

Telematics Governance Terms of Reference Common Implementation

TAF TSI

COMMISSION REGULATION (EU) No 1305/2014 of 11th December 2014

TAP TSI RU/IM Functions

COMMISSION REGULATION (EU) No 454/2011 of 5th May 2011

Reader's attention required:

This document is subject to pending changes to be aligned with the Commission Implementing Regulation (EU) No 2026/253 of 6 February 2026 (Telematics TSI).

History of the versions

<i>Version</i>	<i>Date of approval by the JSG</i>	<i>Reason for change</i>
1.0	12/11/2015	Initial version
1.1	09/03/2017	TAP RU/IM monitoring included in TAF Implementation Cooperation Group Establishment of the TSGA
1.2	27/02/2018	Inclusion of JS Pilot Programme Separation of TSGA Advisory Committee and TAF/TAP RU/IM Steering Committee
1.3	14/05/2019 06/02/2020	Speeding up the making decision processes Update of Annex 1 (membership)
1.4	15/12/2021	Removal of JS Pilot Programme Relation to TTR IT implementation Update of Annex 1 (membership) Update of Annex 2 (Terms of Reference for the Telematics Expert Groups)
1.5	12/09/2024	Update of Annex 1 (membership) Update of Annex 2 (Telematic Expert Group 8 (TEG) – Legal)
1.6	27/02/2025	Update of Annex 1 (membership)
1.7	02/04/2026	Update of Annex 1 (membership)

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1 Scope

To effectively implement the Regulation about telematics applications, an efficient sector-driven organisation is required to be in place specifically to harmonise and coordinate the work-plans of the sector and work to agree a common sector position towards European Union Agency for Railways (ERA¹) and Directorate-General for Mobility and Transport (DG MOVE) whenever required.

The specific work plans governed by this organisation concern TAF TSI² (as a whole) concerning Railway Undertakings [RUs], Infrastructure Managers [IMs] and Wagon Keepers [WKs] and TAP TSI³ for the following basic parameters (concerning RUs, IMs and Station Managers [SMs]):

- 4.2.12 Handling of information provision in the station area;
- 4.2.14 Train preparation;
- 4.2.15 Train running info and forecast;
- 4.2.16 Service disruption information;
- 4.2.17 Handling of short term timetable data for trains;
- 4.2.18 Quality (RU/IM);
- 4.2.19 Reference files and databases (RU/IM).

In the following this scope is combined under the term “RU/IM Telematics”.

The purpose of this document is to describe the structure, the membership and the operation of the organisation. It is addressed to the stakeholders of the railway sector.

1.1 TAF TSI

“TAF TSI” is the usual wording for the Commission Regulation (EU) No 1305/2014 of 11 December 2014 (repealing Regulation (EC) No 62/2006) concerning the technical specification for interoperability relating to the telematics applications for freight subsystem of the rail system in the European Union.

This regulation is directly applicable in all Member States and by all stakeholders.

The TAF master plan v4.0 of 17/01/2013⁴ published by ERA, based on the individual master plans delivered by 58 companies, describes target dates for the implementation of the different functions of TAF TSI.

1.2 TAP TSI

“TAP TSI” is the usual wording for the Commission Regulation (EU) No 454/2011 of 5 May 2011⁵ on the technical specification for interoperability relating to the subsystem ‘telematics applications for passenger services’ of the trans-European rail system.

This regulation is directly applicable in all Member States and by all stakeholders.

¹ Abbreviations are explained in Annex 3.

² Commission Regulation (EU) No 1305/2014 of 11 December 2014 on the technical specification for interoperability relating to the telematics applications for freight subsystem of the rail system in the European Union and repealing the Regulation (EC) No 62/2006

³ Commission Regulation (EU) No 454/2011 of 5 May 2011 on the technical specification for interoperability relating to the subsystem ‘telematics applications for passenger services’ of the trans-European rail system

⁴ Document <http://www.era.europa.eu/Document-Register/Documents/TAF-TSI-Master-Plan.pdf>

⁵ And Commission Regulations (EU) No 665/2012, 1273/2013 and 527/2016 amending 454/2011

The TAP European master plan v1.0 of 28/04/2013⁶, based on the individual master plans delivered by 38 companies (for RU/IM functions), describes target dates for the implementation of the different functions of TAP TSI.

The governance of TAP TSI is split in two areas:

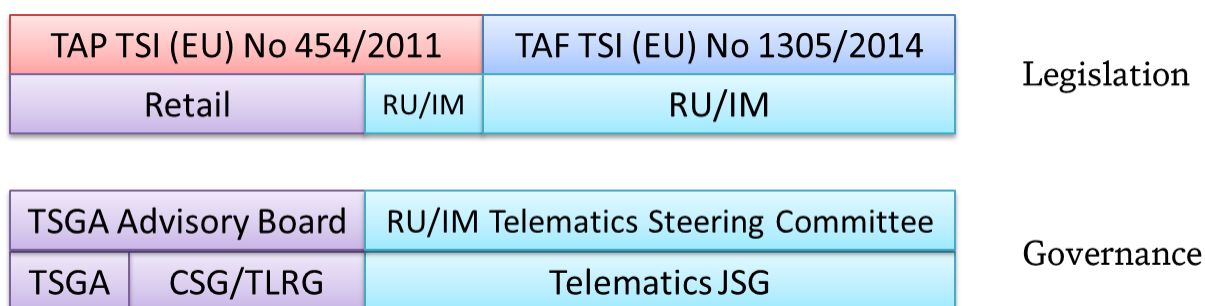
- RU/IM basic parameters are managed according to the governance described in this document;
- retail basic parameters are managed by the Common Support Group (CSG) and the TAP Services Governance Association (TSGA) and are outside the scope of this present governance document.

The TAP TSI Common Support Group of the sector (CSG) was already established during the writing of Commission Regulation (EU) No 454/2011 and serves as the rail sector's mirror group for matters related to the statutory ERA Working Parties and Cooperation Groups as well as for other official TAP TSI bodies.

The TSGA is designated to be a non-profit AISBL that will not hold reserves other than those required to ensure the provision of the regulatory services. Its purpose is to ensure that the regulated services exist, in accordance with the TAP TSI Regulatory Services, in a manner that allows regulatory obligations to be met by railways and regulatory rights to be enjoyed.

At the beginning of 2017, a TAP Retail Liaison Group (TRLG) was established. It is constituted of the CSG and representatives of the Ticket Vendor associations ECTAA and ETTSA. The initial purpose of this new group is to align Railway and Ticket Vendor positions vis-à-vis the retail provisions in the ERA TAP CCM process.

The picture below summarizes the scope of the TSIs and the related governance:



The link between retail and RU/IM is ensured by cross-attendance of representatives of CSG and JSG as well as between TSGA Advisory Board and RU/IM Telematics Steering Committee.

