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Level 2

Application of the Common Safety Method for Risk Evaluation and Assessment

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Glossary

AB	Assessment Body
CDM	Construction (Design and Management) Regulations
CSM-RA Regulation	Commission Implementing Regulation (EU) 402/2013 (the Regulation on a common safety method for risk evaluation and assessment)
GRIP	Governance of Railway Investment Projects
IAP	Independent Assessment Plan
IM	Infrastructure Manager
LDM	Lead Development Manager
NRAP	Network Rail Assurance Panel
NSC	National Supply Chain
ORR	Office of Rail Regulation
PM	Project Manager
PRG	Project Review Group
RAM	Route Asset Management
RIR	Railways (Interoperability) Regulations 2011 (as amended)
ROGS	The Railways and Other Guided Transport Systems (Safety) Regulations 2006 (as amended)
SAR	Safety Assessment Report
SRP	System Review Panel
TSI	Technical Specifications for Interoperability

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1 Purpose

The purpose of this module is to define Network Rail's arrangements for complying with the Commission Implementing Regulation (EU) 402/2013, the Regulation on a common safety method for risk evaluation and assessment, referred to here on as the CSM-RA Regulation.

The module does not duplicate the CSM-RA Regulation, or any of the wide range of guidance available from the European Railway Agency (ERA), the Office of Rail Regulation (ORR) and the Railway Safety and Standards Board (RSSB). Users are advised to consult these sources when complying with this module. The following provide details on the CSM-RA Risk Management Process:

- ORR Guidance: Common Safety Method for risk evaluation and assessment (see ORR website);
- GE/GN8640 series. Railway Industry Guidance Notes covering all aspects of the CSM-RA Regulation.

This module is part of a suite of processes governed by NRAP to provide appropriate review of projects, products and vehicles. Some elements of projects e.g. aspects that are novel, introducing new products, or may have interoperability requirements, might also come within scope of other modules in this suite.

The other modules in the suite are:

NR/L2/RSE/100/01 *Network Rail Assurance Panel*

NR/L2/RSE/100/03 *The application of the interoperability regulations for infrastructure projects*

NR/L2/RSE/100/04 *Introduction of new or changed vehicles*

NR/L2/RSE/100/05 *Product introduction and change*

NR/L2/RSE/100/06 *How to decide what needs product acceptance via NR/L2/RSE/100/05*

NR/L2/RSE/100/07 *System Review Panels*

NOTE 1 Information on roles and responsibilities, and definitions used in this module can be found in NR/L2/RSE/100/01.

NOTE 2 The CSM-RA Regulation is a part of a suite of Common Safety Methods. The others are listed below but do not form part of the scope of this standard.

- *CSM on Monitoring*
- *CSM on Supervision*
- *CSM on assessing conformity with the requirements for obtaining Safety Certificates*
- *CSM on assessing conformity with the requirements for obtaining Safety Authorisations*
- *CSM on assessment of achievement of Safety Targets*

2 Scope

2.1 Overview

The scope of this module is:

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- a) infrastructure and operational changes to the railways for which Network Rail is Infrastructure Manager as defined in ROGS; and
- b) changes to vehicles where Network Rail is identified as the Entity in Charge of Maintenance as defined in ROGS. The significance of changes to NSC vehicles is determined in accordance with procedure PE-MS-005. A summary of all vehicle changes and significance decisions is reported annually to NRAP.

This standard is applicable to projects from their inception i.e. GRIP stage 0.

The risk management process under CSM-RA as defined in this module can be used by the principal designer to discharge their duties under the CDM Regulations 2015.

The application of the CSM-RA Regulation to organisational change is not within scope, this is covered by NR/L2/HSS/020 *Safety Validation of Organisational and Safety Management System Change*.

2.2 Non-mainline Railways

ROGS requires that a Safety Verification process is applied for projects on non-mainline railway. However, this module mandates CSM-RA on all railway for which Network Rail is Infrastructure Manager. The information in appendix B demonstrates that this approach is compliant with ROGS.

2.3 Proposer

The CSM-RA Regulation defines the role of “proposer” as being “the company or organisation in charge of implementing the change”. This module applies when Network Rail is acting as proposer.

NOTE 1 The module also explains how to decide whether Network Rail is acting as proposer in cases where it may be ambiguous.

In Network Rail, the sponsor is accountable for specific requirements placed on the proposer by the CSM-RA Regulation. Some requirements can be discharged by formal delegation through the PM as shown in Table 1.

NOTE 2 The “sponsor” is the person undertaking this role, not necessarily a job title.

NOTE 3 For infrastructure changes, this module should be read in conjunction with NR/L2/INI/02009 Engineering Management for Projects, which defines other relevant roles and responsibilities in detail.

2.4 Remitting the Assessment Body

This module mandates requirements on sponsors in respect of remitting the AB.

NOTE Assessment Bodies are independent organisations, therefore this module does not mandate requirements on them.

2.5 Alignment with GRIP (NR/L1/PM/GRIP/100)

Where possible, GRIP equivalents are given for generic project stages.

To balance the level of assurance activity with the project risks, apply a progressive assurance approach to CSM-RA activity.

