Third Maritime Talks

Classification Societies

- Guarantors for Maritime Safety? -

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Classification Societies’ Contribution to Maritime Safety

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Dear President Wolfrum, dear Judges, Ladies and Gentlemen,

I am truly honoured to be offered the opportunity to speak at this conference to this highly professional audience. I am going to present to your kind attention our views on classification societies’ contribution to maritime safety.

Being the first speaker this morning I should introduce to everybody some basic understanding of the work of
classification societies and thereby setting the ground for the following speakers.

Let me start with some introductory remarks about the historic background of classification. I will then come to today’s scope of services offered by classification societies and to our contributions to maritime safety. I will end this presentation by saying a few words regarding the liability regime applicable to classification societies and recent developments at EU and IMO level.

1. Historic Facts

Germanischer Lloyd Aktiengesellschaft was established in 1867. 140 years of history of our society are also 140 years of being part of the history influencing us. For a technical supervisory organisation such as Germanischer Lloyd, this also means 140 years in the historical development of marine technology and the constant adjustment of a technical supervisory organisation to make its contribution towards safety, especially at sea for ships and their crews.

Initial systematic assessment of the design, equipment and condition of the ships was undertaken already in the eighteenth century. In 1764, the first register of ships was published by underwriters and brokers in London, containing details of the condition of the registered ships. In particular, marine insurers and the seafarers were interested in the availability of a reliable and objective
assessment of the condition of a ship for which underwriters had to evaluate the risk of insurance or to which seamen were to entrust their lives. This called for an independent, impartial and objective technical organisation to assess the ships with respect to their seaworthiness, their classification and their technical supervision.

The ships were sorted according to their design, condition and age into different classes. From this, the technical supervisory organisations derived the name “classification society”.

It should be stated that the technical supervision of ships was a private initiative and that technical rules and regulations for the promotion of safety existed on a private basis until the first international convention was adopted 1914, in response to the Titanic disaster.

2. Classification Societies’ Scope of Services

Classification societies provide technical supervisory services, which are outlined below, based on their own set of technical rules and statutory regulation. I would like to explain the following issues considering Germanischer Lloyd as example.

2.1 Classification Rules

2.1.1 Development of classification rules

The rules are the essential and distinguishing part of our service functions, and it is a unique procedure that we - as
classification societies - develop our own rules being recognised as “State of Technology”.

The rules are per se our **contribution to maritime safety**.

At Germanischer Lloyd rules, regulations and guidelines are developed through extensive research and development (R & D).

This is achieved by national and international research projects and Germanischer Lloyd’s permanent involvement in scientific-technical activities of many types. A high amount of investment is annually reserved for these R & D activities.

The rules are further developed through the know-how and experience of our engineers, many of whom have gathered work experience at shipyards, with marine suppliers and/or ship operators, and from the close feedback of our worldwide network of surveyors. In order to meet the requirements of an international business it is essential to be represented worldwide by our exclusive surveyors. They can provide worldwide services, gaining experiences through services at shipyards at different levels of technical know-how. In regularly held training sessions at the head office, views and experiences will be exchanged and therefore substantial interaction of technical knowledge will take place. These experiences together with the R & D activities influence the rules. This unique system is a further **contribution to maritime safety**.
Additionally, to ensure that field service experience is quickly incorporated in our rules and guidelines, the information flow is concentrated in one single department in Hamburg. Here new rules will be prepared using further technical expertise from our head office and in close consultation with our technical advisory committee. Comparing this procedure with international industry standards it is unbeatably faster and leads to standards which continuously reflect the state of technology.

Unlike other industry standards our rules also have to stay abreast of changes in order to support innovative design of our clients, which is a further **contribution to maritime safety** as we have the expertise to evaluate whether a new design meets the safety concept of our rules and whether a new design is equivalent to them.