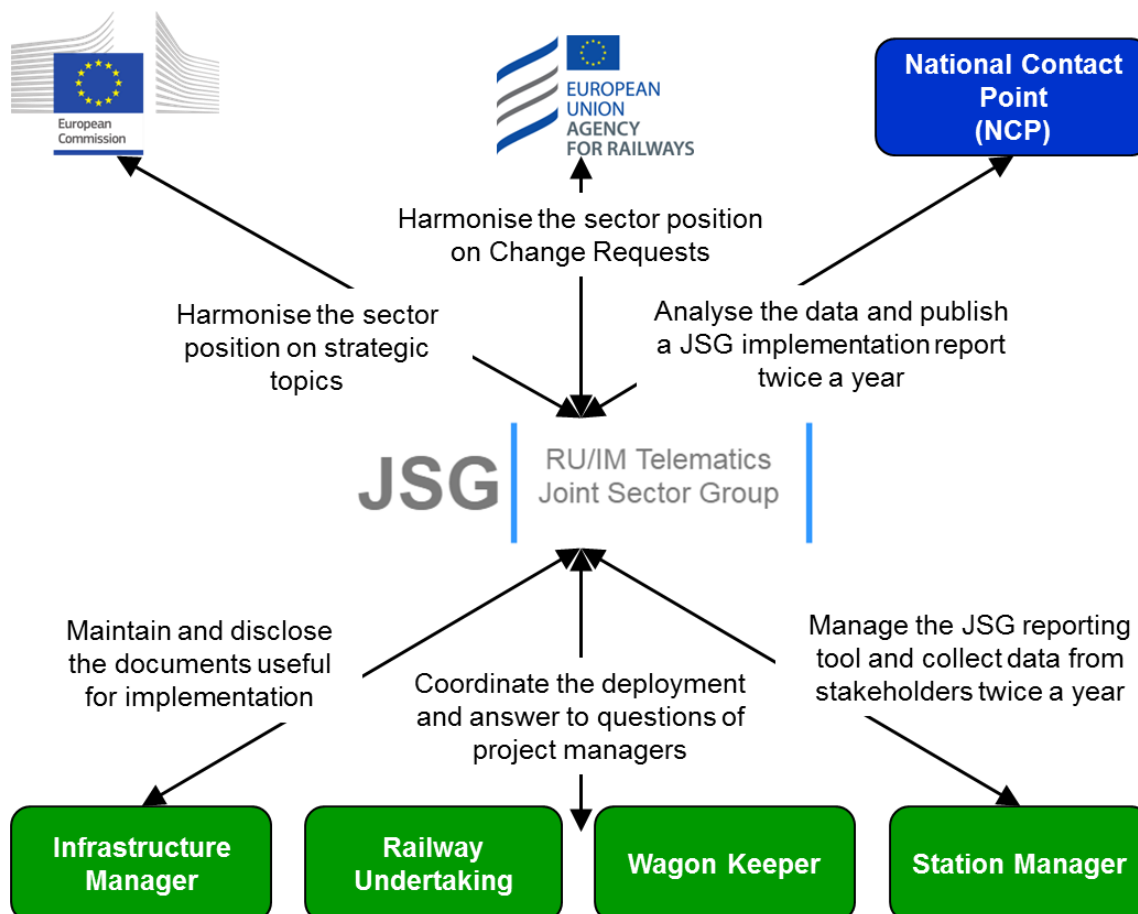
⁶ Document http://www.era.europa.eu/Document-Register/Documents/20130428_TAP%20Master%20Plan%20Delivery_final.pdf

2 Objectives of the governance organisation

2.1 Advisory and reference information

The governance structure aims to harmonise the sector views of different stakeholders and to achieve a common position for topics of strategic importance towards ERA and DG MOVE as visualised hereafter.

This includes advice such as relation to other regulatory matters and to Member States issues or concerns.



2.2 Monitoring of the Implementation

The RU/IM Telematics Steering Committee shall assess the implementation of the TAF TSI as set out in Article 5. The same approach is applied for assessing the implementation of TAP RU/IM functions.

The implementation monitoring is based on assessment reports provided by the Agency. The assessment reports shall determine whether the agreed objectives and target dates have been achieved.

The Joint Sector Group coordinates the collation of regular draft Implementation Reports including open issues or deviation from master plan and delivers this to the ERA.

In order to evaluate and monitor the progress of the RU/IM telematics functions (TAF and TAP TSIs) implementation, it is necessary to have measurable objectives for the implementation process, for which Key Performance Indicators (KPIs)

must be defined. The KPIs are implementation dates that have been established in the Master Plan, broken down by RU/IM telematics Function. Those companies who submitted a Master Plan will be assessed against their individual submission as well as the target dates. The governance of the monitoring process is described in detail in Chapter 4 of this document.

2.3 Change Control Management

The Change Requests (CRs) are processed via the established ERA Change Control Management Process. The governance structure works in accordance with this ERA process.

All change requests issued by the sector must be firstly assessed and approved by the governance structure before being submitted through the existing ERA CCM Tool.

To achieve this goal, the Change Requests are studied by the Sector Management Office (if needed with the support of the Telematics working groups) and approved by the Joint Sector Group.

Change requests presented by entities outside the sector (e.g. ERA) are also studied by the SMO and the JSG delivers the sector position.

Change requests concerning only sector documents follow an internal process (out of the ERA CCM process): they are studied by the SMO and the JSG delivers the final agreement.

The governance of the change control management process is described in detail in Chapter 5 of this document.

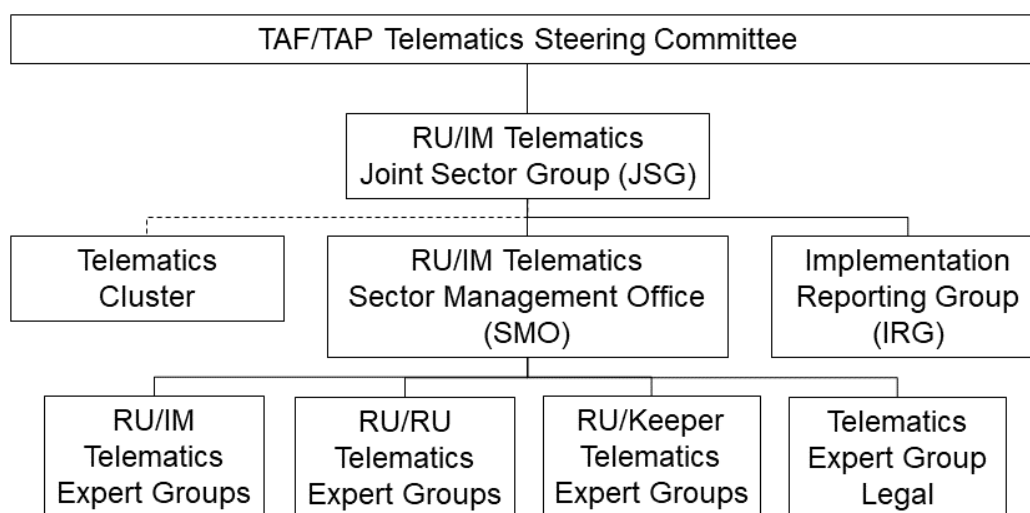
3 Defining the Governance

3.1 Organisational structure

This Governance Structure shall coordinate the implementation of the complete TAF TSI and TAP TSI provisions except functions linked to retail. In the following this scope is combined under the term “RU/IM Telematics”.

To be effective governance is adopted at the RU/IM Telematics Steering Committee. The diagram below shows the relationship between this organisation and the overall governance structure.

The names of the sector members responsible for specific functions of the governance structure are indicated in Annex 1 updated when necessary.



3.2 RU/IM Telematics Steering Committee (SteCo)

The roles and responsibilities of the RU/IM Telematics Steering Committee, in charge of RU/IM Telematics, are described in the section 7.1.4 of the TAF TSI and section 7.2.1 of the TAP TSI, namely:

- the SteCo shall provide for the strategic management structure to efficiently manage and coordinate the work for implementing the RU/IM Telematics TSI. This shall involve setting the policy, the strategic direction and prioritisation. In doing so, the Steering Committee shall also take into account the interests of small undertakings, new entrants, and railway undertakings providing specific services;
- the SteCo shall monitor the implementation progress. It shall regularly report to the European Commission about the progress achieved compared with the master plan. The Steering Committee shall take the necessary steps to adjust open tasks in the case of a

deviation from the master plan;

- the SteCo shall guarantee that the interests of the passenger RUs and freight RUs are respected in all matters concerning the RU/IM communication.

