

Making the railway system work better for society.

FINAL REPORT 006REC1128 TO THE RECOMMENDATION OF THE EUROPEAN UNION AGENCY FOR RAILWAYS

on

Revision of the regulation 1305/2014/EC concerning the technical specification for interoperability relating to the telematics applications for freight

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1. Executive summary

The report is the final report for the recommendation 006REC1128 concerning the revision of the TSI "Telematics applications for freight". The report explains the achieved results of the working party.

The European Railway Agency (the Agency) received a mandate in 2010 to review the technical specifications for interoperability (TSI) for the 'telematics applications for freight' (TAF) subsystem in accordance with Article 6(1) of Directive 2008/57/EC. The mandate was given by the decision (EC) C(2010)2576 final. The European commission published on 8 June 2017 the supplementing Directive (EU) 2016/797 with specific objectives for the drafting, adoption and review of technical specifications for interoperability. The document defined in detail the tasks to be elaborated by ERA concerning the revision of the TAF TSI and mandated ERA for this revision.

The working party started the discussion about the revision of the TAF TSI with the kick-off meeting on on 25th of October 2018. The main topics for the discussion were:

- Soft compliance (chapter 4.2.1 and 4.2.16.2)
- Inclusion of available ELETA elements for ETA calculation
- Better access to tracking data for customers
- Inclusion of CCM process which has been harmonised with the TAP CCM process
- combined transport related specific TAF TSI change requests
- related to TAF chapter 4.2.1 and 4.2.12.6 (Common Interface and Compliance)
- related to TAF chapter 4.2.1.2. Consignment orders
- related to Rolling Stock Reference Database
- related to TAF chapter 4.2.11.1. Reference Files
- related to TSI chapter 4.2.12.3 Security
- related to the ERA compliance reporting

The working party has finished discussion on 29 May 2020 and provided a recommendation about the revision of the TAF TSI. The recommendation is hereby submitted to the European Commission as well as published in parallel on the website of the Agency.

Work of the working party included processing of the outcome of the public consultation open during the period between 10/01/2020 and 13/04/2020.

While delivering the recommendation in timely manner, the working party also pointed out areas where the work shall continue:

- EDIGES messages,
- intelligent freight trains/wagons such as https://tis.ag/en/downloads/ or similardigital automatic coupler,
- temporary infrastructure restriction,
- automated data exchange, machine learning, automated train ready,
- GNSS identifiers for locations/infrastructure,
- Unique Train ID / JSG Pilot Program
- Merge RU/IM part for TAF and TAP

Those subjects were taken on board by the Agency and added to the Terms of Reference for the next TAF TSI revision project 2020-2022.

2. Introduction

The report shows the results achieved after about 1 and a half a year of work on the revision of the commission regulation (EU) 1305/2014 Telematics Applications for Freight TAF TSI. It gives background information about the revised draft TSI, which is attached as an annex to this report.

The working party had 7 meetings (not counting kick off) and could agree on a final proposal for recommendation of the revised TAF TSI. This number of meetings includes additional meetings added ad-hoc as a result of ongoing discussions, in order to assure timely closure of the working party task.

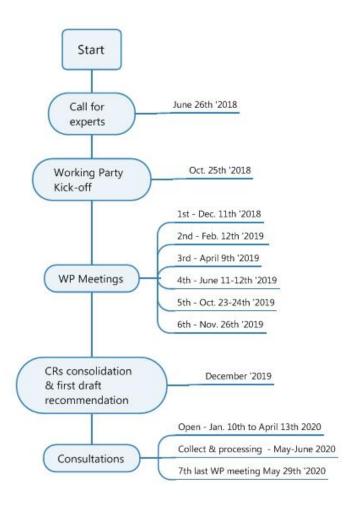


Figure 1 TAF TSI revision timeline

Overall number of Change Requests logged in the Change Control Management tool and processed by the Working Party was 43.

