

# “THE ROLE OF A PROFESSIONAL SOCIETY IN PROMOTING SUCCESS IN THE MARITIME INDUSTRY”

A keynote speech by

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## ABSTRACT

The historic role of engineering professional institutions such as the Royal Institution of Naval Architects has been to promote and facilitate the exchange of technical and scientific information, views and discussion, and through this to influence and contribute towards furthering the knowledge and standards within their particular discipline of engineering. Professional institutions today have a wider and more proactive part to play in helping to provide the engineers with the knowledge, understanding and professional skills who are essential to the future success of the maritime industry. This paper examines the pivotal role a modern professional institution plays in the education, professional development and employment of engineers.

## INTRODUCTION

I am sure that I do not need to tell you that all sectors of the maritime industry are today facing challenges, the like and scale of which many in the industry will not have experienced before. They are obvious to all in the industry.

It is therefore not surprising that as I visit universities and meet with students, I find that they too are aware of the present state of industry which they hope to join. It is therefore also not surprising that they ask me what are their career prospects.

Had I been asked that question prior to 2008, only eight years ago, I would have told them that the global maritime industry was enjoying a level of prosperity it had not known for many years, with the order books of many shipyards and shipping rates at record levels for recent times. Their career prospects were correspondingly very good.

Today, following the global financial crisis in 2008, I would tell them that the maritime industry still offered a good career, but that the industry was indeed facing many challenges in responding to the downturn in activity which it and many other industries are experiencing. However, I would also tell them that many sectors of the industry are responding to those challenges as they seek to return to the success they have previously enjoyed. But, I would warn them that the maritime industry will continue to face those challenges for the foreseeable future, and that they will have an important part to play in ensuring that the maritime industry continues its progress, as will professional societies.

A key factor in both achieving and maintaining that progress to success which the industry is making as it responds to the challenges it faces is innovative thinking in all sectors. By innovation, I mean “to bring in new ideas, to introduce new methods, to make changes, to invent, and to discover “ Such innovation has and will continue to require commitment and investment, but perhaps most importantly, people with the knowledge, understanding and professional skills needed by the maritime industry both today and in the future.

The maritime industry is highly dependent on technology, and it is therefore in technological and scientific development

that innovation has had and will continue to have the greatest impact in providing ships and marine structures which cost less to design, build and operate, are safer, and are more sensitive to the environment. Conferences such as MARTEC 2016 will present such developments. However, I believe that professional societies have a key role and responsibility in helping to ensure that engineers in the maritime industry have that knowledge and understanding and those professional skills. A professional society should fulfil this role and responsibility by setting standards of professional competence and both encouraging and assisting engineers to achieve and maintain those standards.

In referring to the maritime industry, I include those who educate, train, and carry out research, as well as those who design, produce, maintain and regulate. Co-operation between all those sectors is another key factor in ensuring the success of the maritime industry, and professional societies have an important role to play in helping to achieve that co-operation.

But in order to examine how professional societies can promote success in the maritime industry, I would like to take a wider look at the role and responsibilities of a modern professional society.

When the Royal Institution of Naval Architects was formed in 1860, its objectives were to promote the art and science of naval architecture. As with other engineering professional societies set up at that time, its main function was to enable and encourage the exchange of information relating to ship design and construction. Access to information is of course essential to the professional development of any engineer. This was achieved mainly through the publication and discussion of technical and scientific papers. In this way, the Institution was able to influence and contribute towards furthering the knowledge and standards of engineering.

Professional societies at that time also gave advice on the education and training of engineers, which of course is crucial to achieving and maintaining high professional standards.

Whilst those fundamental aims, which I am sure are shared by other professional societies, remain equally valid today, I believe that professional societies today must play a much more proactive role in the education, training and professional development of engineers in the maritime industry, and in doing so, help to promote the success of the maritime industry.

In presenting my view of how a professional society should fulfil that role, I will use the Royal Institution of Naval Architects as the basis for that view. In doing so, I would not wish to imply that RINA is a template for either a governing body or a professional society, although after over 150 years, it must be a worthwhile example. More importantly, it is also an international organisation, able to represent and serve members of an international industry.

## **WHAT IS A PROFESSION?**

Even if you are not members of a professional society, if you are an engineer, I am sure you would call yourself a professional engineer. But what is a professional engineer? What is a profession? In examining the role of a modern professional society, we should start by first answering that question, whether applied to engineering, medicine, law etc. To quote the Concise Oxford Dictionary, a profession is a vocation or calling, esp. one which involves some branch of advanced learning or science, or it is a body of persons engaged in a profession.

### **Governing Body**

Key amongst those factors which distinguish a profession and therefore a member of that profession is the requirement for it to have a governing body and for it to be a regulated, either voluntarily or by law.

