

## **Competence Profiles – Guidance for applicants and Assessors**

### **PART 2 – INDUSTRY CLASSIFICATION (B) – SHIPPING & GENERAL INSURANCE**

#### **Introduction**

The purpose of this document is to outline, in advance of commencing the Professional Review, the standards of performance, knowledge and managerial capabilities that are required for engineers working in the field of marine surveying to be elected or transferred to Member of the Institution of Mechanical Engineers.

The reason for compiling this document is to improve the consistency of approach for all members of professional review panels.

Within the job definitions the outline of the rôles at different seniority levels is described. However, these are not intended to be comprehensive. In order for comprehensive rôles to be determined, a detailed job description will need to be consulted.

A table is included in support of job definitions and this gives details of basic training courses and core skills that are needed to perform at the various levels.

#### **Grades and Core Responsibilities**

<b>GRADE</b>	<b>LINE MANAGEMENT responsibility</b>	<b>TECHNICAL SKILLS</b>	<b>NON- TECHNICAL SKILLS</b>	<b>TRAINING REQUIREMENT (courses)</b>
<b>Senior Principal Surveyor</b> (see supporting job definition)	Administering and leading Senior management  Setting KPI and KRA  Involved in policy matters, major programmes and plans  Strategic business and budgetary input	Technical competence embraces varied and complicated disciplines and applications of work	As per Principal Surveyor and:  Strategic awareness  Advanced management techniques  Organisational theory competence  Advanced performance monitoring	As per Principal Surveyor <u>plus</u> :  Finance for managers  Strategic management
<b>Principal Surveyor</b> (see supporting job definition)	Administering and leading Senior staff  Marketing, sales and negotiating responsibility  Influence on LR business operations	Technical in depth competence of fundamental principles of a distinct engineering or allied function  * Senior Principal at this level has additional	Leading advisory skills  Achievement driven  Independent thought and judgement  Broad knowledge of LR activity	As per Senior Surveyor <u>plus</u> :  Line Management  Commercial Awareness  Effectively managing unacceptable performance

	Budgetary and delivery monitoring	world-wide/strategic responsibilities	Able to obtain group co-operation  Budget responsibility  Cultural awareness	Performance measures/ Performance improvement  Budget preparation / monitoring  Negotiation techniques
<b>Senior Surveyor</b> (see supporting job definition)	Administering and leading group of Surveyors  Office finance awareness  KPI and KRA monitoring	Marine Surveying course  Training scheme in the engineering, shipbuilding or associated fields and supervisory experience in a marine environment or equivalent.  IF NOT staff management responsibility, will have Technical Specialisation	Enterprise and initiative  Leading rôle in local functions  Organisational skills  Staff management responsibility  Tasks and problem solution involving judgement outside R&R and previous practice  Broad knowledge of LR activity  Knowledge of local office practices  Awareness of Harassment and Grievance Policies	Team leadership workshop  Office finance  Project Management  Working effectively  QA Lead Auditor  Presentation techniques  Appraisal skills  Recruitment/ interview skills
<b>Surveyor</b> (see supporting job definition)	NO managerial responsibility but may provide guidance to staff with less authority/ knowledge	Technical expertise in broad areas of activity	Time management skills  Tasks and problem solution via application of standard methods  Computer literate	Appropriate Technical training and Certified Authorisations  Basic QA
<b>Assistant</b>	NO	Technical	Self-	Appropriate

<b>Surveyor</b>	management responsibility	competence in a limited area of activity	management skills Written skills Nurate Computer literate	Technical training and Certified Authorisations (points)
<b>Trainee Surveyor</b> (only for UK Graduate Trainee Scheme)				As requested by the Graduate Trainee Programme
<b>Specialist I and II</b> (see supporting job definition)				

#### Job titles

The Job Titles that follow cover six levels of work responsibilities:

Senior Principal Surveyor  
Principal Surveyor  
Senior Surveyor I  
Senior Surveyor II  
Surveyor  
Assistant Surveyor

and two levels of specialist work responsibilities Specialist I and II.

They are intended to be a guide to the grading of staff in accordance with their duties and responsibilities. Where these are unclear, job descriptions may be called for in order to assist in the allocation of the correct grade and title.

The terms and characteristics contained in the grade definitions should be read in relation to total job content and responsibilities.

The Experience described is that normally expected to enable the jobholder to fulfil the required levels of function and responsibility.

#### **General characteristics of Senior Principal Surveyor**

##### Range of Duties

Authoritative, advisory and managerial responsibility for the management and direction of certain defined areas of the organisation's operations. The control exercised allows scope for fresh and imaginative treatment where alternative courses of action are required to be applied to a wide range of problems or difficult techniques. In addition, there is a need to exercise managerial skills over a considerable and varied range of activities.

