



RSC-G-026-A

Guideline providing List of Parameters and Requirements for APIS of Railway Sub-System ENE & related OPE/MAI Parameters

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Acronyms:

ENE Energy Subsystem as defined by EU directive.

1. Introduction

This Guideline must be read in conjunction with RSC-G-009.

It provides:

- the List of Parameters to be assessed as part of APIS for **ENE Projects**. The related Parameters for assessment of Technical Compatibility with the Railway Network in the State, the Safe Integration with the Railway Network in the State and TSI Requirements for Operation and Maintenance are included in this List of Parameters.

The annexed matrix has been divided into Part 1, Management of Acceptance Process and Part 2, List of Parameters. Should there be any aspect of a specific project which is not integrating into the parameters listed in the matrix, it is expected that the matrix is amended accordingly by the Project SMS activities.

2. Process for APIS

The general process of submission and review of the Project Safety Case/ NWA/ NRSA shall follow the approach outlined in the RSC ***Guideline for the Process of Authorisation for Placing in Service of Railway Sub Systems (RSC-G-009)***. A sufficient timeframe must be allocated within the project programme to allow for the development of robust submissions, for review by the RSC, and for any subsequent iterations of the submission through revisions and re-reviews prior to acceptance.

For each stage of the approval process the appropriate evidence and assessment reporting must be prepared and submitted to the RSC.

At each stage of the approval process, and in order for the RSC to develop its judgement on i)safety, ii)the level of compliance with law, and iii)fitness for purpose of the Project, the RSC reserves the right to review any or all of the supporting evidence and to participate in relevant verification and validation processes.

The RSC's normal intention, however, is to undertake a number of spot checks in order to gain sufficient confidence in the ability of the applicant's safety management processes to assure safety and fitness for purpose.

Range and depth of these spot checks will generally depend on:

- engineering judgement,
- safety criticality of the individual aspects,
- availability of an Independent Assessment Report, and
- Findings of the initial spot checks.

3. V&V, Testing

It is a fundamental safety management principle that, in order to validate any safety related design calculations, simulations and assumptions, V&V and type testing is performed. Any deviation from this principle shall be justified.

Routine testing must cover a suitable subset of the type testing scope in order to demonstrate that a series production item complies with the core parameters of the design.

The tests shall be of a repeatable nature and be covered by retrievable test procedures and test reports. A test report shall include (but is not limited to):

- Precise identification of the item under test and description of its parameters (product identification, serial number, software status, etc.),

- reference standards,
- the method of testing,
- description of environmental parameters,
- all results of testing,
- any deviations from the test method,
- the determination of conformity made from these results,
- all information needed to understand and interpret the report.
- Used test tools and their calibration
- Testers in charge and their qualification

All information shall be reported correctly, accurately, and clearly.

Testing should follow legislative requirements as well as current best industry practice where appropriate.

4. Independent Assessor

In complex projects, the RSC may direct the railway undertaking to employ a competent Independent Assessor (IA) according to RSA 2005. The role of the IA shall be to undertake a review of all safety-related aspects of the project to a level that is consistent with the RSC's own review processes, thereby supplementing and supporting the role of the RSC in assessment of submissions. The evidence of system performance provided by the IA review shall enable the RSC's own scope and depth of review to be reduced, normally to spot checks. The selected IA should be advised to the RSC at an early point in the project for agreement that the individual's competence is appropriate for the scope of the project.

Where employed, the IA shall issue reports as indicated in Annex 1. The reports shall include all the results of assessments performed and conclusions reached, as well as all information needed to understand and interpret these results and conclusions. All this information shall be reported correctly, accurately, and clearly. The report shall also contain a clear statement of the IA's level of support for the submission.

The RSC's decision on the acceptability of the submission, shall be based on the findings within the IA report and the RSC's own conclusions from its review and spot checks undertaken.

5. Further Clarification

Further clarification on these Guidelines can be sought from the RSC.

6. Annexes:

RSC-G-026-A-Annex1