The classification rules cover the structural integrity and mechanical ability of the vessel including hull structures, machinery and electrical installations, test procedures for materials and welding and analysis techniques such as for strength and stability.

The rules are published and known to all clients such as yards, ship owners, ship suppliers and flag state authorities.

### 2.1.2 IACS unified requirements

In 1968 the leading classification societies - including Germanischer Lloyd - decided to establish an International
Association of Classification Societies (IACS), which presently comprises ten members and one associate member. Long before IACS’ formal inception, a more or less organised dialogue existed among the world’s leading classification societies. The formation of IACS formalised this relationship and created a permanent forum for the exchange of information and the adoption of a common practice and a common approach in the realm of technical standards and their application. Unified requirements have been developed providing for a minimum standard for specific rules and practices, which also contributes to maritime safety.

2.2 Statutory Rules

Several international conventions are dealing with the safety at sea and environment protection. Over the years IMO has promoted the adoption of some 30 conventions - such as SOLAS, Load Line and MARPOL - and Protocols, and additionally, well over 500 codes and recommendations. It should be noted that all of them are devoted to different topics; none of them deals with the whole system “vessel”. The conventions and codes usually utilise inspection requirements and the issuance of certificates as a means of enforcement.

The main objective of the SOLAS Convention is to specify minimum standards for the construction, equipment and operation of ships.
The MARPOL Convention is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes.

The International Convention on Load Lines regulates the freeboard, which should ensure adequate stability and avoid excessive stress on the ship's hull as a result of overloading.

Further to this convention additional regulations have been introduced by regional or local law.

2.3 Dual functions

As stated above, adequate construction and maintenance of a ship including its essential machinery and electrical installation are throughout the world safeguarded by one of the international classification societies through their involvement during construction, and subsequently during a ship’s service life. This fact has enabled the international conventions and national statutory regulations to cover this area by just setting up very generalized provisions and by referring for their implementation to those classification societies acceptable to the national authorities to act on their behalf. All flag states therefore accept the class certificates issued by a classification society recognized by them to be sufficient basis for the issuance of the statutory certificate called Cargo Ship Safety Construction Certificate required internationally by the SOLAS Conventions.
This is a further **contribution to maritime safety**: The availability of a reliable well trained network of surveyors of classification societies acting for flag states world-wide.

Having now explained the basis for all services of a classification society, I will go now into further details of our work.

### 2.4 Services towards shipyards

The scope of services towards shipyards is laid down in our technical rules and in our agreements with the shipyard. Germanischer Lloyd will render to a shipyard the approval of drawings as its first service. The drawings will be sent to the respective departments mainly in Germanischer Lloyd’s head office. Here the technical experts will review the submitted documents whether they comply with the rules and regulations. If not, the shipyard will be informed and changes will be requested until they meet the requirements. These services are not only related to the classification rules but also to statutory regulations. At the site of the yard, Germanischer Lloyd surveyors carry out a technical supervision during the construction in order to ensure that the construction of the vessel is in line with the approved drawings and the rules and regulations. Next to this, the surveyor will observe the relevant tests and trials and will check whether approved components are used by the shipyard. Upon satisfactory completion of this procedure,
the certificate of classification will be issued and handed over to the shipyard.

Here we have the unique situation that enables Germanischer Lloyd as the rule-making body to observe the implementation of the rules and to safeguard their proper interpretation. This procedure is the next **contribution to maritime safety**.

This advantage of classification applies also to all other services of Germanischer Lloyd described hereinafter.

### 2.5 Services towards ship suppliers

The scope of services towards the suppliers depends on the respective equipment or material at the relevant production facilities. The services range from obligatory final inspections to random inspections of material and components according to our rules and, if applicable, according to the regulations of flag states.