The SteCo is composed by:

- the DG MOVE;
- the representative bodies from the railway sector acting on a European level as defined in Article 38(4) of Regulation 2016/796/EU ("the rail sector representative bodies");
- the ERA;
- observers and reporters from other organisations.

The SteCo is chaired by the chairperson of the RU/IM Telematics Joint Sector Group. The SteCo is co-chaired by the Commission.

The decisions are taken by consensus.

The SteCo should meet at least twice a year.

3.3 RU/IM Telematics Joint Sector Group (JSG)

The Joint Sector Group is the key central driver of the implementation. The Joint Sector Group consists of influential stakeholders from representative bodies and sector associations.

The JSG:

- reports regularly to the SteCo;
- approves the implementation report prepared by the IRG and makes it publicly available;
- provides input into the CCM Process and is accountable for the validation and coordination of all CRs coming from the sector. It is responsible for reviewing all modifications to the regulation and evaluates the impact of the CRs on the implementation plan;
- approves TEGs terms of reference and makes recommendation for lead;
- approves the final release of the following documents:
 - RU/IM Sector Handbook,
 - RU/RU Sector Handbook,
 - Application Guide (technical document B.56) before transmission to ERA;
- receives every second meeting a progress report about the activities of the TTR IT implementation and provide feedback on the basis of TEG evaluation
- maintain the JSG website up to date;
- provides consistent information for stakeholders via the JSG website or other means of communications (e.g. Telematics Cluster);
- may establish ad hoc working groups or subcommittees in order to address specific issues related to the implementation.

The JSG will comprise:

- the Sector Chairperson of the Steering Committee;
- the Chairperson and the Co-Chairperson of the JSG;
- the Coordinator of the Coordination Technical Group (CTG);
- the Chairperson of the Sector Management Office;

- the Chairperson of the CSG and a representative of the TSGA;
- Identified representatives of the Representative Bodies, Sector Associations and Companies (e.g. Project Managers).

The decisions are taken by consensus.

The meeting calendar is coordinated with the responsibilities of the JSG.

3.4 Telematics Cluster

The Telematics Cluster Group consists of IMs, RUs, Wagon Keepers.

This group is used for:

- information sharing, e.g. reports from TEGs and relevant working groups;
- company endorsement of proposals such as CRs;
- implementation knowledge exchange;
- impact analysis with respect to roll-out;

Decisions are taken by consensus.

3.5 RU/IM Telematics Sector Management Office (SMO)

The SMO shall assist the JSG in fulfilling its oversight responsibilities related to CCM.

For the following documents:

- RU/IM Sector Handbook,
- RU/RU Sector Handbook,
- Application Guide (technical document B.56),

the SMO shall:

- identify continuously any changes required,
- develop new or amended content,
- ensure the validation of the changes taking account of the impacts,
- collate the amendments into a new release,
- issue a final release to JSG for approval.

Each Sector Handbook is updated twice a year after the ERA CC Board meeting with the proposed modifications to the document according to the provisions of Annex 3.

The SMO can also propose specific updates if needed.

In addition, the SMO shall:

- reports regularly to the JSG;
- prepare change requests and proposals of modification to be decided in the JSG;
- collect risks and critical success factors for the implementation and report them to the JSG for decision making;
- submit the Change Requests (CRs) and Proposals of Modification (PMs) to the ERA tools after approval of the JSG;
- adapt and provide versioning for common metadata xsd based upon the CR procedure;
- establish if necessary Telematics Expert Groups in order to address specific issues;
- coordinate the tasks of the different Telematics Expert Groups;
- answer the questions raised by the Project Managers regarding the implementation.

The SMO will comprise:

- the Chairperson of the SMO;
- the Chairs of the different TEGs.

The decisions are taken by consensus.

The meeting calendar is coordinated with the responsibilities of the SMO. Identified experts of the representative bodies, sector associations and companies can be invited by the SMO.

3.6 Telematics RU/IM Revision Working Group

In case of revision of TAF TSI or TAP TSI section RU/IM, the JSG can establish an Ad-hoc Revision Working Group to advise the JSG via regular reports on change requests and proposals of modification.

The Ad-hoc Revision Working Group will comprise:

- the SMO;
- the Coordinator of the Coordination Technical Group (CTG);
- Identified representatives of the Representative Bodies, Sector Associations and Companies (e.g. Project Managers) nominated by the JSG.

The Ad-hoc Revision Working Group works in close cooperation with the SMO, the TEGs and other concerned entities.

The decisions are taken by consensus.

The meeting calendar is drafted regarding both SMO and ERA outcomes with the responsibilities of the JSG

3.7 Implementation Reporting Group (IRG)

The Implementation Reporting Group shall assist the Joint Sector Group in fulfilling its oversight responsibilities related to the monitoring of the implementation.

The IRG shall:

- report regularly to the JSG;
- be the single point of contact with ERA for topics related to monitoring and reporting;
- analyse ERA requests (e.g. economic aspects such as KPIs) and prepare the decision to be taken by the JSG;
- develop, maintain the JSG Reporting Tool and manage access to it;
- initiate and run the process for data collection;
- analyse the data and prepare regular implementation reports based on data provided by the JSG Reporting Tool;
- discuss and harmonise the reports with ERA;
- answer the questions raised by the Project Managers regarding the monitoring;
- present the implementation report to the JSG for approval and for presentation in the ERA TAF TSI Implementation Cooperation Group (which monitors TAF and TAP RU/IM implementation).

The IRG will comprise:

- the Chairperson of the IRG;

- the CER representatives in the ERA TAF TSI Implementation Cooperation Group;
- the Common Technical Group (CTG) Coordinator;
- identified experts.

The decisions are taken by consensus.

The meeting calendar is coordinated in respect with the ERA TAF TSI Implementation Cooperation Group calendar.

3.8 Telematics Expert Groups (TEG)

The Telematics Expert Groups are created by the decision of JSG on request of the SMO, via a terms of reference, when it is necessary to gather expertise to resolve a matter.

The terms of reference will contain as a minimum:

- the tasks;
- the governance of the TEG (chairperson, approval process inside the TEG, etc.);
- the required level of focus;
- the required expertise of the participants;
- the format (limited workshops, regular meetings, consultations, etc.);
- the expected lifecycle and elapsed time (e.g. steps and how long the output is prepared);
- the outputs to be provided.

TEGs will have to provide their assessment of CRs according to their expertise.

The outputs are validated by the SMO and approved by the JSG.

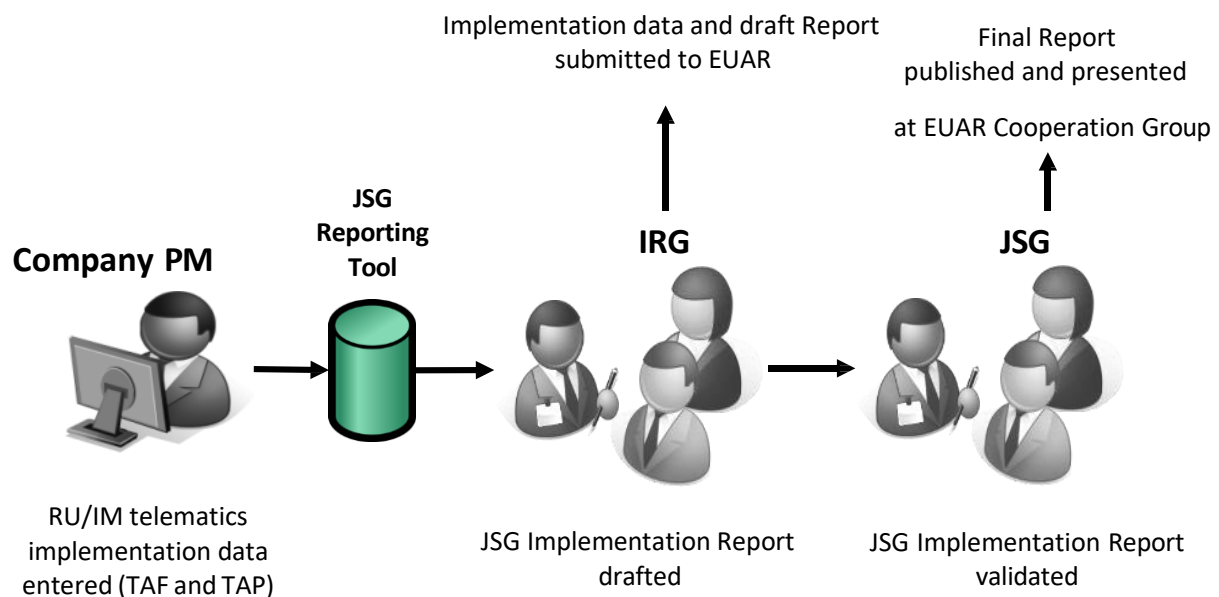
The TEGs are open for all representatives of the sector stakeholders with the required expertise. The existing TEGs are listed in Annex 2. To improve the efficiency of the TEGs, a Core Group can be established inside a TEG.

