

**RSD Internal Guidance****RIG-2013-06****Policy statement on the relationship between the CSM for Risk Evaluation and Assessment and other risk assessment requirements**

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Summary	<p>This RIG clarifies¹ the relationship between railway specific and more general health and safety legislation in respect of risk assessments for Britain’s mainline railways including the UK half of the Channel Tunnel. It summarises:</p> <ul style="list-style-type: none"> • how direct European and domestic rail legislation co-exist; and specifically, • The relationship between the CSM for risk evaluation and assessment and domestic requirements to carry out a ‘suitable and sufficient’ risk assessment. <p>This RIG does not apply to railway systems which are not “mainline railways” for the purposes of the Railways and Other Guided Transport Systems (Safety) Regulations 2006.</p>		
Consultation			

¹ It should be noted that a definitive legal interpretation of the law could only be provided by the Courts.

Detail

Background

This note sets out the relationship between direct European statutory requirements for common safety methods (CSMs) and UK domestic law based around the Health and Safety at Work etc. Act 1974 (HSWA) and the regulations made under it.

The European framework

We work closely with DfT on European negotiations, transposition of directives and interpretation of European requirements so that they coexist with and complement existing national requirements. However, some European legislation is directly applicable in the UK, such as Commission Regulations and must be complied with, in full, from the date the regulation comes into force. Decisions of the Commission are binding on those to whom they are addressed.

As far as possible, courts will read and interpret domestic legislation in a way that is compatible with European law. To prevent conflict arising, ORR should interpret national law in a way which is consistent with European law. In order to ensure there is conformity across Europe, every effort must be made to interpret and apply national law in line with European law. The Courts' guiding principle is that European and domestic requirements are compatible unless a conflict is clear². Where a provision of European law conflicts with a national law provision and cannot be reconciled, European legislation will take precedence over domestic requirements and a court must set aside the conflicting national law provision.

European requirements for a common safety method

Regulation 352/2009 sets out the common safety method for risk evaluation and assessment.

The guiding principles European safety legislation and the CSM aim to achieve:

- a common regulatory framework for railway safety to establish a single transport market in Europe;
- framework of rules to harmonise risk evaluation and assessment for railway systems across the EU; and
- no overall decline in system safety.

Compliance with CSMs is a core requirement for risk assessments in the UK under the Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS). The common safety method for risk evaluation and assessment applies when any significant safety related change, of a technical, operational or organisational nature, is made to the mainline railway in the UK.

ORR's view is that there is no conflict between the domestic requirements for a risk assessment to be *suitable and sufficient* and the level of risk assessment set out in the CSM RA. In practice, therefore, when any significant safety related change of a technical, operational or organisational nature is proposed to the mainline railway, **compliance with the CSM on risk evaluation and assessment should produce a suitable and sufficient risk assessment for that change.**

Interface between the common safety method on risk evaluation (CSM RA) and assessment and national requirements

The CSM RA applies to any *significant change* to a railway system. ORR has issued guidance on determining the significance of a change and the types of change to which the CSM RA applies. Under HSWA and relevant health and safety regulations, duty holders have a

² The limits of interpreting national law in line with European law arise in the unambiguous wording of a national law, which is not open to interpretation.

responsibility to undertake a suitable and sufficient assessment of risks for the **entirety** of its operations and make arrangements for the effective planning, organisation and control of protective and preventative measures.

The starting point for a proposer³ planning to implement any change to the mainline railway is the CSM RA. The first consideration is whether the change is significant for the purposes of the CSM RA. Although the CSM RA is not applicable in all situations, where the proposer concludes that the change is not significant, adequate documentation justifying that decision should be kept. As a minimum it should address the criteria in Article 4(2) of the CSM RA.

Although, ORR is not of the view that application of the CSM RA is required in all cases, for example where the change is not deemed to be significant, because of the requirement to retain documentation, the **CSM RA will always need to be considered at the outset** of a proposed change.

Where a change is not significant, it will fall to the proposer of the change to consider domestic legislative requirements, such as those set out in Regulation 19 of ROGS and Regulation 3 of the Management of Health and Safety at Work Regulations 1999 (MHSWR), which require a suitable and sufficient risk assessment to be undertaken. It is possible to adopt the CSM RA approach even when there is no legal requirement to do so (for example, when a change is not significant). Following the CSM approach correctly in these circumstances is likely to mean that domestic safety legislation is complied with.

Where a change is determined to be significant, risk evaluation and assessment in accordance with the CSM RA requirements must be undertaken by a proposer. Although the CSM RA requirements in relation to risk assessment and evaluation must always be complied with, this process can complement existing domestic legislation. The CSM RA applies the same principles as set out in Regulation 3 of the MHSWR but sets out a more formalised process with an independent assessment of the risk assessment process by an assessment body (which can be carried out by an in-house service if it meets the criteria in the regulation). The CSM also includes additional elements requiring:

- agreements with other duty holders or 'actors' (in European terms) involved in managing or affected by the risk in their risk management process and associated safety management responsibilities;
- cooperation arrangement between 'actors' in how shared risks will be managed;

In order to comply with the CSM RA, all safety requirements must be fulfilled and risks must be eliminated or reduced to a level that is acceptable. One of the purposes of the CSM RA is to ensure that a high level of safety will be maintained, and where reasonably practicable, improved.