This governing body should set standards of professional competence as a condition of entry to the profession and therefore the achievement of professional status. The governing body should also actively encourage and assist the members of that profession to achieve and maintain those standards.

In addition to setting standards of professional competence, the governing body of a profession should also set and enforce standards of ethical and professional conduct to be observed by members of that profession. It should have a Code of Professional Conduct which must be followed by all its members, and be a condition of membership.

I believe that it is a function of a modern professional society to be such a governing body for its members. I also believe that to be considered as a member of a profession such as engineering, and to describe oneself as a professional engineer, an individual must accept those conditions and criteria which define a profession, including the authority of a governing body such as a professional society. Logically, therefore, to be counted as a professional engineer, an individual should be a member of an engineering professional society and accept its authority.

## **PROFESSIONAL COMPETENCE**

Membership of a professional society should be dependent upon demonstrating the achievement of defined minimum standards of professional competence, and a commitment to maintaining such competence. And for those who have not yet achieved such standards, membership of a professional society should be dependent on demonstrating the commitment to doing so.

Membership of a professional society should also require the acceptance of a commitment to act at all times with professional integrity. Professional engineers are defined by not only their professional competence, but also by their professional integrity.

### **Setting standards**

Whilst acknowledging the wide range of activities which engineers in the maritime industry might be engaged on and their need therefore for differing expertise, the professional society should nonetheless define the minimum standards of professional competence to be achieved by all its members.

### **Measuring standards**

As a governing body, a professional society should not only set the standards of professional competence, but should also have clearly defined procedures for determining whether those applying to become members have met those standards. Such procedures must be transparent and consistent if the governing body and implicitly the professional engineer is to have credibility and respect.

### **Academic achievement**

For most engineers, education is a means to an end, and not an end in itself. Education should provide the knowledge and understanding that will form the basis of the professional skills which will be gained through training and experience. A professional society should therefore define the academic achievement necessary to underpin the professional competence required for full membership.

### **Initial Professional Development**

During the period between graduation and achieving the minimum standards of professional competence defined by a professional society, the engineer will develop the professional skills needed to provide a sound foundation for his or her career.

Professional societies should recognise that it is the achievement of competence rather than the route or time to achieving it which is important. Such a route to professional competence, for example, may include an approved academic course at an appropriate level, followed by a company's structured training programme, followed by a period of responsible experience.

However, a professional society should also recognise that professional competence is not simply the achievement of a formal academic qualification or completion of a formal training programme. The professional society should therefore recognise that the knowledge and understanding which underpins professional competence may be achieved

through experience, as well as through formal academic study and structured training.

### **Continuing Professional Development**

It is self-evident that an engineer's professional development does not cease when he or she achieves those minimum standards of professional competence required by a professional society for full membership, but that such development should continue through their careers. Continuing Professional Development will be necessary for professional engineers to remain competent to carry out their professional duties. Such development will be different for each individual engineer and be determined by the specific requirements of his or her current or expected employment.

As such, whilst a professional society may advise and guide on activities which contribute to continuing professional development, it should not be prescriptive about what type and how much of activity each individual should undertake. An activity, whether it be reading a technical journal or attending a conference, will be relevant only if it contributes towards the individual's professional development.

The professional society should place an obligation on its members who are in or seeking work to take all reasonable steps to maintain and develop their professional competence. Its members should be required to plan and record their professional development. However, employers must also recognise their role and vested self interest in requiring and assisting their engineers in continuing their professional development.

It is a key role of a modern professional society to assist its members to achieve and maintain its required standards of professional competence. The expertise of a company, which is a key factor in its success, is the collective expertise of its engineers.

### **Access to information**

Essential to achieving and maintaining professional competence is access to credible and up to date information on technical developments. Such access should be provided by a professional society through its publications, conferences and local meetings. A modern professional society must use modern means of communications. Professional societies should also co-operate with each other in providing such information, for example, by joint conferences.

However, the ultimate responsibility for continuing professional development must rest with the individual. The commitment and necessary action to maintaining professional competence is a prerequisite to being a member of a profession. Continuing professional development and being a professional engineer are synonymous.

### **THE PARTNERS**

The modern professional society should provide a link between academia, individual engineers, industry and society, who may all be considered its partners in promoting the success of the maritime industry.

## **THE PROFESSIONAL SOCIETY AND ACADEMIA**

For all but a few, education is a means to an end, and for most engineers, that end is the needs of industry, using the term in its broadest sense. Through its individual members who will generally reflect the full spectrum of professional activity in industry, and through its links with industry, a professional society is in an ideal position to be able to advise academic institutions on the professional needs of industry, and therefore the academic base which is necessary to properly fit graduates to achieve the professional skills required to meet industry's needs, both today and in the future. The modern professional society also has a role in validating the suitability and effectiveness of an academic course in providing that base.

