Ref No: PO 01
Issue No: 1.0
Issue date: March 2013

INSTITUTION OF RAILWAY SIGNAL ENGINEERS
MINOR RAILWAYS SECTION

GUIDELINE

ON

THE BASICS OF KEEPING AND MAINTAINING S & T RECORDS ON MINOR RAILWAYS

Record of Amendments		
Issue	Date	Amendments
1.0	March 2013	Initial Issue

Anyone who wishes to contribute additional items; or correct / amend any of the entries; or wants further information may contact the IRSE Minor Railways Section Document Co-ordinator at mrsdc@irse.org or via the IRSE Headquarters.

Any railway seeking to follow the guidelines in this document should ensure that it is suitable for their particular railway concern. Duty holders are reminded that they must be satisfied that they are doing all that is needed under health and safety duties to control risks. Compliance with this guideline issued by the IRSE is not mandatory as it provides advice on how an issue may be addressed.

TABLE OF CONTENTS

1 INTRODUCTION

This document is one of a series prepared for those associated with heritage railways who do not have a direct background in railway S & T engineering. This document describes the background and process for keeping operational records for the maintenance of S & T equipment and systems on minor railways. This is to assist new operations or existing railways with new systems to get started on maintaining and preserving their assets.

It is not intended to be a definitive document on how records on S & T equipment should be kept, but to disseminate best practice and advice on getting started with S & T records, collection and storage.

The IRSE Minor Railways Section has used its best endeavours to ensure that the contents of this document are factually and technically correct and is suitable for its stated purpose but the IRSE Minor Railways Section cannot be liable for any subsequent use to which the document may be put.

2 DEFINITIONS

See also IRSE Guideline document “Glossary of terms for Signalling and Telecommunications”.

Is (are) required	Used to indicate choices where firmer guidance might be indicated.
May	Used where guidance suggests optional choice.
Must	Used only where there is a legal or statutory requirement to the measures being described.
RGS	Railway Group Standard published by RSSB
S & T	Signal and Telecommunications
Should	Used as the primary verb for statements of guidance.

3 SAFETY CONSIDERATIONS

None

4 RECORD KEEPING

4.1 General

An effective method and system of record keeping is an essential contribution to the Safety Management System for the railway.

It is recommended that each record should be retained for the life of the asset or for such time as is determined by the particular railway and stated in the railway's Safety Management documentation.

4.1.1 Why keep records

Records are required to:

- Permanently retain details of the final testing and of any testing carried out during installation.
- Provide statistics and information on maintenance and testing activities, which could be a base for future maintenance frequency.
- Inform maintainers and management on the date when an activity was last carried out.
- Record asset performance, especially for those assets subject to dynamic influences like points.
- Provide evidence in the event of an inquiry.
- Provide an input to the safety management system

4.1.2 When should records be completed

Records are best completed as soon as the work is done.

4.1.3 How should records be kept

Records can be kept in any format to suit the local situation, for example:

- A loose-leaf book or folder.
- A record card kept centrally or on site.
- A computer in the office.
- A laptop/ tablet/ palmtop carried on the work site.
- In any convenient format providing it forms or is transferred to form a permanent record.

There needs to be a permanent copy.

4.1.4 What should be recorded

The railway's records should include details of the installation of all assets, their testing during installation and all testing taking place at commissioning.

Records should be kept of any activity carried out on maintenance visits and the results of any testing, adjustment or replacement, carried out and materials used. Records should include full details of any equipment replaced on a maintenance visit, including details of the origin and year of manufacture (if known) if a subsequent user, type, manufacturers name, serial number etc and the Asset Register updated.

Records should also be kept for all activities associated with major overhauls.

Taken together the records should give a picture of the performance of the equipment over its life.

4.2 Asset Records

It is recommended that all assets should be formally recorded on an asset register, which should form part of the Safety Management System for the railway. As a minimum the assets name, location, installation date, type, manufacturers name, serial number history and manufacture date (if known).