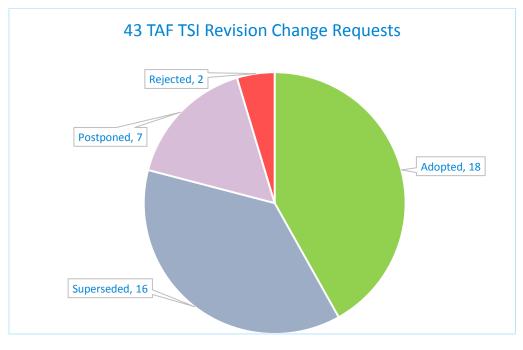


Figure 2 TAF TSI Revision Change Requests statistics

2.1. Legal basis

The legal basis for the revision of the TAF TSI is based on the following documents:

- Regulation (EC) No (EU) 2016/796 repealing Agency Regulation (EC) No 881/2004
- Commission Regulation (EU) No 1305/2014 of 11 December 2014 on the technical specification for interoperability relating to the subsystem 'telematics applications for freight services' of the rail system in the European Union.
- COMMISSION DELEGATED DECISION (EU) 2017/1474 of 8 June 2017 supplementing Directive (EU) 2016/797 of the European Parliament and of the Council with regard to specific objectives for the drafting, adoption and review of technical specifications for interoperability, Article 13

The delegated decision (EU) 2017/1474 defined in detail the closure of the following topics during the revision of the TAF TSI:

- Regulation (EU) No 1305/2014 ('TAF TSI') shall be revised in order to simplify the procedure for the update of its technical baseline in accordance with the TAF TSI Change Control Management process referred to in Section 7.2 of the Annex to that Regulation.
- The content and structure of messages defined in the TAF TSI in relation to exchange of wagons and train composition shall be revised and, where appropriate, simplified.
- The content and structure of messages defined in the TAF TSI in relation to combined or multi-modal transport shall be revised and, where they are not available, they shall be developed in order to facilitate logistics and operations.
- Where appropriate, the TAF TSI shall include data which shall be exchanged with safety related applications.
- The links between the TAF TSI databases and the tools used to improve the performance of rail freight shall be reviewed.
- The TAF TSI shall allow the Agency to assess the compliance of the IT tools deployed by the European rail sector with the TSI requirements.

 The TAF TSI shall not impose requirements on railway undertakings, which could constitute a barrier for the digitalisation of railways.

2.2. Purpose and Scope

The TAF TSI has been drafted between 2010 and 2013. It has been published as Commission regulation (EU) 1305/2014 on 12 December 2014. Due to the developments in the rail sector, especially concerning the railway freight business and their monitored implementation, the content of some parts of the regulation has to be revised. This is mainly driven by the following facts:

- The technical documents of the TAF TSI were further developed in the ERA TAF TSI CCM working party and by the rail sector. Most of the changes of the TAF TSI technical documents are purely technical and were already incorporated. However, some of these changes remained unsolved, because they will affect the TAF TSI basic parameter definition as well and they cannot be modified in the TAF TSI CCM working party. The current text of the TAF TSI does not reflect these changes.
- The alignment of the TAF TSI with the current revision of the TAP TSI.
- During the TAF implementation monitoring it has been observed that some of the original TAF functions became obsolete, (provisions for Interchange Reporting, WIMO or some Reference Data) thus, they should not stay anymore as mandatory requirements in the TAF TSI legal text.

The scope of the revision of the TAF TSI includes four main topics:

- 1. Soft compliance (chapter 4.2.1 and 4.2.16.2)
- 2. Inclusion of available ELETA project elements¹ for ETA calculation and for combined transport requirements
- 3. Better access to tracking data for customers
- 4. Inclusion of CCM process which has been harmonised with the TAP CCM

2.3. Objectives

The main objectives of the project is the revision of the TAF TSI to incorporate changes in the legal text and in the annexed technical documents. Proposed changes shall facilitate TAF TSI implementation for stakeholders by easing system requirements and so reducing costs; making train and consignment movements more transparent and predictable.

http://www.uirr.com/en/projects/ongoing/item/21-electronic-exchange-of-eta-information/34-ongoing.html

3. Workgroups

3.1. Setup of the working party

3.1.1. Setup of the project

ERA has created in 2018 a project for the revision of the TAF TSI. ERA drafted the internal project documentation and identified the topics to be discussed in the revision of the TSI. A first draft of the topics (Terms of Reference and Project Plan) to be addressed in the TAF TSI revision was presented in the ERA economic survey group in June 2018.