## **THE PROFESSIONAL SOCIETY AND INDUSTRY**

The vast majority of members of professional societies will develop and exercise their professional skills in industry. How then should the membership of a modern professional society by its engineers benefit industry?

### **Improving the company's image**

Membership of a professional society should identify professional engineers by substantiating their professional competence and experience. By helping and encouraging engineers to achieve professional recognition through membership of a professional society, a company strengthens its reputation for quality, thus improving its image with its customers.

### **Making the most of a company's most valuable asset.**

Membership of a professional society should enable individual engineers to demonstrate that they have achieved or are working to achieve validated standards of professional competence. Encouraging and assisting their engineers to achieve that professional validation through membership of a professional society shows a company's faith in their abilities, and commitment to making the most of the company's most valuable asset, its people.

### **Improving a company's competitiveness.**

The standing of a professional society should be such that by employing members of that society, its customers can be assured that they are dealing with a company that is so concerned with professional standards that it has chosen to have the quality of its engineers evaluated objectively. Its customers will know that the company's engineers who are members of a professional institution have an inside track to the latest developments within their field. By employing professionally recognised engineers, a company implicitly demonstrates its own professionalism, thereby improving its competitiveness.

### **Expanding a company's knowledge**

The access to up-to-date technical information that a professional society should provide through its publications, conferences and local meetings should ensure that its members are amongst the most well informed people in

industry. For any company which wishes to expand its knowledge base, employing members of a professional institution is therefore a sure and cost effective way of doing so.

Encouraging and assisting its employees to achieve membership of a professional society will therefore give a company a competitive advantage, strengthen its future and develop its internal knowledge base, and should be seen as an investment rather than a cost. Those benefits will be best achieved by industry working in partnership with professional societies.

## **THE PROFESSIONAL SOCIETY AND THE INDIVIDUAL**

A professional society today must recognise that modern engineering is invariably complex, and is usually a team activity to which individuals bring the particular contribution for which their education, training and experience has fitted them. They may be primarily concerned with innovation, creativity and change, or with the management of existing technologies at peak efficiency, or with the efficient application of proven engineering techniques, all of which contribute to industry's success.

But what benefit should a professional institution provide to its members who are members of this engineering team, and which in turn benefit their companies and the maritime industry?

### **Demonstrating individual value**

Membership of a professional society and achieving its minimum standard of professional competence and commitment should be recognised as a benchmark of professional status that is recognised and respected by other individuals, industry and society, thereby demonstrating the individual's value.

### **Increasing individual value**

A professional society should provide its members with the opportunity to keep up to date with developments in their industry. The knowledge and the contacts which they gain from their membership go straight back into the company where they work, so an individual's value to their company or future company will increase.

### **Valuing the profession**

A professional society should provide engineers with the opportunity to demonstrate support for their chosen profession and to help shape its future. The use of that opportunity is of course a matter for the individual. However, it may be considered the exercise of that responsibility to support and help shape the profession is in fact a prerequisite for being a member of a profession, and is therefore the duty of all members of that profession.

### **Self value**

It is a natural desire for individuals to want their skills and achievement acknowledged by their peers, by their employer and by society. But perhaps just as important is the sense of

pride which comes from doing something to the best of the individual's ability. Gaining professional recognition through membership of a professional society should not come easily, but should provide a sense of great personal achievement.

Membership of a professional society should make a real difference to an individual's personal and professional development. The requirements for membership of a professional institution should be the acknowledged benchmarks of professional excellence. When the individual achieves these standards of excellence it should mean that they have been recognised by their profession as a competent professional who is committed to maintaining those standards.

## **THE PROFESSIONAL SOCIETY AND SOCIETY**

The professional society's main contribution to the success of the maritime industry will be in helping to provide engineers with the knowledge, understanding and professional competence required by the industry. However, a professional society also has a responsibility to use its collective expertise for the benefit of society – the public who will use the products of the maritime industry.

Societies and governments which represent them will place their trust in the professional competence, judgement and integrity of engineers, and will expect them to put the interests of the community above those of personal or sectional interests.

Increasingly in a modern society, such competence, judgement and integrity are no longer being taken for granted but are being questioned and challenged, as evidenced by society's willingness to go to litigation, or governments' demand for change when such competence, judgement and integrity fail or appears to fail to meet society's increased expectation. Today for example, the individual engineer in the maritime industry must respond to the increasing demands by society and their representatives for greater safety and protection of the environment, as well as the more efficient and sustainable use of resources.

Individual members of a profession will enjoy the esteem and respect which society has of the profession as a whole, or suffer from the lack of it. Conversely, society's view of a profession will invariably be determined by the actions of its individual members.