The decision-taking process including timelines, cooperating rules and the required profile of the participants of TEGs and Core Groups are listed in Annex 3.

4 Monitoring Process

The progress of implementation of the TAF TSI and TAP RU/IM TSI will be reported once a year.

Companies are reporting TAF TSI and TAP RU/IM functions compared to their own Master Plan target date. In case there is no company Master Plan it will be reported against the TAF master plan v4.0 and the TAP master plan v1.0 published by ERA.



The process of TAF TSI and TAP RU/IM Implementation Monitoring starts about 3 months before an ERA TAF TSI Implementation Cooperation Group meeting with the data collection.

ERA triggers the process via NCPs by inviting all companies in Member States to report about the current state of implementation. The JSG informs at the same time the Representative Bodies about the start of data collection.

The IRG is responsible for data collection and data is collected via the JSG Reporting Tool⁷. The JSG Reporting Tool gives access to Company Project Managers and is open for a period of about four weeks.

The results of the analysis are summarised in a JSG Implementation Report and submitted to ERA together with the raw data before the ERA TAF TSI Implementation Cooperation Group meeting. The JSG Implementation Report is approved by the JSG and made publicly available.

ERA will upload the raw data received from JSG into the ERA TAF TSI Implementation Cooperation tool. Furthermore ERA will deliver a draft Status Report containing the data, assessment and recommendation to be discussed within the ERA TAF TSI Implementation Cooperation Group.

The ERA Status Report is consolidated after endorsement at the ERA TAF TSI Implementation Cooperation Group meeting.

The Steering Committee is ultimately responsible for the approval and delivery of the ERA Status Reports for publication.

⁷ The JSG uses the tool 'EUSurvey' for collecting the data and managing the survey about TAF and TAP RU/IM

implementation. 'EUSurvey' is supported by the European Commission's ISA programme, which promotes interoperability solutions for European public administrations.

5 Change Control Management Process (including questions)

The Change Control Management (CCM) is the process in place to monitor the evolutions of the documents used to implement the TAF and TAP regulations.

Two CCM processes exist:

- the ERA CCM process in charge of maintaining and monitoring the technical documents listed in Appendix I of TAF TSI and the technical documents B.1 to B.30 listed in Annex III of TAP TSI;
- the Sector CCM process in charge of maintaining and monitoring all changes related to the documents managed by the sector.

For both processes the SMO is in charge of analyzing the Change Requests (CRs) and preparing the position to be presented to the JSG for approval.

Overview of the ERA CCM Process

The ERA CCM process is structured by CCM cycles two times a year.

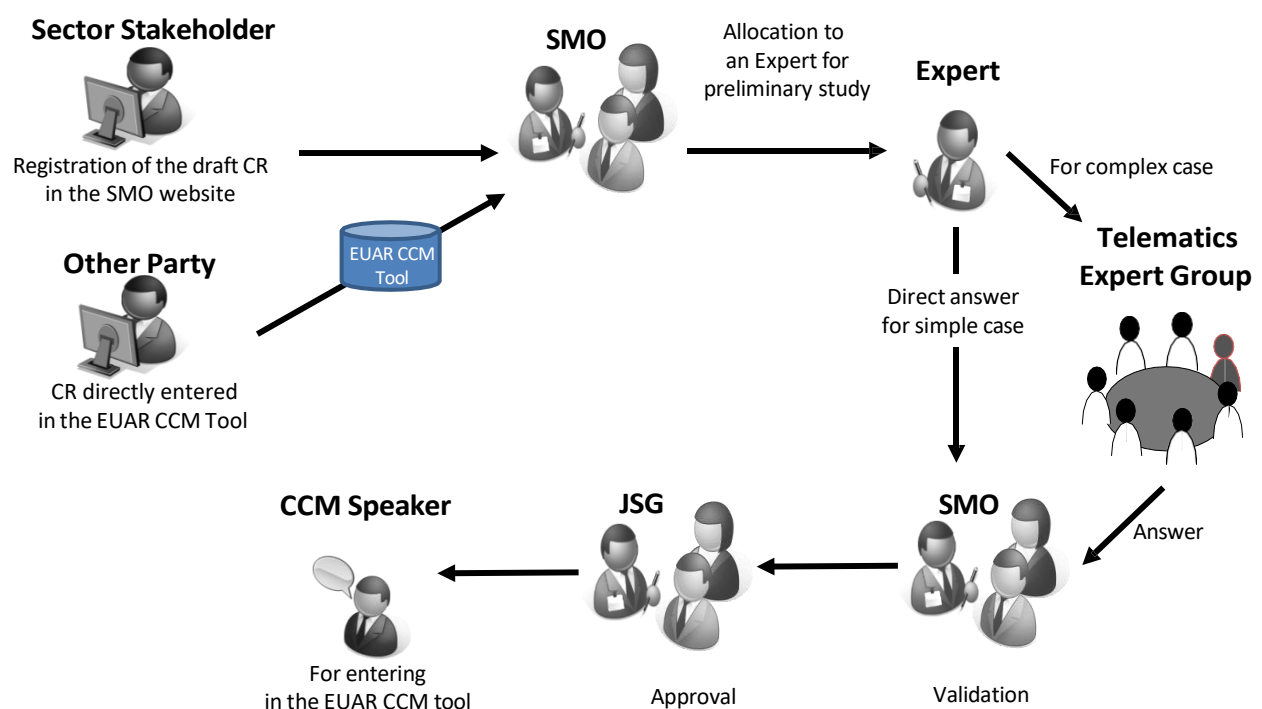
The CRs are entered in the ERA CCM tool by the SMO one month before the ERA CCM Working Party (usually in May and November each year) where the CRs are discussed and agreed. Normally a CR can be discussed at most 3 times before an agreement is reached.

All CRs agreed during a CCM cycle are presented to the Change Control Board (CCB) for final agreement. Technical documents are updated and published at the ERA website on 15th June and 15th December.

The process is described in the ERA document “Change management procedures – Working rules for the TAF/TAP TSI change control management”, version 1.0⁸.

Note that all CRs proposed by the sector organisations members of the JSG are firstly analysed by the SMO and agreed by the JSG before being introduced in the ERA CCM tool.

