

Level 2

Signal Engineering: Implementation of IRSE Licensing Scheme – The Route to Competence

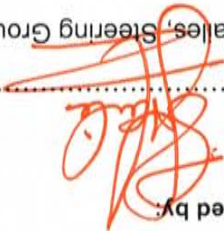
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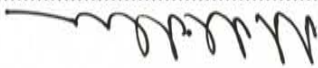
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Issue record

Issue	Date	Comments
1	April 2004	First Issue
2	03/09/2011	Maintenance of document, no change to requirements (CCMS document number 61378327)

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from the dates below.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 3 (Option Selection) to continue to comply with the issue of any relevant Network Rail standards current when GRIP Stage 3 was completed and not to comply with requirements contained herein, unless stipulated otherwise in the scope of this standard.

- Maintenance activities 31st March 2004
- Testing & Commissioning activities 30th June 2004
- Installation activities 31st December 2004
- Design activities 31st December 2004
- Engineering Management 30th June 2005

Reference documentation

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1 Purpose

This standard sets out the requirement for the mandatory application of the IRSE Licensing Scheme to Network Rail's own engineers and technicians as well as those of its contractors and / or consultants.

2 Scope

All engineers and technicians engaged on work affecting the safety and integrity of the signal infrastructure owned by Network Rail shall hold an IRSE Licence appropriate to the nature of their work.

3 Roles and responsibilities

Employers shall demonstrate that all employees undertaking safety critical and / or safety related work on Network Rail's signal infrastructure shall have had the education and training necessary to understand and carry out safely the activities on which they are employed. In addition to this, they shall have demonstrated their abilities to consistently carry out those activities in practice to the required standard. Employers have the responsibility to implement and record competence assessments and maintain the associated records. The IRSE Licensing Scheme will be used as the common standard so that all individuals whose work affects the safety and integrity of Network Rail's signal infrastructure have been assessed and certified as competent.

The IRSE Licensing Scheme is a means of confirming competence - each licence category is based on a range of performance criteria against which applicants shall demonstrate their competence. So that the licence is portable between different employers, the licence does not include 'type approval' for specific equipment and process. The competences that the licensee shall demonstrate are therefore described in generic terms. This means that the standards demanded by the IRSE Licensing Scheme are generic and the possession of a licence does not guarantee familiarity with a particular piece of equipment or system. Where appropriate, employers shall continue to utilize appropriate equipment specific competence assessments to demonstrate the competence of their staff. These assessments may be used to assist in the process of obtaining an IRSE Licence.

4 Definitions

IRSE	Institution of Railway Signal Engineers
Safety Critical Work	Defined term used in "Railways (Safety Critical Work) Regulations 1994". The HSE provide guidance by publishing a series of tables titled "Guidance on the definition of activities regarded as safety critical under the Railway (Safety Critical Work) Regulations 1994". For examples see section 6.3.1 .
Safety Related Work	Defined term used in "Railways (Safety Critical Work) Regulations 1994". The HSE provide guidance by publishing a series of tables titled "Guidance on the definition of activities regarded as safety critical under the Railway (Safety Critical Work) Regulations 1994". For examples see section 6.3.2 .
Primary Activity	The area(s) of activity that the individual is expected to fulfil as part of the normal course of their job, or as defined in their job

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description.

Secondary Activity

An area of activity, which the individual may be called to work in on occasions. These will not form part of the individual's normal work, nor be specified in their job description.

5 Procedure

5.1 The IRSE Licensing Scheme

The IRSE Licensing Scheme was introduced in October 1993 for railway signalling and telecommunications staff engaged on safety critical and safety related work. The IRSE Licensing Scheme meets the requirements of the European Standard EN45013 "General Criteria for Certification Bodies Operating Certification of Personnel". The scheme has achieved accreditation by the United Kingdom Accreditation Service (UKAS).

The IRSE Licensing Scheme is designed to assist employers of signal engineers and technicians to determine that personnel undertaking licensable work are competent, and that they are provided with relevant training and experience to maintain their competence. New employees should be provided with adequate induction training, so that they can competently undertake their allocated tasks, and fulfil their responsibilities for the implementation of safe systems of work. Employers are also required to undertake the mid-life review of the licences held by their employees.

A number of licence categories exist to cover design, installation, testing, maintenance and engineering management of both railway signalling and telecommunications. Further categories may be developed by the IRSE to meet the requirements of the industry.

5.2 Mandating the Timescales

The dates prescribed below are so that individuals hold licences for the primary areas of activity that they undertake.

The IRSE Licensing Scheme is to be applied to the following areas of work at the prescribed timescales:-

- Maintenance activities 31st March 2004
- Testing & Commissioning activities 30th June 2004
- Installation activities 31st December 2004
- Design activities 31st December 2004
- Engineering Management 30th June 2005

The areas of activity are defined below and indicate which roles within each area are to be licensed by the prescribed date.

5.2.1 Maintenance Activities

This is defined as individuals undertaking work directly on signal infrastructure as part of maintenance and fault finding activities. This category includes technical support staff and signal maintenance testers (SMTH). Also included are those who

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supervise or directly manage such individuals, but excludes more senior levels of engineering management.

Full details of the types of roles covered by “Maintenance Activities” and the corresponding IRSE Licence categories are included in [appendix A](#).

5.2.2 Testing & Commissioning Activities

This is defined as individuals undertaking work directly on signal infrastructure as part of either testing or commissioning activities. This activity covers all categories of “works tester” from Tester-in-Charge to Assistant Tester. It does not include maintenance testing.

Full details of the types of roles covered by “Testing & Commissioning Activities” and the corresponding IRSE Licence categories are included in [appendix B](#).

5.2.3 Installation Activities

This is defined as individuals undertaking work directly on or adjacent to signal infrastructure as part of installation activities. Also included are those who supervise or directly manage such individuals, but excludes more senior levels of engineering management.

Full details of the types of roles covered by “Installation Activities” and the corresponding IRSE Licence categories are included in [appendix C](#).

5.2.4 Design Activities

This is defined as individuals undertaking design work at all levels in the process. The only exclusion are those who are managing the process and are not engaged in the actual process of design or its verification, for example project engineers or engineering management.

Full details of the types of roles covered by “Design Activities” and the corresponding IRSE Licence categories are included in [appendix D](#).

5.2.5 Engineering Management Activities

This is defined as individuals who manage others undertaking Safety Critical or Safety Related work on signal infrastructure. It excludes those who directly manage signal technicians (e.g. “supervisors”).

Full details of the types of roles covered by “Engineering Management Activities” and the corresponding IRSE Licence categories are included in [appendix E](#).

5.3 Nature of the Work

It is the responsibility of Network Rail and its contractors to identify the competence requirements for each post holder. In turn this should lead to the identification of the most appropriate IRSE Licence for that post. In some instances more than one licence category may be indicated.

The nature of the licence shall relate to the **primary** area of work that the individual engages in. For instance, it is expected that designers will hold a design licence (at an appropriate level), maintainers will hold a maintenance licence, etc. In situations where an individual engages in **two or more** areas of **primary** activity (for instance design **and** maintenance) then it will be necessary to hold a licence for each category.