A Senior Principal Surveyor would be responsible for ensuring process control is maintained over the area of responsibility. He/she will set KPIs and KRAs for groups under his/her control.

### Decisions and Recommendations

Decisions consistently relate to, and possibly affect the technical philosophy and service delivery of the Society. There is an involvement with broad policy matters, major programmes and plans.

### Supervision Received

Subject only to overall policy and budgetary control, leave and travel authorisation.

### Supervision Exercised

Full managerial and technical responsibility over a large department or UK region.

### Experience and Qualifications Required

A degree in engineering or other related physical science.

The experience required is such as to enable the job holder to: either fulfil a management rôle, covering the breadth and depth and the fundamental principles of a major area of the company's work, or the technical experience required embraces varied and complicated disciplines and applications of the company's work.

In both cases, the experience should enable the jobholder to give authoritative guidance in the delivery of the company's activities.

### Grade of Membership

Would qualify for **Fellow** of the Institution.

### **General characteristics of Principal Surveyor**

#### Range of Duties

Although the jobholder may be engaged on survey duties or other "production" duties from time to time, there is a major requirement to take a leading advisory rôle in a particular discipline or a specialist function. In addition, the jobholder may administer and direct the work of a particular group of surveyors. The jobholder plays an active and leading rôle in most technical matters, using enterprise and initiative with a significant contribution to the company's development. His/her relationship with clients and with the company is active and at such a level as to influence the company's business operations.

Under broad directives, independent judgement and creative thought are exercised in the solution of a range of problems related to a principal subject or the wider application of the principles of several subjects to a wide range of problems. In the application of standard methods or techniques, substantial variations or adaptations may sometimes have to be made by the jobholder.

The jobholder is required to obtain maximum co-operation of personnel of different skills, and to select and lead staff in the conduct of external negotiations on important and difficult matters. He/she is required to deploy resources with an opportunity to vary methods to achieve the best quality of service. The jobholder will produce and monitor the financial and delivery levels for the area of responsibility.

### Decisions and Recommendations

Decisions relate to the prime responsibility for the progression and achievement of delivering a quality service to clients high in technical and intellectual content, and demanding developed powers of organisation, management and/or technical problem solving.

Matters of principle are dealt with, which affect a considerable area of the company's operations and influence the development of major functions.

### Supervision Received

Supervision received relates to broad terms of adherence to policy and the satisfactory accomplishment of major assignments and functions.

Normal line management controls.

### Supervision Exercised

The jobholder assumes a major rôle as adviser and consultant in a fundamental discipline, and is an established source of expertise in his/her field, local functional responsibility for the supervision and management of groups and sections of staff.

### Experience and Qualifications Required

A degree in engineering or other related physical science.

The experience required is such as to enable the jobholder to fulfil a supervisory rôle covering in depth the fundamental principles of a distinct engineering or allied function. Alternatively, embraces varied and complicated disciplines and applications of the company's work. In both cases, a major contribution to development is required.

### Grade of Membership

Would qualify for **Fellow** of the Institution

### General characteristics of Senior Surveyor 1

#### Range of Duties

The jobholder will be engaged on survey duties or other "production" activities from time to time, as outlined in Senior II, there is a strong requirement to take a leading rôle in a particular discipline or a specialist function with minimum supervision for routine and regular activities. The jobholder may be called upon to take charge of an office or group involving leadership for direction of the work. The jobholder plays an active and leading rôle in most technical matters using enterprise and initiative with a significant contribution to the company's development. His/her relationships with clients and with the company are active and at such a level as to influence the company's business operations.

Under broad directives, independent judgement and creative thought are exercised in the solution of a range of problems related to a principal branch of a subject, or the application of the principles of several subjects to a wide range of problems. In the application of standard methods or techniques, substantial variations or adaptations may sometimes have to be made by the jobholder.

The jobholder is required to obtain co-operation of personnel of differing skills, and must deploy technical expertise in conducting external negotiations on important and difficult matters. He/she is required to commit resources with an opportunity of apportion between different terms and to vary methods to a degree that significantly affects the quality of service.

The jobholder will be able to construct a budget and monitor against the budget together with ensuring service levels are maintained against agreed KPI/KRAs.

#### Decisions and Recommendations

Decisions relate to the acceptability or otherwise of standards of workmanship, the interpretation of Rules and specifications and the suitability of arrangements or components. Judgements are required on questions and problems varying through a wide field outside Rules and Standards, where previous practice does not normally provide a solution.

Decisions require to be made on job priorities, work programmes, the time element of operations, demanding qualities of leadership in the organisation of tasks with a substantial technical content, and in the co-ordination of activities.

#### Supervision Received

Work is assigned with an emphasis on direct involvement with no restrictions outside the general guidelines of the assignment. Supervision is concerned with the satisfactory accomplishment of the tasks and functions assigned.