The picture hereafter describes the workflow:



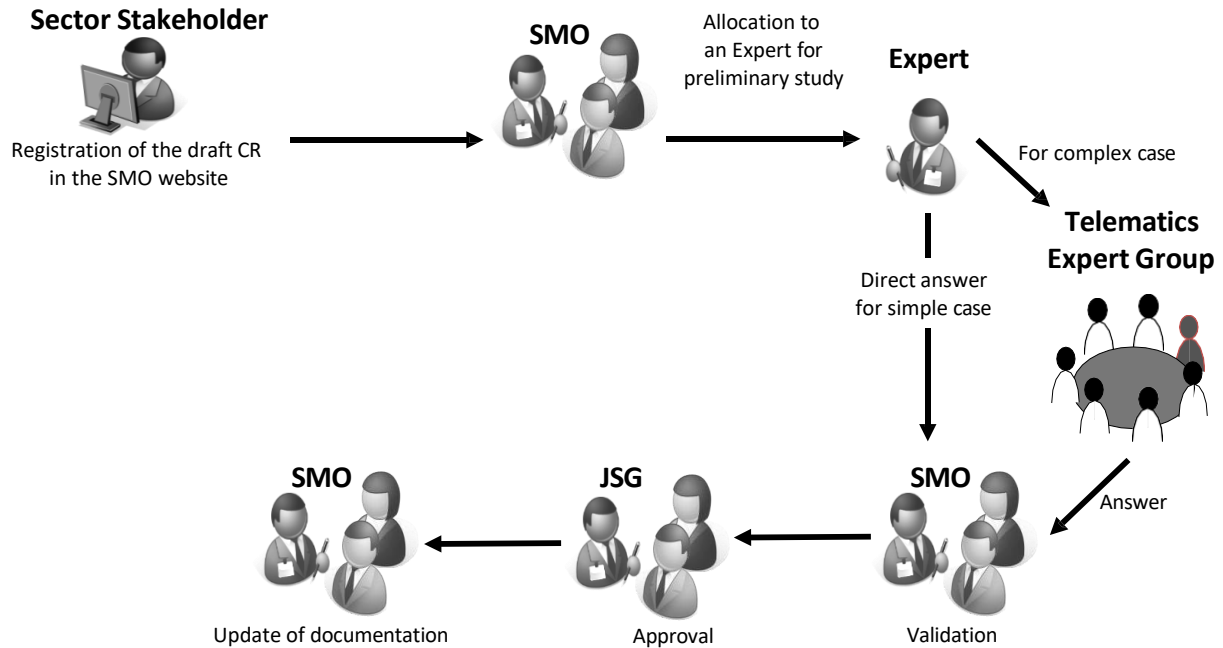
⁸ Reference Change management procedures – TAF_TAP CCM.docx.

Overview of the Sector CCM Process

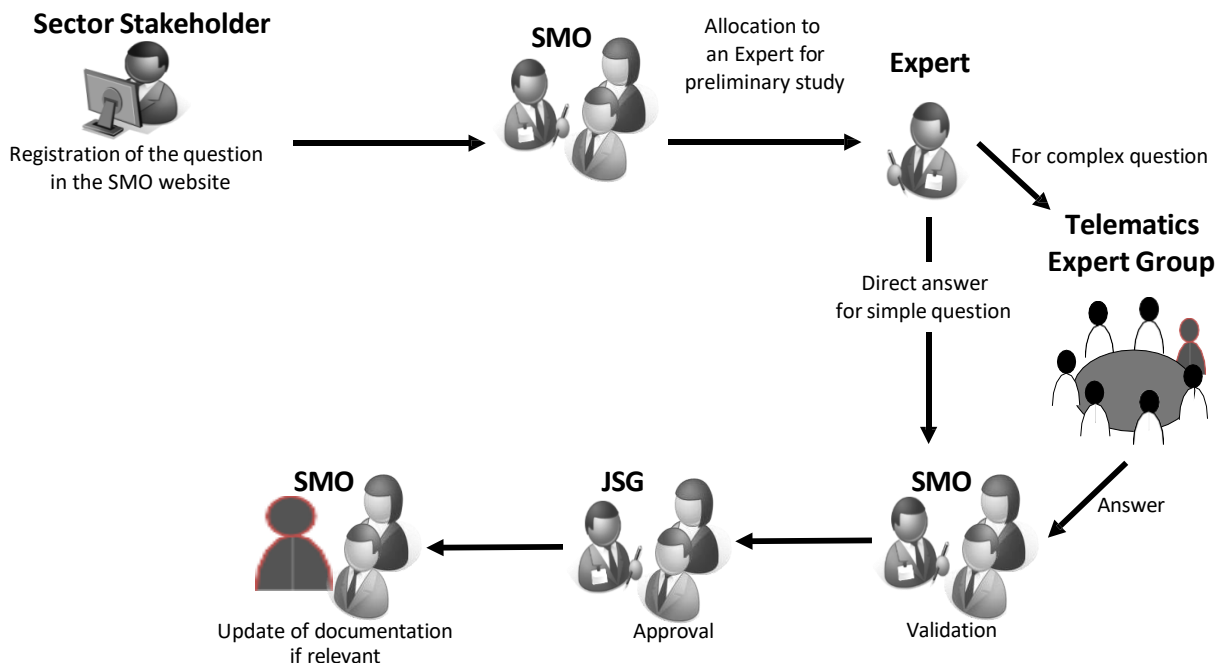
The Sector CCM process is applied for all changes linked to sector documents (e.g. Sector Handbook) and Sector Data Model (e.g. xsd or sector messages). ERA is not involved in this process.

The Sector Data Model is an extended official ERA Data Model containing in addition sector messages. Hence it is published two weeks after the ERA Data Model latest on 30th June and 31st December at the JSG Website.

The picture hereafter describes the workflow:



A similar process is used to answer questions from the sector. The picture hereafter describes the workflow:



6. Framework information

The following sections provide contextual information with respect to the Telematics governance.

6.1 Common Components

RNE Common Components System (CCS) is responsible for the development, maintenance and on-going operations of the Telematics Common Components, which consist in:

- the Common Interface which allows the secure communication of information amongst all trading partners. The companies may decide to use the RNE CCS CI or to build their own solution according to the requirements of the reference implementation;
- the Location Reference File which uniquely identifies physical rail points (e.g. stations, customer sidings, loading places);
- the Company Reference File uniquely identifies of rail actors who exchange information according to TAF and TAP TSIs.

RNE has set up a mechanism which will enable all companies to get access to the Reference Files under fair and non-discriminatory conditions.

The JSG receives reports on RNE CCS activities.

6.2 ERA TAF TSI Implementation Cooperation Group (ICG)

Having regard to the legal obligations of the TAF and the TAP TSI, ERA has set up the ERA TAF TSI Implementation Cooperation Group to manage the monitoring process of RU/IM telematics functions.

This cooperation group meets twice per year and performs the following main activities:

- assess the reports from the sector (NCPs and RBs) about the TAF TSI and TAP RU/IM implementation;
- compare the data received with the content of the Master Plan and assess the progress of implementation to determine whether the objectives pursued and target dates have been achieved;
- use Key Performance Indicators (KPIs) previously agreed between the Agency and the Rail Sector to assess the evolution of the deployment of the system and report twice per year to the European Commission and to the TAF Steering Committee;
- perform a dissemination campaign to NCPs and assist them to follow-up the TAF TSI and TAP RU/IM TSI implementation at national level.

6.3 Approval and publication

This “Telematics Governance Terms of Reference” document was first approved at the JSG meeting on 12th November 2015 and the current update was approved by the JSG on 15th December 2021.

Documents referred to in it and the governance document itself are publically available at the JSG website <http://taf-jsq.info/>.