Additionally, a risk assessment under the CSM RA will need to identify relevant domestic law provisions as part of its risk acceptability evaluation, which can be encompassed in the CSM RA risk assessment. Separate requirements under European and domestic legislation will not require duplicate risk assessments to be undertaken. ORR therefore expects that a CSM RA risk assessment will be scoped broadly to encapsulate all relevant legislative requirements and to address the impact of the change on all interfaces.

Whilst in theory, it is possible to scope the proposed change narrowly under the CSM RA requirements, it is very likely that the change may impact on other interfaces in relation to the railway system, which are not covered by the CSM RA. In such cases, the proposer must consider its obligations under domestic legislation, such as MHSWR. It is likely in such cases to be more efficient to produce a single, broadly scoped, risk assessment in accordance with the

³ A proposer is defined as a railway undertaking, infrastructure manager, entity in charge of maintenance, contracting entity, manufacturer or an applicant for an authorisation for the placing in service of structural sub-systems

CSM RA risk assessment requirements. This will ensure that the risk assessment adequately addresses the risks for the whole operation as a result of the proposed change.

Conflict should not arise between domestic and European legislative provisions in relation to risk assessments. The CSM RA, ROGS and MHSWR requirements seek to achieve the same result: a robust risk assessment and controls to achieve risk reduction. ORR therefore considers it to be unnecessary for duty holders to produce separate risk assessment and evaluation processes to comply with domestic and European requirements. Compliance with the CSM RA should simultaneously deliver compliance with regulation 19 ROGS and regulation 3 MHSWR in respect of the change and impact on other interfaces, as the purpose of the CSM RA is to deliver a thorough and competent risk assessment process.

Significantly, a court is likely to interpret domestic legislation in such a way as to determine that a risk assessment which is CSM RA compliant is suitable and sufficient for the purposes of the domestic requirements.

If a proposer of a change applies one or more of the three risk acceptance principles in the CSM RA regulation (see paragraph 2.1.4 of Annex I of the Regulation) correctly for all identified hazards, and implements suitable control measures, this should mean that the risk has been reduced to an acceptable level for the change being effected.

Designing in risk control

It is essential that duty holders' risk assessment and evaluation processes, whether European or domestic, consider risk control from the initial design stage. Where the change is likely to be significant this will require the CSM RA to be considered from the outset.

Case study:

Given the current investment in electrification, we have taken the example of a route to be electrified for the first time (thereby creating a new energy subsystem) in order to illustrate how the CSM RA and relevant domestic legislation fits together.

The process of risk assessment using the CSM RA and the subsequent identification and application of the relevant statutory provisions to a new electrification project can be illustrated as follows:

Step 1 Significant Change – a proposer decides to electrify its network, applies the CSM RA and recognises it is a significant change. A plan or company process for applying the CSM RA where there is a significant change is essential. A plan is likely to address all the steps below at some stage in the process, however it should require the application of the hierarchy of control set out in Regulation 4 MHSWR early enough to influence the client requirements before pre-construction information is finalised.

Actions required – a proposer complies with the CSM RA process and as part of the risk analysis identifies the relevant statutory provisions. The initial risk analysis should identify what information the proposer needs to collect to give to the designer, in particular regarding the future maintenance requirements of the structure as a whole and its use once electrified. In relation to an electrification project, the risk assessment should match the output requirements of the project specification in terms of train paths, speeds, effect on the asset with the asset maintenance requirements to keep the infrastructure in efficient working order (e.g. under Provision and Use of Work Equipment Regulations 1998 (PUWER)) without working on or near live conductors. By ensuring the CSM risk assessment addresses regulation 3 of MHSWR, the proposer will be able to demonstrate it has met the absolute requirements in the legislation. Particular attention should be given to the elimination of hazards by design.

Step 2 Legislation – identification of the relevant statutory provisions, these will include European legislative requirements as well as HSWA and regulations enacted under it.

Actions required – one method of demonstrating compliance could be production of a methodology for identifying relevant statutory provisions, which is wide enough to capture regulations that influence design but might not necessarily be fulfilling a direct safety function. For example, Railway Interoperability Regulations 2011, Supply of Machinery (Safety) Regulations 2008 etc.