Normal line management controls.

#### Supervision Exercised

In a local office, the jobholder may have direct responsibility for the operational efficiency of an area or the functional responsibility for the work of a section of staff in a larger office.

In London, supervision may involve the day-to-day control of a significant portion of the work of a section in a department, with responsibility for organising and co-ordinating staff.

#### Experience and Qualifications Required

A degree in engineering or other related physical science.

The experience required is such as to enable the jobholder to fulfil a supervisory rôle covering in depth the fundamental principles of a distinct engineering or allied function. Alternatively, the experience required technically embraces varied and complicated disciplines and applications of the company's work. In most cases, the ability to provide a contribution to development is an important requirement.

#### Grade of Membership

Would qualify for **Member** (possibly Fellow) of the Institution

#### **General characteristics of Senior Surveyor 2**

##### Range of Duties

To carry out surveys in accordance with the applicable Rules on ships and their machinery and equipment during construction, periodical survey or repair. To carry out surveys in accordance with Statutory Requirements and clients' and other agreed requirements and specifications. To carry out testing and inspection of materials, equipment and components in accordance with the above mentioned requirements. To carry out inspection and testing as required by industrial Contracts and Specifications with a minimum supervision and broad understanding of all the company's activities and fee structures.

There may also be a requirement to take charge of operational activities of a small office.

In a large department, the work involves specialist or consultancy applications, the scrutiny of original designs and the evaluation of complete schemes, the determination of standards required and negotiations with clients.

### Decisions and Recommendations

Decisions relate to the acceptability or otherwise of standards of workmanship, the interpretation of Rules and specifications and the suitability of arrangements or components.

Judgements are required on questions and problems varying through a wide field outside Rules and Standards, where previous practice does not normally provide a solution.

Decisions require to be made in the special circumstances of surveys on older ships, and to provide second opinions as directed.

### Supervision Received

Work is assigned with an emphasis on direct involvement with no restrictions outside the general guidelines of the assignment. Supervision is concerned only with the satisfactory progression of the tasks and functions assigned.  
Normal line management controls.

### Supervision Exercised

A generally advisory rôle is exercised over less experienced colleagues with occasional direct supervision when instructed by their supervisory staff.

Alternatively, the jobholder may be directly responsible for the operational activities of one or two surveyors operating in the same departmental section/office.

### Experience and Qualifications Required

A degree in engineering or other related physical science, or a First Class Combined Steam and Motor Certificate, or a relevant Higher National Diploma.

Coupled with an apprenticeship in the engineering, shipbuilding, ship-repairing or associated fields of engineering and/or experience in a supervisory capacity or in a senior or managerial position of responsibility in a marine or engineering environment.

In the majority of cases, experience within the company is a necessary qualification.

### Grade of Membership

Could qualify as a **Member** of the Institution depending on qualifications and experience.  
Would qualify as an **Associate Member**.

### General characteristics of Surveyor

#### Range of Duties

To carry out surveys in accordance with the applicable Rules on ships and their machinery and equipment, during construction, periodical survey or repair. To carry out surveys in accordance with Statutory Requirements and Clients' and other agreed requirements and specifications. To carry out testing and inspection of materials, equipment and components in accordance with the above mentioned requirements. To carry out inspection and testing as required by industrial Contracts and Specifications.

In a large department, undertakes tasks or the solution of problems through the application of standard rules, regulations, methods and techniques with a moderate degree of variation or adaptation.

#### Decisions and Recommendations

Decisions relate to the acceptability or otherwise of standards of workmanship, the interpretation of Rules and Specifications and the suitability of arrangements or components. Published standards and sources of technical information are used when decisions relate to equivalents, matters of good engineering practice or the extent of renewals or repairs.

Judgements on the integrity, reliability and efficiency of arrangements or proposals are normally covered by independent analysis and interpretation with a considerable reliance on previous practices.

#### Supervision Received

Work is usually assigned with an outline of the methods to be followed or standards required but is not supervised in detail. Methods and day-to-day decisions are not usually checked, but reports and recommendations are subject to scrutiny, and difficult, complex or unusual matters are normally referred to a senior authority.  
Normal line management controls.

#### Supervision Exercised

In general, will not have management responsibility for other technical staff, but guidance may be given to staff with less authority.

#### Experience and Qualifications Required

A degree in engineering or other related physical science, or a First Class Combined Steam and Motor Certificate, or a relevant Higher National Diploma.

Coupled with an apprenticeship in the engineering, shipbuilding, ship-repairing or associated fields of engineering and/or experience in a supervisory capacity or in a senior or managerial position of responsibility in a marine or engineering environment.

#### Grade of Membership

Could qualify as a **Member** of the Institution depending on qualifications and experience.  
Would qualify as an **Associate Member**.