EVOLVING DEMANDS ON CLASSIFICATION SOCIETIES
The Role and Responsibilities of Class

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Good morning. It is a pleasure to be here.

My thanks to the conference organizers for giving me this opportunity to talk to you about class and the part we play within the maritime safety regime, particularly as it relates to the environment.

I recognize that many of you are familiar with classification and I ask for your indulgence.

I want to take a few minutes to explain what class is, why it exists, what it does and, just as importantly, does not do, and of the concerns I have for the future as there are many others here today who are expert in their own fields but may not have a clear understanding of the role of class.

That lack of familiarity is perfectly understandable.

Although the genesis of class can be traced back to the 1760’s, and ABS itself was founded in 1862, class operates within a very narrow and very specialized area within the maritime industry.

Its role as the independent mechanism for technical self-regulation of this industry is a vital one, yet it rarely receives even the briefest mention outside of the specialist trade press.

Understandably, a daily newspaper or TV beat reporter assigned to cover a shipping incident, may not have time to fully grasp the function and responsibilities of all the parties involved, including the classification society.

For example, it is common for media reports of a casualty to include a statement to the effect that the classification society “guaranteed the seaworthiness” of the ship.

This type of shorthand conclusion is a fair reflection of the public perception of our role, but is far from the reality.

Sometimes these perceptions may contribute to lawsuits, such as those currently faced by ABS in the aftermath of a major oil spill in Europe.

In that instance, it is notable that no significant nor sovereign legal action has been taken against the owner of the ship, or against the company that operated the vessel.

To date, it is the classification society that is bearing the brunt, with the claims now amounting to in excess of one billion dollars.
Although we are in no doubt that we will prevail in the courts, these actions are indicative of perhaps the greatest threat currently being faced by the classification sector – our exposure to potentially unlimited liability for services for which our fees may have been a few hundred dollars.

Class is the only member of the safety regime that is exposed in this manner.

The shipowner is able to limit liability.

The flag State can claim sovereign immunity.

Yet many flag States are forcing the class societies that act on their behalf as a statutory agent to accept unlimited liability for the services they provide.

This is an untenable position.

We cannot insure ourselves against such potentially ruinous exposure.

Unless a more rational approach is permitted it could lead to the end of class as it is currently structured.

If the independent self-regulating mechanism is terminated, the need to establish and verify conformance with appropriate safety standards will not go away.

And there is only one foreseeable way in which that need could be filled.

That is by government taking on the activities traditionally vested with the classification societies.

And you can be sure that those governments will quickly extend to themselves the protection from liability that they are currently denying to the class societies.

How the majority of those governments would carry out those additional responsibilities is beyond me.

Most flag States already delegate at least part of their maritime regulatory responsibilities to the class sector.

They do so because they simply do not have the depth of technical expertise, nor can they cost-effectively establish the worldwide network of surveyors needed to carry out their existing duties.

I am also seriously concerned over the growing exposure of classification personnel, from executives to field surveyors, to criminal penalties for our actions.
There have been attempts to make these penalties apply for acts of simple negligence or omission.

The penalties are completely disproportionate to the services rendered and the fee charged and they have a chilling effect on the conduct of our business.

It is increasingly difficult to reassure our field surveyors to carry out their duties in a balanced, professional manner when those actions may subsequently be misconstrued in a distant courtroom and lead to a jail cell.

So you can understand my sensitivity on this issue and my desire to take a few minutes to explain who we are and what we do.

I want to underline the importance of our contribution to maritime safety and the necessity to continue to promote a viable, professional and independent classification sector.

In doing so I will talk specifically about what it is that ABS does.

We currently class more than 9,000 vessels from tugs and barges to Ultra Large Crude Carriers.

They aggregate more than 112m gross tons and represent about 17 percent of the world’s commercial fleet.

We are currently the third largest classification society in the world, based on our fleet size, and are one of the ten members of the International Association of Classification Societies that jointly class an estimated 94 percent of the world fleet.

I want to firmly restate that ABS and the other class societies do have a vital role in protecting the marine environment.

The ABS Mission Statement is quite clear on this point.

It says that “The mission of ABS is to serve the public interest as well as the needs of our clients by promoting the security of life, property and the natural environment.”

How do we do that?

The statement continues “primarily through the development and verification of standards for the design, construction and operational maintenance of marine-related facilities.”

That is a heavy burden.
It is a process that starts well before the initial design of the vessel or offshore facility.

The distinguishing characteristics of class are firstly that the individual societies have traditionally developed their own detailed technical standards, or Rules, for the building and classing of vessels.