Below is a non-exhaustive list of statutory provisions that may be applicable to a new electrical traction system during the detailed design / construction phase / life time operation / decommissioning / dismantling:

1. Electricity at Work Regulations 1989 (directly related to system design and use)
2. Railway Safety (Miscellaneous Provisions) Regulations 1997 (prevention of third parties affecting railway operations)(prevention of inadvertent contact)
3. Workplace (Health, Safety and Welfare) Regulations 1992 (future use of the modified structure as a workplace)
4. PUWER (virtually all the equipment will be work equipment whether part of the electrical system or not)
5. Confined Spaces Regulations 1997 (may need to be considered as part of the original infrastructure or may need to be designed out of the new one)
6. Manual Handling Operations Regulations 1992 (most recent example is 33kg lids for the only specified cable ducting being installed – CDM-C should make sure suppliers / designers can identify safe means of installing)
7. Personal Protective Equipment Regulations 1992 (may be appropriate if risks cannot be effectively controlled at any time)
8. Work at Height Regulations 2005 (for the future maintenance and use of the structure and during construction phase)
9. Supply of Machinery (Safety) Regulations 2008 (for any new machinery as defined that is being installed)
10. Control of Asbestos Regulations 2006 (to be considered where existing infrastructure is being disturbed)
11. Railways and Other Guided Transport Systems (Safety) Regulations 2006 (the requirements for risk assessments under ROGS exclude the assessment of health risks)
12. Railway Interoperability Regulations 2011 (the risk assessment must apply consideration of interoperability)
13. Construction (Design and Management) Regulations 2007 (specific duties in managing construction but also application of part 4)
14. Control of Substances Hazardous to Health Regulations 2002 (requires risk assessment if hazardous substances are involved)
15. Control of Lead at Work Regulations 2002 (for work on existing structures)

Step 3 Level of Duty – once the relevant statutory provisions have been identified, the proposer will need to identify what the relevant legal duties are and whether they are absolute or subject to the test of reasonable practicability.

Step 4 Approved Codes of Practice – once legislative requirements have been identified, requirements set out in codes of practice that support the regulations should be identified. This step is key when the risk acceptability evaluation takes place under the CSM RA, as application of codes of practice is one of the risk acceptance principles. If all the legislation is not considered by the proposer, then the codes of practice are unlikely to be identified or applied.

Step 5 Guidance – as set out in Step 4, the proposer should identify relevant guidance, specifically that issued by HSE / ORR on what good practice in meeting the relevant statutory provisions looks like. The proposer should consult the ORR guidance on the application of the CSM RA at the outset of the project. There may also be other guidance to be considered which is specific to a project. For example, for an electrification project, ORR's level crossings guidance for designers is for the highest practicable conductor height to be in place at level crossings.

Step 6 Existing industry standards – a CSM RA approach to risk assessment, which is informed by specific duties, is likely to minimise the risks arising during the project. For

example, on a new electrical subsystem, there is a risk of inadvertent contact with energised conductors. There is no group standard providing guidance on specific duties, e.g. fencing the railway infrastructure to secure compliance with the Railway Safety (Miscellaneous Provisions) Regulations 1997 or the duty to ensure an electrical system is safe and does not give rise to danger at all times Electricity at Work Regulations 1989. Identifying these legislative measures as part of the CSM RA approach, will minimise risk as advice can be given to designers on what they need to achieve when designing the control measures.

Step 7 Client and future operator’s strategic aims – scoping the CSM RA risk assessment broadly from the outset of a project, will ensure that provisions such as “*General principles of prevention*” set out in Schedule 1 to the MHSWR are applied at the outset of the risk assessment process. This can enable the proposer to use the opportunity to introduce strategic aims into the design of a new sub system. For example, the electrical asset policy includes some significant policy safety statements that should be considered at the outset of an electrification project.

An approach to CSM RA risk assessment which identifies relevant statutory provisions, codes of practice etc. should ensure duties are met under both European and domestic legislation, whilst avoiding duplication of work. A broadly scoped risk assessment under CSM RA will identify hazards relevant to the entirety of the project, not just the system change. This will negate the need for risk assessments on the same hazards under different legislation. Consideration of CSM RA at the outset of a project should produce a compliance matrix which systematically identifies all hazards (which could be linked to specific legislative provisions). For example, when scoping a risk assessment for a new electrical subsystem the client will need to undertake a HSG85 style assessment of individual maintenance tasks compared to electrical risk, which will determine when, where and how often electrical isolations are needed and Indicate to the designer the future demands for isolations on the subsystem so that sufficient switches, points of isolation and integral earths can be provided in the design.

Further information

- “**ORR guidance on the application of the common safety method (CSM) on risk assessment and evaluation**”– see: <http://www.rail-reg.gov.uk/server/show/nav.1118>.

Action

- inspectors and policy staff should be aware of this guidance to be able to explain and help avoid misunderstandings on the alignment between European and national legislation and the processes to resolve incompatibility between European and national requirements.
- when considering whether the risk assessment and controls put in place for a significant technical, operational or organisation change is suitable and sufficient, and therefore satisfies obligations under the Health and Safety at Work etc. Act, inspectors need to ensure that duty holders have risk assessed the change, in accordance with the CSM on risk assessment.