It is implicit that as members of a profession, individuals will observe standards of ethical and professional conduct, set and enforced by its governing body, both with regard to the individual member of society and to society as a whole. It is therefore necessary that as a governing body, a professional society should regulate the activities of its members by, for example, a Code of Professional Conduct. Such a Code should require that all members of the professional institution will always exercise their professional skill and judgement to the best of their ability and discharge their professional responsibility with integrity.

What therefore can and should society expect of a professional society?

## **Professional competence**

Such is the breadth of activities which its members may be engaged upon, membership of a professional society cannot in itself provide a guarantee that a member is competent to carry out every activity which a member of that profession might be engaged upon.

However, membership of a professional society should provide society with the assurance that members will only undertake work which they have sufficient competence, time and authority to perform, and implicitly will take all reasonable steps to maintain and develop their professional competence.

## **Professional integrity**

Society has the right to expect that a professional society today will require its members to act at all times with honesty, impartiality and integrity in respect of their professional activities.

## **Health and safety**

Society also has a right to expect that a professional society will require its members to always act in a manner so as to safeguard the public interest in matters of safety and health, of both the individual and the environment. The professional society should therefore require of its members that in the course of their professional work, they will consider and minimise the risk to the health and safety of both the public and the environment.

## **Corporate standards**

In addition to setting and enforcing standards of individual professional competence and integrity, I believe that professional societies also have a responsibility to promote and encourage corresponding corporate standards by those companies and organisations which employ engineers. This may be achieved through its links with industry, and by advisory or active participation in national and international organisations which are responsible for setting corporate standards. I believe that the professional society has a duty and responsibility to make its collective expertise available to such bodies, both proactively and reactively, as for example the contribution which the Royal Institution of Naval Architects makes to the formation of international legislation concerning safety through its membership as a Non Government Organisation with the International Maritime Organisation.

## **Regulation and Enforcement**

It is the ultimate responsibility of governments to ensure the protection of the public interest and the collective good of society. However, regardless of any governmental requirement for registration or licence, the professional institution must recognize that it too has a responsibility to society to enforce the standards of professional and ethical conduct required by their Codes of Professional Conduct. A professional society should have a clearly defined disciplinary procedure to be followed in response to any allegation of improper professional conduct by its members.

The confidence of society in a profession requires the willingness of professional societies to enforce their professional standards, and to take action where those standards have not been met. Such action may of course be limited, but this does not remove the obligation.

## **ACCOUNTABILITY AND RESPONSIBILITY**

In a modern society which is increasingly demanding greater individual and corporate accountability, to whom then is the professional society accountable?

Clearly a professional society is accountable to its individual members, who may be considered as its shareholders, implicitly owning the society and collectively forming the profession. However, in setting and enforcing professional standards, it is essential that the professional society acts independently and without favour to the individual member.

Whilst mindful that its members are employed in industry, professional societies should not seek to promote or endorse the commercial interests of industry, nor indeed of national interests. A professional society's credibility demands its independence of both industry and governments.

The professional society should require that member's obligations under the society's Code of Professional Conduct should take precedence over those to their employer, where conflict exists. Such factors as loyalty or alternatively fear of consequent action by the employer do not remove that obligation.

Similarly, the professional society must recognise that its obligations to society should also take precedence over those to its individual members. Payment of membership fees should not imply acceptance or support by a professional society of all its members' actions, right or wrong.

Finally, the professional society should also be accountable to the profession which it represents and serves. It has a responsibility to the profession to contribute towards furthering knowledge and understanding in the profession and to promoting the highest standards of practice by its members. In doing so, it must recognise and be responsive to the changing needs of individuals, industry and society.

The professional society also has a responsibility to promote and represent the profession, whether that be in the understanding and perception which society and its representatives have the profession, or in encouraging and supporting those who may be considering becoming members of the profession or have newly joined the profession, through its activities related to schools and universities.

## **CONCLUSIONS**

In summary, the role of the professional society in promoting the success of the maritime industry is complex and wide-ranging.

- It should promote and facilitate the advancement of knowledge and understanding which underpins professional skills.

- It should set the standards of professional competence and integrity to be achieved and exercised by its members, acknowledging the wide range of activities upon which its members might be engaged upon. It should recognise the ultimate needs of the maritime industry in setting those standards, and its responsibility to society in enforcing them.
- It should both guide and assist its members in achieving those standards. It should also encourage and contribute to the corporate achievement of those standards.
- It should promote and represent the profession, seeking to further the understanding and awareness which society and its representatives have of the profession.
- Throughout, it must recognise and respond to the changing needs of the profession, and implicitly the needs of its members, which it serves.

The role of a professional society is not an easy one, but it is, I believe, a vital one in contributing to the success of the maritime industry. I hope you will agree, and in my view of a professional society, you will recognise your own professional society.

May I end by reminding you of where I started, innovation is the key to the success of the maritime industry, but the key to innovation is people with the knowledge, understanding and professional skills which industry needs. Professional societies have an important role in providing such people, called engineers.