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2.6 Accountabilities and responsibilities

Accountable, Responsible, Consulted, Informed		LDM	Sponsor	PM	NRAP	SRP	AB
Process Step (Clause numbers in brackets)							
Start hazard record (5.1)		A/R	I				
Produce first version of System Safety Plan (5.3)		A/R	I				
Produce Preliminary System Definition and conduct significance test (4.1)			A/R	C	I		
Submit NRAP application form (4.1)			A/R	C	I		
Ratify significance (4.1) *NRAP may delegate this task to the Route SRP under special circumstances only			I	I	A/R	R*	
Determine CSM-RA compliance requirements (4.2)			A/R	I		I	
Agree CSM-RA responsibilities with any contractor being appointed (3)			A	R			
Risk management only	Compliance with full CSM-RA						
Progress project carrying out risk management in accordance with CSM-RA Regulation but without independent assessment. (5)	Progress project carrying out risk management in accordance with CSM-RA Regulation (5)		A	R			
	Produce System Definition (5.2)		I	A/R			I
	Maintain System Safety Plan (5.3)		C	A			C
	Define AB Remit (6.2)		A	R			C
	Appoint AB (6.1)		A/R	C			C
	Produce IAP (6.2D)		C	C			A/R
	Make submissions to AB according to System Safety Plan (6.3)		A	R			I
	Comment on submissions (6.3)	Iterate as required	I	I			A/R
	Resolve issues and respond to AB (6.3)		A	R			C
	Issue SARs (6.3 and 6.4)		I	I	I		A/R
	Take SARs into account (7.1)		A	R			
	Produce Declaration and apply to SRP for approval to commission (7.2)		A	R		I	
	Review project and sign Declaration (7.2)		I	I	I	A/R	
	Submit close out report to AB (8)		A	R			I

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Accountable, Responsible, Consulted, Informed		LDM	Sponsor	PM	NRAP	SRP	AB
Process Step (Clause numbers in brackets)							
	Issue final SAR (8)		I	I	I		A/ R
	Place copy of documentation on project file (8)			A/R			
	Submit close out report and Declaration to NRAP (8)		A	R	I	R	

NOTE 1 If any role is not present on the project/programme the duties shall be re-allocated amongst team members.

Table 1 – RACI

NOTE 2 According to EU 402/2013 Annex 1 clause 5.2, the proposer needs to submit to the assessment body evidence of the organisation chart of the project and people/roles responsible for risk management. The RACI chart in Table 1 should be used for guidance, while the details shall be in accordance with the safety roles identified in NR/L2/INI/02009 – Engineering Management for Projects.

3 Deciding who is the Proposer

In some circumstances it may not be immediately obvious which organisation is the proposer. This might happen when Network Rail:

- provides asset protection arrangements for externally implemented works;
- undertakes a project on a leased station for which a train operating company (TOC) is the IM; or
- undertakes works on Network Rail managed infrastructure on behalf of another IM, e.g. Crossrail Ltd. and HS2 Ltd.

In such situations, the Network Rail sponsor for the works, or the Asset Protection team if applicable and no sponsor has been appointed, shall facilitate agreement between all parties concerning which organisation is acting as proposer. The agreement shall be recorded.

NOTE This module does not apply where it has been agreed that Network Rail is not the proposer. See also 2.3.

Where Network Rail is the proposer, the accountabilities of proposer are retained. This applies when work, including project management, is subcontracted.

The sponsor shall arrange for specific responsibilities to be agreed during the procurement of subcontracted work.

4 Significance

4.1 Conduct significance test

The sponsor shall produce a Preliminary System Definition for each project.

This shall be done using form NR/L2/RSE/100/02/F06.

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The Preliminary System Definition shall be produced during the feasibility stage (GRIP stage 2) at the latest. The sponsor shall use the significance test matrix in appendix A to determine whether or not the project is significant. The decision shall be recorded in the Preliminary System Definition document.

Projects within a programme shall be tested for significance individually. Projects shall not be divided into sub-projects. Projects that are being undertaken concurrently in the same geographic area shall be assessed together.

The sponsor or their representative shall submit the Preliminary System Definition to NRAP.

NRAP shall either ratify the decision and notify the project, or instruct the project that a different decision has been made i.e. significant or not significant.

Where a project forms part of a larger programme, the PM shall inform the programme manager of the decision.

4.2 Deciding how the CSM-RA Regulation applies

All projects shall comply with the CSM-RA Risk Management Process (see clause 5).

When the sponsor has received the notification from NRAP, the sponsor or their representative shall apply the following:

- a) non-significant projects that NRAP has also determined do not require an authorisation under RIR do not require independent assessment (clause 6) or a Declaration (see clause 7);
- b) significant projects shall be independently assessed (see clause 6) and require a Declaration (see clause 7); or
- c) where NRAP has determined projects require authorisation under RIR, the sponsor shall comply with the requirements in the applicable TSIs relating to application of the CSM-RA Regulation.

5 CSM-RA risk management process

5.1 Hazard record

A hazard record shall be started by the LDM (or the person fulfilling this role) from the beginning of the project i.e. GRIP stage 0. This shall record safety hazards for the various options being considered, and be used to inform feasibility work and subsequent option selection.

The hazard record shall be updated by the PM (including identification of any new hazards) and maintained throughout the whole project lifecycle.

The sponsor shall organise and maintain the Preliminary System Definition and hazard record for each option until GRIP stage 3 is complete.

NOTE 1 This allows options to be compared.

NOTE 2 Once a single option has been selected, only the hazard record for that option need be maintained.