The asset register should be kept up to date with any change, replacement following maintenance changes or additional assets installed.

4.3 Task Records

Each piece of signalling or operational telecommunications equipment, whether it is safety critical or not, should have a set of defined maintenance tasks required to be carried out on a maintenance visit. The task record may be generic for a particular piece of equipment, which is installed in more than one location like a point machine or Signal Post Telephone, or specific to detail a particular location. The task information can be combined with a check list and is dated and signed may form the basis or the maintenance records.

4.3.1 Pocket Books

All individuals carrying out installation or maintenance on safety critical equipment should carry a pocket book in which all the individuals activities are noted. As a minimum the following should be recorded: the date, the task, the location, faults found, action to restore and the names of those attending.

At the simplest level of record system or on smaller systems, the pocket book can be retained by the railway as a permanent record for the Safety Management System and no further records completed.

4.4 Log Books & Professional Development

Logbooks are a useful way to record an individual's education, training, experience and work activity and are a useful tool in continuing professional development. Many proprietary systems such as those for the IRSE Licensing Scheme, the IET or on http://www.pd-how2.org/ but at a simple level a loose-leaf book with the necessary forms and information is sufficient. Both the IRSE and www.goskills.org the sector skills council for the transport industries also have a number of helpful papers on their web sites.

Logbooks assist in demonstrating the competence and experience particularly for individuals receiving on the job training and experience under the guidance of more experienced colleagues.

4.5 Record Systems

At its simplest the record system needs to be a book, a card or a computer record.

4.5.1 Record Book

Simple ruled sheets, on the basis of one per asset type or device, on which every maintenance and test activity is recorded each time any activity is carried out.

The record book can be kept on site and the contents transferred to a master record on a regular basis for the permanent record.

4.5.2 Record Card/ Index Card

A ruled or template form card on which the information required is entered. A number of examples exist and information on these is available from the IRSE Minor Railways Section Document Controller at mrsdc@irse.org.

4.5.3 Spreadsheet

A spreadsheet can be used to record the information, using a laptop, tablet or palmtop on site or on return to the maintenance base.

4.5.4 Database

On larger systems a database can be used to record the information allowing more sophisticated analysis to be carried out using information gathered on site visits and transferred to the database.

4.6 Use of Templates

Pre prepared templates for the production of the blank sheets, charts and record cards simplifies work on site making sure the correct data is collected every visit.

4.7 Application of ROGS

The ROGS Regulations affect all safety critical activity on the railway including signalling and telecommunications.

4.8 Installation Testing Records

Testing records should be compiled as and when the installation progresses. Each stage of testing must be recorded and signed off against the test plan by the testers.

These records should be included with the as built drawings to form the completion hand-over documentation sometimes called the Test Certificate and Test Copies.

This data on the systems and equipment will form the core information for the preparation of asset and maintenance records.

On completion of the work all the records should be completed to reflect the new and changed assets.

4.9 Maintenance Records

Use of the techniques described will allow the railway to build up useful data over the early years of the use of the system to be fed back into refining the maintenance periods and activities to provide cost, and resource, effective maintenance.

As a minimum the following items are recorded:

- Date of the test
- What was tested
- Condition of the equipment, including batteries if fitted.
- Who made the test
- What was replaced or adjusted

5 REFERENCES

RSSB Railway Group Standards see www.rgsonline.co.uk

IRSE Publications

IRSE Licensing at http://www.irselicensing.org/

RSPGs and RSPs Issued by the Office of Rail Regulation see www.rail-reg.gov.uk

Railway safety principles and guidance Part 1 (1996) (HSE 1996)

Railway Safety Publication 4; Safety critical tasks - Clarification of ROGS regulations requirements, (ORR 2007)

Railway Safety Publication 5; Guidance on minor railways, (ORR 2007)

GoSkills – Sector Skills Council for passenger transport

http://www.goskills.org/

6 APENDICES

None

(End of document)