The content of the Terms of Reference and Project Plan can be summarised along the following key principles:

Background	The legal basis for the revision of the TAF TSI is based on the following documents:
	 Regulation (EC) No (EU) 2016/796 repealing Agency Regulation (EC No 881/2004 COMMISSION DELEGATED DECISION (EU) 2017/1474 of 8 June 2017 supplementing Directive (EU) 2016/797 of the European Parliament and of the Council with regard to specific objectives for the drafting adoption and review of technical specifications for interoperability Commission regulation (EU) No 1305/2014 of 11 December 2014 or 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 Commission Delegated Decision (EU) 2017/1474 states in its Article 3: "6. TSIs related to information and communication systems shall take into
	account open source and open data architecture requirements."
	Furthermore Article 13. states that
	"2. The content and structure of messages defined in the TAF TSI in relation to exchange of wagons and train composition shall be revised and, where appropriate, simplified.
	3. The content and structure of messages defined in the TAF TSI in relation to combined or multi-modal transport shall be revised and, where they are not available, they shall be developed in order to facilitate logistics and operations.
	4. Where appropriate, the TAF TSI shall include data which shall be exchanged with safety related applications.
	5. The links between the TAF TSI databases and the tools used to improve the performance of rail freight shall be reviewed."
Purpose	The purpose of this project is the revision of the TAF TSI addressing issues related to railway customers, aiming at harmonizing the exchange of information between actors. The revision aims to facilitate the deployment of harmonised protocols and processes for exchanging information between railway actors will enable RUs and IMs to permanently locate freight trains and exchange documents related to the carried goods. Above deployment of those harmonised protocols and processes will be done in a multimodal environment where special attention will be paid to aspects such as information exchange towards emergency systems in freight or

connection to other modes of transport.

Project objective	Proposed changes will facilitate TAF TSI implementation for stakeholders by easing system requirements and so reducing costs; making train and consignment movements more transparent and predictable.
Underpinning assumptions	The underpinning assumption for this project is: (i) No extension of the scope of the project during the lifetime
Scope	 The scope is limited to the revision of the following TAF TSI functions: Soft compliance (ch. 4.2.1 and 4.2.16.2) Inclusion of available ELETA elements for ETA calculation Better access to tracking data for customers Inclusion of CCM process which has been harmonised with the TAP CCM process
Interfaces and dependencies with other projects	There is an interface with CEF financed ELETA project
Internal Decision Making	The internal decisions will be submitted to the project sponsor for validation.
External Decision Making	The ERA working group "TAF Implementation Cooperation" will be consulted in the decision making process.

3.1.2. Setup of the working party

A working party for the revision of the TAF TSI has been established by ERA.

For the appointment of the experts for the working party, ERA has prepared a call for experts and submitted to the ERA recognised bodies and NSA's in June 2018. ERA has received from them until September 2018 the contact details of the appointed speakers and deputy speakers for the working party.

The working party has been composed of the following organisations and speakers:

Table 1: appointed speakers for the working party

Stakeholder / NSA	Official speakers		
NSA Austria	Edeltraud	Heinze	
NSA Estonia	Karin	Veskioja	
NSA Finland	Une Elina	Tyynila	
NSA France	Matthieu	Goulard	
NSA Germany	Stefan	Müller	
NSA Netherlands	Hinne	Groot	
NSA Netherlands	Menno	Langeveld	
NSA Poland	Michal	Jaworski	
NSA Slovakia	Eva	DURISOVA	
NSA Slovenia	Zdenko	ZEMLJIČ	
NSA Switzerland	Rudolf	Achermann	
	Christian	Weber	
Community of Francisco Daily average	Jan-Christian	Arms	
Community of European Railway and Infrastructure Companies	Rafal	Kowalczyk	
initiastructure companies	Vito	Sante Achille	
	Yann	Seimandi	
	Patrick	Konix	
European Rail Infrastructure Managers	JAVIER	MORENO	
	Loic	Le Mignot	
European Sea Ports Organisation	Anne	Rieke-Stuhlmann	
European Shippers Council	Godfried	Smit	
Hitrail	Antonio	Elias Lopez	
Titi dii	Ugo	Dell'Arciprete	
International Union for Road-Rail Combined	Feyen	Eric	
Transport (UIRR)	Aldo	Croci	
International Union of Wagon Keepers	Peterhans	Gilles	
International official of wagon keepers	Thomas	Heydenreich	
Rail Net Europe	Harald	Reisinger	
hall Net Europe	Vojkan	Stefanovic	
RailData	Michael	Pfitzner	
Nanvata	Tommy	Ransmark	
UNIFE	Miroslav	Haltuf	

The composition of the working party has been changed during the project as described in the following table.