And that a vessel must not only be designed and built to those Rules but must continue to meet those standards throughout its service life if class is to be maintained.

Traditionally these Rules have been established on an empirical basis, reflecting the continuous feedback that is received from our experience with the service performance of vessels in our fleet.

More recently, sophisticated computer programs have been developed that apply engineering first principles to consider the dynamic loads that will be placed on the vessel throughout its service life.

These programs can scientifically take account of the effects of factors such as fatigue, corrosion and buckling.

We maintain a large research and development department that contributes towards the development of our Rules, often working in conjunction with the leading universities and industry research facilities and sometimes jointly with our colleagues at the other major class societies.

In recent years, there has been a marked trend within shipping companies – from the largest oil majors to the small independent owners – to scale back on their own in-house technical departments.

The result has been a growing reliance on class to act as the technical resource for the industry, a position that is underlined by class’ role as the de facto technical advisor to the International Maritime Organization.

I have mixed feelings about this trend.

On the one hand it is reassuring to know that the industry has the confidence to use class in this way.

Yet, from a practical point of view, it has placed a heavier burden on our engineers, who review new vessel designs, and on our field surveyors when conducting periodic and damage surveyors.
In the past they would work closely with comparably experienced personnel within many shipowners’ technical departments.

That level of mutual support, although still present, is becoming less common.

Our challenge is to forge strong working partnerships with all of our clients, providing them with technically sound, practical counsel throughout a vessel’s life, from design department to scrap yard.

Class also plays a dual role through its statutory activities on behalf of flag states in areas as diverse as issuing load line certificates to inspecting fire fighting and life saving equipment.

This is a role that continues to expand, more recently through our auditing activities of ships and offices to the International Ship Management Code or ISM, and most recently as Recognized Security Organizations under the International Ship and Port Facility or ISPS Code.

When you combine our life-cycle classification activities with these increasing statutory certification responsibilities, it is understandable that misunderstandings of our role may arise in the mind of the casual observer – government officials, the general media or the average citizen in a coastal state that has been affected by an oil spill.

They tend to think that class is the industry’s policeman with widespread powers of enforcement.

We are not.

They tend to think that class has responsibility for the maintenance of the ship or that we warrant or guarantee a ship’s seaworthiness.

We don’t.

We are part of an overall safety regime that starts with the shipowner and includes flag states, port states, the IMO, underwriters, charterers and the many other parties who have responsibilities for quality shipping.

The primary responsibility rests with the shipowner.

It is the owner who has direct day to day control over the ship, how it is operated and how it is maintained.

As the class society we do not know how the ship is being operated, what cargoes it is carrying or what services it is performing at any one time.
If, in the course of that service, the vessel incurs damage, it is the owner who is aware of the damage and it is the owner who is required to notify the classification society.

We do not tell the owner how to repair the damage – we verify that, once repairs are complete, the structure or machinery item is once more in conformance with our Rules.

Absent being called under such circumstances, the classification society surveyor goes on board the vessel just once a year.

The survey consists of a sampling, with particular attention being paid to areas of the vessel's structure, or items of machinery, that experience has shown to be most at risk.

Two surveyors are assigned to a tanker or bulk carrier once it reaches 15 years of age but the survey remains a sampling.

Remember, a VLCC is longer than the Empire State Building in New York is tall.

It is comprised of some 38,000 tons of steel, many miles of welds and an engine, generators and equipment capable of providing power to a city of several thousand people.

It is simply not feasible to require a survey regime that inspects every inch and every component.

That is a key difference between a survey, which is a carefully targeted sampling, and an inspection.

And inspecting every inch is not necessary. The current system not only works but it works very well.

It is not widely known, for example, that the international shipping industry has a better safety record than the airline industry.

The casualty statistics for the international shipping industry show a strong and clear path of continuous improvement.

There are more than 5,600 bulk carriers of more than 10,000 tons deadweight in the world’s fleet. Four of them were lost in 2003, none of them attributable to structural failure.

The containership sector has an enviable safety record with just one ship, from a fleet of over 3,000 having been lost in the last three years.
The international tanker industry transports several billion tons of oil and oil related products across the world’s oceans every year.

And it delivers 99.9994 percent of that cargo without incident. Just two tankers were lost in 2003 from a fleet of 3,570.

Yet that outstanding record counts for nothing when there is the occasional large oil spill that directly and dramatically impacts a coastal state and its environment.

The bad news is that perfection is not possible.

As long as oil is transported – whether by ship or pipeline or truck – there will be occasional failures.