Several components require type approvals. In this case Germanischer Lloyd inspects and certifies a representative sample of the respective product for compliance with the rules. Additionally with regard to certain materials and components, each single product underlies final inspection by Germanischer Lloyd upon completion. In other cases only random inspections are executed. This in particular applies for “simple” products, e.g. cables.
In summary, all these services are not intended to take over responsibility from the manufacturer, but to ensure through a system developed during more than 100 years a valuable supervision of the production of materials and components. Germanischer Lloyd does not only approve or testing the respective product, but through its rules and regulations it has a clear understanding of the overall system which the equipment will become part of. This is a further contribution to maritime safety.

2.6 Services towards ship owners

After the shipyard has delivered the vessel and the class certificate to the ship owner, the latter becomes contracted partner of Germanischer Lloyd.

The ship owner entrusts Germanischer Lloyd with the classification and statutory certification of his vessel. Once in service, it is mandatory for the owner to introduce the vessel to a clearly specified program based on a five-year-cycle and consisting of annual surveys, an intermediate survey and a class renewal-special survey. The rigor of each specified survey increases with the age of the vessel. The class surveys are carried out onboard the vessel.

It should be noted that to a certain extent classification is voluntary and its effectiveness depends in so far upon the ship owner as he is responsible to co-operate in good faith by disclosing to the classification society any damage or deterioration that may affect the vessel’s classification
status. It is neither possible nor part of the agreement with the ship owner that the surveyors scrutinize the entire structure of the vessel or its machinery.

At this stage it is a very important **contribution to maritime safety** that the classification society supervises the vessel during its entire life cycle starting from the newbuilding phase and thereafter, through its world-wide network, which applies also to its statutory work.

### 2.7 Services towards flag states

In general, no government has at its disposal a marine administration in existence that is capable of performing its obligations under the Conventions, particularly on an international basis, all on its own. In this respect we contribute with our worldwide network of exclusive surveyors. The nature and extent of delegation vary from government to government. The working relationship is covered by the IMO resolution A.739(18) giving “guidelines for the authorisation of organisations acting on behalf of the administration” adopted in 1993 including a model agreement. In Europe an EU Directive on classification societies (94/57/EC) applies, which became effective in 1996. European member states can grant an authorisation to organisations to undertake fully or in part inspections and surveys related to certificates under the international conventions. The authorisation can be granted provided that the organisations comply with certain criteria as set out in the annex of the Directive. Such information then has to be
submitted to the EU Commission for recognition. A recognised organisation can offer its services to all European flag states. The working relationship between flag state and classification societies is described in the directive and shall be regulated by a formalised written agreement which also sets up minimum figures for financial liability. Classification societies offer their services to more than 100 governments around the world.

In some countries the respective maritime administration issues the certificates itself based on survey reports of the classification societies, whereas in other flag states the classification society is solely responsible for the whole certification process. The interpretation of the statutory rules, however, rests with the flag state, often advised by classification societies.

### 2.7.1 ISM

As a further statutory service under the umbrella of Maritime Quality Management, Germanischer Lloyd carries out the certification of safety management according to the International Safety Management Code.

The services offered to the ship owner by Germanischer Lloyd as a recognised organisation is related to the compliance with the ISM standard in respect to the shore based organisation and the ships. The audit of the shore based organisation is finalised in a document of compliance,
the audit of the ships in the safety management certificate. The certificates are valid for a five-years-period based on regular audits.

Through this independent auditing, Germanischer Lloyd supports the identification of weak points in the quality system of the ship owner and his vessels, which is a further contribution to maritime safety.

While the ISM code is a standard against “internal risks”, a further code called ISPS is a security standard against “external hazards”.

