhance maritime safety.
- Is an active advocate for improving standards

More than 50 organizations worldwide define their activities as providing marine classification. Any classification society that meets the conditions of membership may apply for membership within IACS. To remain a member of IACS, all members are required to demonstrate continued compliance with quality standards as determined by periodic audits.

## DNV GL dedicated to make the cruise industry Safer, Smarter and Greener

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