These may be attributable to human error – the constant wild card in the safety equation – or to structural or mechanical failure, to terrorism or any of a number of other risks.

The challenge that we all face is to clearly identify all possible hazards, evaluate them and adopt strategies that minimize the risk or mitigate their consequences.

So what more can class do to help prevent future failures?

The battle is never ending so I will highlight some of the initiatives with which ABS is currently involved.

The first is the most important and represents the most fundamental change in the classification process since its inception.

It is the development of new Common Structural Rules for double hull tankers and for bulk carriers that will be adopted by all IACS member societies in 2005.

You may recall that earlier I mentioned two points – one, that traditionally each class society developed its own standards or Rules, and two, that increased computing power has led to the development of more sophisticated, scientific based methods for assessing a vessel’s strength.

These programs have allowed ship designers to “optimize” a design with great precision.

Unfortunately some shipyards and ABS have had different definitions of “optimization”.

We believe that this scientific approach encourages the designer to allocate the steel in the vessel to the critical areas that are subject to the greatest stress, thereby strengthening the overall structure.
Shipyards, operating in a fiercely competitive arena, have interpreted “optimization” as meaning using the least amount of steel allowable under the most lenient interpretation of any one major classification society’s Rules.

Factor in the current usage of high tensile steel and the result is that a 2004 built tanker or bulk carrier has a significantly lower steel weight than a comparably sized vessel built in the 1970s.

I must emphasize that these new ships remain fit for their intended purpose.

But, as they age, they require a vigorous and comprehensive approach to maintenance, particularly of the coatings.

Recognizing the manner in which the Rules were being exploited, ABS, DNV and Lloyds Register – three of the top four international societies – took a radical decision in 2001.

We announced that we would work together to jointly develop a new set of Common Structural Rules for tankers that we would each adopt and apply in a uniform manner to eliminate the competitive loophole that the shipyards were exploiting.

We knew from the outset that this initiative would result in more robust ships with more steel and with that steel correctly allocated within the structure to best counter the stresses the vessel would be subjected to.

We agreed to set standards that address the most severe operating environment a vessel can face – the North Atlantic, and to establish criteria for a 25 year service life under such conditions.

It has been deeply gratifying to have elicited support from the other seven IACS members for this approach, and for IACS to subsequently agree to extend common rules to other ship types starting with bulk carriers.

It has also been gratifying to have attracted support for this initiative from shipowners and from the International Maritime Organization which is working with IACS to develop Goal Based Standards that will more clearly define the overall parameters under which specific classification Rules will be developed in the future.

Although the Common Rules initiative is the most dramatic development affecting tanker and bulk carrier safety being undertaken by class, it is far from the only one. Some of the many others in which ABS is involved include:
- the development of reliability centered maintenance guidelines targeted at minimizing the risk of mechanical or machinery failure.

- the recent release of the first class standards for inerting ballast spaces on double hull tankers, to reduce the rate of corrosion in these areas and also to protect against explosion should cargo seep into these spaces.

- A common IACS project to develop new Unified Rules that address the survey of tankers and other vessels during the construction period.

- The development of new ergonomic standards for navigation bridges and for crew habitability, designed to reduce the risk of human error.

- Participation in another joint IACS program that is developing practical standards for coatings of the cargo and ballast spaces to address an area of particular concern to the industry.

And in a related area, ABS has been investing heavily in the development of new safety standards for the marine transportation of LNG that will assist users to switch from oil to this more environmentally friendly energy alternative.

These projects, and many others, are all indicative of the day to day, largely behind the scenes work that the modern class society undertakes.

Do we still make mistakes. Of course. We are human.

That is why the overall safety regime is so important.

And why it is so important that we be granted appropriate liability relief at least for simple negligence or omissions.

It is only when the shipowner, his operator, classification society, flag State, insurer, charterer and the world’s port states work together, each mutually recognizing the role and contribution of the other parties, that the highest level of safety can be attained.

This is a system that works. It has worked for more than 150 years.

Good as this industry’s safety record is, it can be improved.

Class is doing everything it possibly can to help raise those standards and to drive the sub-standard operator off the high seas.

I have no doubt whatsoever in my mind that an independent classification regime is the most innovative and responsive technical approach and the most cost effective method of establishing and verifying safety standards.
At ABS, we are committed to meeting our responsibilities.

Some of you in this room are our partners. Many more work with other classification societies.

I urge you to work even more closely with each other, and with class, so that we can better protect this planet and its fragile natural resources.

Thank you.