2.7.2 ISPS Code

This further statutory duty is related to the International Ship & Port Safety Code, a reaction of the IMO to 9/11. The IMO has recognised its responsibility for maritime security with a view to preventing “shipping from becoming a soft target for international terrorism”. Its response has been an amendment to SOLAS, the ISPS Code. The Code introduced a whole range of security measures aimed at tackling the terrorist threat to shipping and port facilities. They include, for example, the performance of security assessments, preparation of security plans, stricter access controls and the appointment of Company Security Officers (CSO) and Ship Security Officers (SSO).
The ship owner himself will prepare a risk analysis and will prepare a ship security plan. The risk analysis will be handed over to Germanischer Lloyd as one of the recognised security organisations for approval. If the documents fulfil the requirements of the ISPS Code, Germanischer Lloyd will issue the international ship security certificate on behalf of the respective flag state. Germanischer Lloyd also observes the realisation of the plans.

The service in respect to ports and harbours is different. Here the national authorities are responsible for the assessment of security plans.

The fact that the classification societies are able to provide these services worldwide with staff duly trained in respect to security matters is also a contribution to maritime safety.

2.7.3 Ship Data

The registerbook containing main particulars of all ships registered with Germanischer Lloyd is continuously updated and published. For the German administration, Germanischer Lloyd publishes the data for all German vessels notwithstanding the respective class.

This data and the survey status are available through Germanischer Lloyds' data base Fleet Online. These data are available to administrations, and according to European
law they are available to port state control officers and the Commission via the data base SIRENAC and the European data base Equasis, which is a further contribution to maritime safety.

I could continue with further services of Germanischer Lloyd contributing to maritime safety such as our 24 hours Emergency Response Service for all Germanischer Lloyd classed vessels as well as our additional environmental passport. Our performance at Port State Control shows that we contribute to maritime safety being number one on the list.

Coming now to the end of my presentation I would like to give a few comments in respect to recent developments.

3. Recent developments

3.1 Liability

Recent casualties such as the Erika and Prestige case have shown that classification societies could, at some point, be exposed to unlimited liability. However, is it appropriate that the class is the only organisation contributing to maritime safety to be exposed to this? This could fill a separate presentation; today, I will only address one aspect.

The flag administration and its civil servants are protected by the sovereign immunity of the state, which prevents it
under international law from being held liable by another state.
The same protection is granted to the port state administrations and its officers.
The ship owner is protected by a limitation of liability granted by maritime law and international conventions on general maritime transport (1924 and 1957 conventions, LLMC convention) and on marine pollution (CLC, HNS, Bunker conventions). He can also obtain financial protection by using single ship companies.
The pilot, the charterer, including the bareboat charterer, the manager, the operator and the salvor cannot be sued for pollution damages “unless they acted by intent or recklessly” (1992 CLC Protocol).

There is no such general immunity regime for class societies. Only in respect to oil pollution we can currently rely on an extensive interpretation of the CLC protocol.

Classification societies can only limit their liability by contract with their own clients. In certain circumstances, it is also possible to limit liability vis-à-vis third parties, but only in a few legal systems.

This potential exposure to an unlimited liability is perceived as one of the greatest threats currently being faced by classification societies and we all have to consider whether this is of advantage to maritime safety.
In order to safeguard our contributions to maritime safety, it is time for a convention which clearly states a limitation of liability also for class societies.

3.2 IMO and EU developments

There is always room for improvement in the way rules and regulations are developed and framed. That is why the IMO is discussing to set out top level goals and levels for risk regarding safety and environmental protection. Here it should be noted that present classification rules do, of course, reflect certain goals, but these are not always transparent outside of IACS.

I am looking forward to listening to Ms. Hoppe at this conference, who will explain this significant change to the current complex system and, I am sure, also its contribution to maritime safety.

In respect to the recent modification of the EU Directive on classification societies we will hear Mr. Terling. I would only like to mention that we believe further discussion with the Commission, Parliament and Council is necessary. Striving for an open competition among small national class societies the directive should not lose sight of its actual purpose of maritime safety, to which Germanischer Lloyd seeks to contribute in the future as having done ever since.

We strongly believe that our unique system - historically developed – has always been an important factor for
maritime safety; therefore, new initiatives should clearly evaluate whether or not they really improve this system.