Annex 1

Membership of the governance structure (as at 02/04/2026)**RU/IM Telematics Steering Committee**

<i>Entity</i>	<i>Status</i>	<i>Name</i>
DG MOVE	Member	Joachim Lücking Michaela Strohschneider Yann Seimandi
ERA	Member	Michael Varga Stefan Jugelt
CER	Member	Jan-Christian Arms (chair as JSG chair) Marcel de la Haye (CTG coordinator)
ALLRAIL	Member	Nick Brooks Eoin Rollins
CSG	Member	Jan Möllmann (CSG chair)
EIM	Member	Giuseppe Miccoli
EPTO	Member	John Gilbert
ERFA	Member	Markus Vaerst
UIP	Member	Gilles Peterhans Thomas Heydenreich
UIRR	Member	Éric Feyen
UITP	Member	Anne-Laure Lemerre
UNIFE	Member	Miroslav Haltuf
ESC	Observer	Godfried Smit
FTE	Observer	Michael Senyszyn
Raildata	Observer	Hanna Munninghoff
RNE	Observer	Harald Reisinger
TAP Retail Liaison Group (TReLiG)	Observer	TReLiG chair
TSGA	Observer	Luca Mariorenzi
UIC	Observer	Frédéric Hénon
CCS (RNE)	Reporting	Vojkan Stefanović (CCS)

RU/IM Telematics Joint Sector Group

(The members of the companies are not listed)

<i>Entity</i>	<i>Status</i>	<i>Name</i>
JSG	Member	Jan-Christian Arms (chair)
SMO	Member	Vojkan Stefanović
ALLRAIL	Member	Nick Brooks Eoin Rollins
CER	Member	Marcel de la Haye
CIT	Member	Erik Evtimov
EIM	Member	Giuseppe Miccoli Éric Jourdain
EPTO	Member	John Gilbert
ERFA	Member	Markus Vaerst
FTE	Member	Michael Senyszyn Seid Maglajlić
Hit Rail	Member	Enrique Ruiz
UIP	Member	Gilles Peterhans Thomas Heydenreich
UIRR	Member	Éric Feyen
UITP	Member	Anne-Laure Lemerre
UNIFE	Member	Miroslav Haltuf
ESC	Member	Godfried Smit
Raildata	Member	Hanna Munninghoff
RNE	Member	Harald Reisinger
CSG	Member	Jan Möllmann (CSG chair)
UIC	Member	Parinaz Bazeghi
CCS (RNE)	Reporting	Vojkan Stefanović (CCS)

RU/IM Telematics Sector Management Office

<i>Entity</i>	<i>Status</i>	<i>Name</i>
SMO	SMO Chair	Vojkan Stefanović
JSG	JSG Chair	Jan-Christian Arms
TEG 1 Planning	TEG Chair	Nicolas Jasinski
TEG 2 Operation	TEG Chair	Nektarios Zacharias
TEG 3 Object Identifier	TEG Chair	Harald Reisinger
TEG 4 Reference files	TEG Chair	Vojkan Stefanović
TEG 5 Consignment Order	TEG Chair	Ralf Gutbrod
TEG 6 Wagon Movement	TEG Chair	Petr Červinka
TEG 7 RSRD	TEG Chair	Thomas Heydenreich
TEG 8 Legal	TEG Chair	Tsvetan Tanev

Telematics Experts Groups

The membership list is maintained by each Telematics Group Leader named in the SMO list above.

Implementation Reporting Group

<i>Entity</i>	<i>Status</i>	<i>Name</i>
CER	IRG Chair Speaker in ERA TAF ICG	Jan-Christian Arms
CER	Deputy in ERA TAF ICG	Filippo Massari
CER	Speaker in ERA TAF ICG (TAP RU/IM representative)	Franck Matheau
CER	CER Technical Director	Marcel de la Haye

Terms of Reference for the Telematics Expert Groups (as at 12/09/2024)

RU/IM Communication

Telematic Expert Group (TEG) 1 – Planning

Telematic Expert Group (TEG) 2 – Operation

Telematic Expert Group (TEG) 3 – Object Identifier⁹

Telematic Expert Group (TEG) 4 – Reference Files

RU/RU Communication

Telematic Expert Group (TEG) 5 – Consignment Order

Telematic Expert Group (TEG) 6 – Wagon Movement

RU/Keeper Communication

Telematic Expert Group (TEG) 7 – Rolling Stock Database

Transversal

Telematic Expert Group (TEG) 8 – Legal

Members of the Technical Expert Groups are published at dedicated Websites, such as the Share of RNE.

⁹ TEG 3 is currently not active. Terms of Reference will be provided when the group would be reactivated.

TERMS OF REFERENCE

Telematic Expert Group (TEG) 1 – Planning

TEG Planning is established as a permanent TEG providing the expertise to SMO and JSG for the TAF/TAP TSI maintenance process.

TEG Planning will have regular meetings every quarter of the year with the possibility to increase/reduce the meetings frequency according to the needs and other ongoing processes within TAF/TAP TSI.

Governance

Chairperson: Nicolas Jasinski (RNE)

Approval process inside TEG: Consensus of all TEG members

Expertise for participants

TEG Planning members must be nominated by their companies and/or organizations, members of JSG, with the decision-making capacity in the context of topics covered by this TEG. They must possess sufficient level of expertise in the domain of timetabling, capacity planning and the tools/standards used by their companies and/or organizations.

TEG Planning members should possess basic technical knowledge of data management and data processing as well as business process modeling and preferably be familiar with XML.

Tasks

- Maintaining and improving definitions and processes of existing and new planning related objects, processes defined within TAF/TAP TSI including but not limited to
 - TR, PR, PA and CR object
 - Path Request processes
 - Identifiers
 - Path Modification, cancellation and alteration process
 - Message structures in the area of Planning
 - Use cases
- Maintaining the JS Handbook chapters related to Planning
- Analyzing, proposing and introducing new concepts, actors and processes related to Planning according to TAF TAP TSI

Outputs

TEG Planning will provide expertise in the domain of path request, timetabling, capacity planning for

- TAF/TAP TSI XSD schema maintenance process in the form of inputs and evaluation of the existing and proposing new change requests to JSG
- TAF/TAP TSI revision process
- Sector handbook maintenance process

TERMS OF REFERENCE

Telematic Expert Group (TEG) 2 – Operation

TEG Operation will have regular meetings every quarter of the year with the possibility to increase/reduce the meetings frequency according to the needs and other ongoing processes within TAF/TAP TSI.

TEG Operation is established as a permanent TEG providing the expertise to SMO and JSG for the TAF/TAP TSI maintenance process.

Governance

Chairperson: Nektarios Zacharias (RNE) Approval process

inside TEG: Consensus of all TEG members **Expertise for**

participants

TEG Operation members must be nominated by their companies and/or organizations, members of JSG, with the decision-making capacity in the context of topics covered by this TEG. They must possess sufficient level of expertise in the domain of operation, and knowledge for the relations between capacity planning and Operation. Familiar with Tools/standards used by their companies and/or organizations.

TEG Operation members should possess basic technical knowledge of data management and data processing as well as business process modeling and preferably be familiar with XML.

Tasks

- Maintaining and improving definitions and processes of existing and new operation related objects, processes defined within TAF/TAP TSI including but not limited to TR objects
 - TR, , PA and CR object
 - Identifiers
 - Modification, cancellation and alteration process for all messages used in Operation (Train Running, Train Running Forecast, PathDetails ...)
 - Message structures in the area of operation
 - Use cases
- Maintaining the JS Handbook chapters related to operations
- Analyzing, proposing and introducing new concepts, actors and processes related to operations according to TAF TAP TSI

Outputs

TEG Operation will provide expertise in the domain of operational processes, mostly for

- TAF/TAP TSI XSD schema maintenance process in the form of inputs and evaluation of the existing and proposing new change requests to JSG
- TAF/TAP TSI revision process
- Sector handbook maintenance process

TERMS OF REFERENCE

Telematic Expert Group (TEG) 4 – Reference Files

TEG Reference Files is established as a permanent TEG providing the expertise to SMO and JSG for the TAF/TAP TSI maintenance process.

