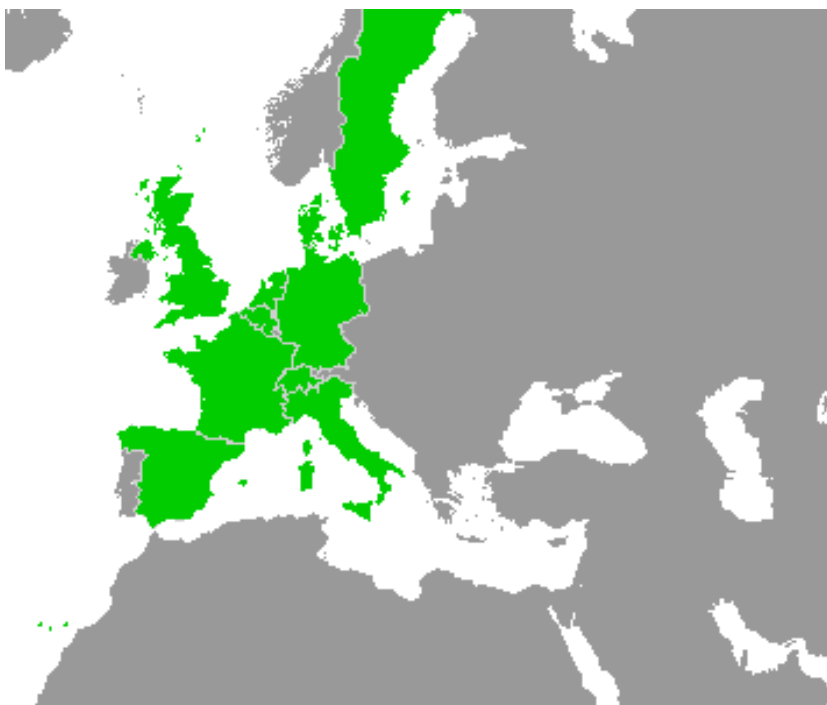


Work-Package 2: “Requirements”

## SRS subset for modelling tool benchmarking

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# SRS subset for modelling tool benchmarking

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## Requirements

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**Abstract:** This document defines the subset of SRS SUBSET-026 that should be used to evaluate modelling tools.

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## 1 Introduction

One goal of openETCS is to make a model of the ERTMS/ETCS System Requirement Specification (SRS). Several tools are possible to make this model. In order to evaluate them, we need to define a subset of the SRS that would be modelled by each tool, therefore allowing to compare the tools on the same basis.

This document defines this subset of SRS.

## 2 SRS Subset definition

The following paragraphs of UNISIG SUBSET-026 v3.3.0 should be used in the benchmarking model in order to evaluate a tool:

**§3.5.3 Establishing a communication session** Rationale: Sample of the communication part.

**§3.6.3.2 Location, Continuous Profile Data and Non-Continuous Profile Data** Rationale: example of complex generic data structure.

**§3.8.3 Structure of Movement Authority and §3.8.5 Update of Movement Authority** Rationale: example of complex procedure, with complex data.

**§3.11.3 Static Speed Profile and §3.11.12 Gradients** Rationale: example of data structure, referring to §3.6.3.2 and used by §3.13.4.

FIXME **§3.13 ??** FIXME: We should find a representative subset of §3.13. Guillaume proposes §3.13.4 (Acceleration / Deceleration due to gradients). Stanislas and David think this is not enough.

**§4.6.2 (Transitions Table) and §4.6.3 (Transitions Condition Table)** Only transitions:

1. from SB to SH
2. from SB to FS
3. from SB to IS

Rationale: Having transitions at different priority level is important to look at priority issues and exclusion issues at the same priority level.

**§4.8.3.2 From National System X (through STM interface)** Rationale: Model a small table.

FIXME FIXME: Isn't such a table redundant with §4.6.2?

FIXME **§5.9 Procedure On-Sight** FIXME: §5.6 also proposed by Guillaume

Rationale: Procedure sample, contains a timer. Procedure not too long compared to Start of Mission.

FIXME **§8.7.2 Movement Authority message** This includes reference to Packet 15 (§7.4.2.4). FIXME: Maybe reference one optional packet

Rationale: That would be a perfect use case for tools able to model things down to bit level.

## 3 Other open questions

FIXME FIXME: Should we model an API? E.g. Odometer? Which reference document?