TEG reference Files will have regular meetings every quarter of the year with the possibility to increase/reduce the meetings frequency according to the needs and other ongoing processes within TAF/TAP TSI.

Expertise for participants

TEG reference Files members must be nominated by their companies and/or organizations, members of JSG, with the decision-making capacity in the context of topics covered by this TEG. They must possess sufficient level of expertise in the domain of reference files in their companies and/or organizations including but not limited to railway network infrastructure and other railway related business processes.

TEG reference files members should possess basic technical knowledge of data management and data processing as well as business process modeling and preferably be familiar with XML.

Tasks

- Maintaining and improving definitions and processes of existing reference files defined within TAF/TAP TSI including but not limited to
 - Primary locations
 - Subsidiary locations
 - Countries
 - Companies
 - National contact points
 - National allocation entities
- Maintaining the reference files sector handbook chapters
- Analyzing, proposing and introducing new concepts, actors and processes related to reference files according to TAF TAP TSI

Outputs

TEG reference files will provide expertise in the domain of reference files for

- TAF/TAP TSI XSD schema maintenance process in the form of inputs and evaluation of the existing and proposing new change requests to JSG
- TAF/TAP TSI revision process
- Sector handbook maintenance process
- Central Reference Files Database maintenance process including but not limited to improvements, modifications and extensions

TERMS OF REFERENCE

Telematic Expert Group (TEG) 5 – Consignment Order

TEG Consignment Order is established as a permanent TEG providing the expertise to SMO and JSG for the TAF/TAP TSI maintenance process.

TEG Consignment Order will have regular meetings as part of ORFEUS Expert- meetings in RailData. This part is open for all interested companies (not only Raildata member) If necessary the meetings frequency can be increase/reduce according to the needs and other ongoing processes within TAF/TAP TSI.

Governance

Chairperson: Ralf Gutbrod (RailData)

Approval process inside TEG: Consensus of all TEG members

Expertise for participants

TEG Consignment Order members must be nominated by their companies and/or organizations, members of JSG, with the decision-making capacity in the context of topics covered by this TEG. They must possess sufficient level of expertise in the domain of Consignment Order in their companies and/or organizations including but not limited to railway network infrastructure and other railway related business processes.

TEG Consignment Order members should possess basic technical knowledge of data management and data processing as well as business process modeling and preferably be familiar with XML.

Tasks

- Maintaining and improving definitions and processes of existing messages (defined within TAF/TAP TSI including but not limited to
 - COM message
 - ORFEUS message
- Maintaining the chapter COM in sector handbook RU- RU- Keeper communication
- Analyzing, proposing and introducing new concepts, actors and processes related to Consignment Order according to TAF TAP TSI

Outputs

Consignment Order will provide expertise in the domain of COM for

- TAF/TAP TSI XSD schema maintenance process in the form of inputs and evaluation of the existing and proposing new change requests to JSG
- TAF/TAP TSI revision process

Sector handbook maintenance process

TERMS OF REFERENCE

Telematic Expert Group (TEG) 6 – Wagon Movement

TEG Wagon Movement is established as a permanent TEG providing the expertise to SMO and JSG for the TAF/TAP TSI maintenance process.

TEG Wagon Movement will have regular meetings as part of ISR Expert- meetings in RailData. This part is open for all interested companies (not only RailData member) If necessary the meetings frequency can be increase/reduce according to the needs and other ongoing processes within TAF/TAP TSI.

Governance

Chairperson: Petr Cervinka (RailData)

Approval process inside TEG: Consensus of all TEG members

Expertise for participants

TEG Wagon Movement members must be nominated by their companies and/or organizations, members of JSG, with the decision-making capacity in the context of topics covered by this TEG. They must possess sufficient level of expertise in the domain of Consignment Order in their companies and/or organizations including but not limited to railway network infrastructure and other railway related business processes.

TEG Wagon Movement members should possess basic technical knowledge of data management and data processing as well as business process modeling and preferably be familiar with XML.

Tasks

- Maintaining and improving definitions and processes of existing messages (defined within TAF/TAP TSI including but not limited to
 - Wagon movement message
 - ISR messages
- Maintaining the chapter Wagon Movement in sector handbook RU- RU- Keeper communication
- Analyzing, proposing and introducing new concepts, actors and processes related to Consignment Order according to TAF TAP TSI

Outputs

Wagon Movement will provide expertise in the domain of Wgon movment for

- TAF/TAP TSI XSD schema maintenance process in the form of inputs and evaluation of the existing and proposing new change requests to JSG
- TAF/TAP TSI revision process

Sector handbook maintenance process

TERMS OF REFERENCE

Telematic Expert Group (TEG) 7 – Rolling Stock Database

TEG Rolling Stock Database is established as a permanent TEG providing the expertise to SMO and JSG for the TAF/TAP TSI maintenance process.

Meetings are held personally or by video conference on demand. Depending on complexity of suggested change, coordination will take place by email, video conferences or physical meeting.

Governance

Chairperson: Thomas Heydenreich (UIP)

Approval process inside TEG: Consensus of all TEG members

Expertise for participants

TEG reference Files members must be nominated by their companies and/or organizations, members of JSG, with the decision-making capacity in the context of topics covered by this TEG. They must possess knowledge of the train preparation process, wagon technics, GCU contract, vehicle registration process, wagon utilisation (high level maintenance requirements) and wagon usage regulations.

Tasks

- Maintaining and developing of TAF TSI data exchange between wagon keepers and railway undertakings, mainly wagon reference data

Outputs

TEG reference files will provide expertise in the domain of Rolling Stock Database for

- TAF/TAP TSI XSD schema maintenance process in the form of inputs and evaluation of the existing and proposing new change requests to JSG
- TAF/TAP TSI revision process
- Sector handbook maintenance process

TERMS OF REFERENCE

Telematic Expert Group (TEG) 8 – Legal

TEG Legal is established as a permanent TEG to provide expertise to the SMO and JSG for the Telematics TSI revision process (TAF/TAP).

Meetings are held on request in person or online by video conference. Depending on the complexity of proposed changes to the legal framework, coordination will take place by e-mail, video conferences or physical meetings.

Governance

Chairperson: Tsvetan Tanev (RNE)

Approval process inside TEG: Consensus of all TEG members

Expertise for participants

TEG Legal members should be nominated by their companies and/or associations that are members of the JSG and have the decision-making power in relation to the subjects covered by this TEG. They should have knowledge of Directive (EU) 2016/797 on the interoperability of the rail system within the European Union, TSI Regulations (e.g., TAF, TAP, RINF, OPE), ERA Technical documents (e.g., ERA Vocabulary/Ontology) and horizontal EU data acts and topics (e.g. Data Act, Data Governance Act, European mobility data space, rail data space, non-personal data).

Tasks

- Legal check of the proposed amendments to the Telematics TSI against relevant railway specific and horizontal EU legal acts on data management, in particular on the topics of governance and compliance with EU law.
- Legal evaluation of other TEGs proposals in terms of their compatibility with the telematics framework and general data regulation in the EU.

Outputs

TEG Legal will provide expertise in the legal domain of Telematics TSI for:

- Telematics TSI revision process (TAF/TAP)
- Sector framework revision process (e.g. sector handbook)

Annex 3

Change Management Process supported and followed by the TEGs

One task of a TEG is the evaluation of Change Requests (CR) submitted by the members. To allow for an efficient decision-taking process during the evaluations of CRs, the following process steps and general rules should be adhered to.

Profile and required expertise of TEG members

To productively participate in a TEG, the profile of the TEG members must meet the following criteria:

- The member is a timetabling and operation “Domain expert” and is familiar with the legal texts provided by ERA;
- The member is a “Technology expert”, who is familiar with XSD models and the technical documents provided by ERA, while also knowledgeable in the reference implementation of Common Components;
- The members possess the delegated power to take decisions in the name of the company that he/she represents.

If these criteria cannot be met by one person, the stakeholders can send 2 representatives to cover the above-mentioned requirements.

Preconditions for CR submission

The following is a list of the required information to be submitted with all CRs.

- (1) A full use-case description with the reference to the applicable part of the regulation. The description must not leave space for ambiguity.
- (2) A technical description of the proposed change:
 - a. A table containing
 - i. The element or attribute name
 - ii. The technical XSD type
 - iii. A value range, if restricted (e.g. 5 digits, 50 characters and similar)
 - iv. An Enumeration - if applicable (e.g. for code lists)
 - v. The annotation: the Element Documentation with the basic explanation of its usage
 - b. An XSD graphical model showing the element in the tree structure of the XSD
 - c. The XSD code snippet (tested, evaluated - without errors in formatting or syntax)

IMPORTANT: The SMO rejects any CRs, which do not meet the above given criteria
- (3) The CR creator must be ready to present the CR in front of the TEG in detail
- (4) A “decision section” on the CR form is to be completed by indicating:

- a. the summary of the discussions
 - b. the decision of the TEG (approved – approved with changes – new submission to TEG with further explanations – submission to SMO to assess relevance – postponed – rejected)
 - c. the decision of the SMO (approved – approved with changes – new submission to TEG with further explanations – submission to JSG to assess relevance – postponed – rejected)
 - d. the decision of the JSG (approved – approved with changes – new submission to TEG and/or SMO with further explanations – postponed – rejected)
- (5) A section describing the updated text for the Sector Handbook is completed on the CR form.

General rules

- All hereafter-mentioned deadlines are periodically communicated by the organisers as a reminder to the participants of the TEG and Core Groups.
- The agenda items are formulated concretely and required decisions are explicitly marked.
- The minutes must include the detailed actions, responsibilities and deadlines. All decisions must be written down with a detailed, clear and consistent description (e.g. new rules, functions, new schemes or texts).
- The same participating IM and RU representative should attend all the TEG meetings, in which he is a member. In the case of substitution, the criteria for the profile of TEG members must be respected by the substitute. The nominating company must ensure the seamless transition.
- To increase the probability of decision-making during the meetings, representatives must have expert knowledge about the topics of the meeting.
- Representatives must prepare and pose questions/comments on CRs prior to the meeting and in accordance with the process steps for CR evaluation.
- All relevant documents must be available for all TEG participants at all times. The management of these documents, e.g. in the Content-Management-System (CMS), is done by the organiser of the TEG meeting (Chair).
- Decisions should not be postponed more than one time. In case of a second postponement it must be escalated to JSG by SMO.
- If the CR is assessed as “complex” by the JSG, a fixed calendar is proposed to TEG and SMO to agree on a decision.

Process steps for CR evaluation

<i>Timeline (D = day of TEG)</i>	<i>Activity</i>	<i>Responsible</i>
Submission of CRs and discussion		
D – 4 weeks	Deadline for the submission of CRs (This deadline allows for a timely preparation and evaluation of CRs by the TEG members and comments / questions can be added)	Participants of TEG (esp. IMs and RUs)
D – 2 weeks	Deadline for comments and questions on submitted CRs (This deadline allows for timely amendments of the CRs by the submitter due to the posted comments / questions)	Participants of TEG (esp. IMs and RUs)
Between D – 2 weeks and D – 1 week	Analyse of the CRs by the Chair of the TEG He has the right to refuse the acceptance of CRs into the agenda if the preconditions for CR submission are not met immediately after the deadline for comments. In this case the chair must send the CR back to the creator with the recommendations for a successful acceptance.	Chair of the TEG
D – 1 week	Sending of the agenda Beside the topics and the accepted CRs to be discussed, a short summary is also given to show the major arguments against or in favor of a CR	Chair of the TEG
D (day of TEG meeting)	Discussions and decisions on CRs are to be completed in the “decision section” of the CR form. Actions for the next TEG meeting date are to be defined, including establishment of a Core Group (see dedicated section hereafter)	Chair of the TEG
D + 1 week	Sending of the minutes including the tasks for the Core Group. For further information concerning the Core Group, consult the Core Group section in this document; Responsible: organiser of TEG (Chair)	Chair of the TEG
SMO following the TEG (usually D + 1 or 2 days)	The TEG leader gives feedback to the existing discussions, advice and opinion of the TEG and Core Group by completing the “decision section” of the CR form Decision by the SMO (approved – approved with changes – new submission to TEG with further explanations – submission to JSG to assess relevance – postponed – rejected)	Chair of the TEG Chair of the SMO
JSG following the SMO	Presentation of the status of the CRs Decision by the JSG (approved – approved with changes – new submission to TEG and/or SMO with further explanations – postponed – rejected)	Chair of the SMO
CR approved by the SMO		
Reception of TEG minutes + 2 weeks	The initiator of the CR proposes, with the support of other members and the Core Group, a draft update to the Sector Handbook. Upload to the CMS for comments by the TEG and SMO during 3 weeks	Initiator of the CR
From upload on CMS + 3 weeks and latest	Depending on the comments, the SMO decides to approve the update (if necessary with slight improvements) or to submit the update to the TEG	Chair of the SMO

2 weeks before the biannual publication of the Sector handbook update	for feedback (which can be done with a written procedure). The update is sent by the SMO to JSG for approval (during meeting or by written procedure)	Chair of the JSG
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Core Group

A Core Group can be initiated if there are topics in a TEG meeting, to which a decision cannot be made due to missing information or the need for further elaboration.

The Core Group should include the CR submitter and should not exceed a maximum of 8 expert members. This Core Group is an expert sub-group of the TEG and has the mandate to develop solutions to be discussed in the TEG and to propose texts or schemes for the sector handbook. The tasks of the Core Group are commonly and clearly formulated in the TEG.

The developed solutions, texts and schemes are submitted to the following TEG one week prior to its meeting. The proposed solutions, texts and schemes should generally be accepted by the TEG members and only be refused in exceptional cases, e.g. if a business operation of an IM or a RU cannot be carried out adequately in future.

The Core Group informs the SMO in due time of the progress of the CR study and seeks advice or opinion if needed.

Annex 4

List of abbreviations

CCB	Change Control Board
CCM	Change Control Management
CCS	Common Components System
CI	Common Interface
CR	Change Request
CSG	Common Support Group (TAP TSI)
CTG	Coordination Technical Group
DG MOVE	General Direction Mobility of the European Commission
ERA	European Union Agency for Railways
ICG	ERA TAF TSI Implementation Cooperation Group
IM	Infrastructure Manager
IRG	Implementation Reporting Group
JSG	Joint Sector Group
KPI	Key Performance Indicator
NCP	National Contact Point
PM	Proposal of Modification
RB	Representative Body
RSP	Rolling Stock Provider
RSRD	Rolling Stock reference Database
RU	Railway Undertaking
SM	Station Manager
SMO	Sector Management Office
SteCo	Steering Committee
TAF TSI	Commission Regulation (EU) No 1305/2014 of 11 December 2014 (repealing Regulation (EC) No 62/2006) concerning the technical specification for interoperability relating to the telematics applications for freight subsystem of the rail system in the European Union
TAP TSI	Commission Regulation (EU) No 454/2011 of 5 May 2011 on the technical specification for interoperability relating to the subsystem 'telematics applications for passenger services' of the trans-European rail system
TEG	Telematics Expert Group
TRLG or TReLiG	TAP Retail Liaison Group (TAP TSI)
TSGA	TAP Services Governance Association
WK	Wagon Keeper