Stakeholder / NSA	Originally appointed Speaker	Replaced by
Community of European Railway and Infrastructure Companies	Vito Sante Achille	-

4. Working methods

The Agency is chairing, managing and coordinating the WP for the revision of the TAF TSI. ERA applies relevant internal procedures and guidelines (e.g. procedure on issuing a recommendation or guide for drafting TSIs).

To facilitate exchange of documents, an extranet workspace of the project was established at: https://extranet.era.europa.eu/TAF_REV/SitePages/Home.aspx. This workspace is accessible for the members of the working party, their deputies and all members of the Agency involved in this discussion.

Furthermore ERA has set-up a management tool for the management of the changes of the TAF TSI legal text and the supporting technical documents. For this purpose ERA has modified the tool for the change control management of the TAF/TAP TSI technical documents and made this tool available on the ERA-website https://ccm.era.europa.eu/cqweb/ in the database TEREV. In this tool all topics concerning the changes, requested for the TAF TSI revision were logged and published to the working party. All proposed changes were discussed in the working party and the status of the change requests have be changed according to the decisions in the working party.

For the management of the changes of the technical documents of the TAF TSI, a change control management procedure is in place, as requested in chapter 7 of the TAF TSI.

The representative organisations were required to ensure continuity of their representative members for the duration of the WP. Whenever possible, the representative members were required to express their organisation's position in advance of the WP meetings through written methods, such as commenting on the draft documents or the draft minutes of the WP meetings.

In order to achieve a common and agreed position of their organisation, the members should have shared pre- and post- meeting information within their organisations. The organisations were expected to facilitate the internal exchange of opinions and the elaboration of their position, for instance through 'mirror groups'.

The text of the recommendation – based on the current state of the discussion – was always available to the members of the working party through the TAF TSI revision working party extranet.

4.1. Meetings of the working party

The working party had the following meetings:

Meeting	Date
TAF TSI Revision working party Kick-off	25.10.2018
1 st meeting TAF TSI Revision working party	11.12.2018
2 nd meeting TAF TSI Revision working party	12.02.2019
3 rd meeting TAF TSI Revision working party	09.04.2019
4 th meeting TAF TSI Revision working party	11-12.06.2019
5 th meeting TAF TSI Revision working party	23-24.10.2019
6 th meeting TAF TSI Revision working party	26.11.2019
7 th meeting TAF TSI Revision working party (remote meeting)	29.05.2020

The participation in the meetings of the TAF TSI revision working party:

Table 2: Working party meetings participation

Stakeholder / NSA	Kick off	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th
NSA Austria	Y	Υ		Υ		Υ	Υ	Υ
NSA Estonia								Υ
NSA Finland	Y	Υ	Υ	Υ		Υ		Υ
NSA France	Y							
NSA Germany	Y	Υ	Υ	Υ	Υ		Υ	Υ
NSA Italy								
NSA Netherlands		Υ						
NSA Poland	Y	Υ	Υ					Υ
NSA Slovakia								
NSA Slovenia	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ
NSA Switzerland	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Community of European Railway and Infrastructure Companies	Y	Υ	Υ	Y	Υ	Υ	Y	Y
European Rail Infrastructure Managers	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ
European Sea Ports Organisation								Υ
European Shippers Council		Υ	Υ					
Hitrail	Υ	Υ	Υ	Υ	Υ	Υ	Υ	
International Union for Road-Rail Combined Transport (UIRR)	Y	Υ	Y	Υ		Υ		Υ
International Union of Wagon Keepers	Y	Υ	Υ	Υ				Υ
Rail Net Europe		Υ	Υ		Υ	Υ	Υ	Υ
RailData	Y	Y	Υ	Υ		Υ		Υ
UNIFE	Y	Υ	Υ	Υ	Υ	Υ	Υ	

The working party was very active and proposing as well written proposals concerning the topics of the revision of the TAF TSI.

5. Main aspects covered

Based on the project plan for the revision of the TAF TSI, the working party focused on the following points:

- 1. Soft compliance (ch 4.2.1 and 4.2.16.2)
- 2. Inclusion of available ELETA elements for ETA calculation
- 3. Better access to tracking data for customers
- 4. Inclusion of CCM process which has been harmonised with the TAP CCM

5.1. Input documents

For the revision of the TAF TSI the following input documents were taken into account:

- 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
- Regulation (EC) No (EU) 2016/796 repealing Agency Regulation (EC) No 881/2004
- COMMISSION DELEGATED DECISION (EU) 2017/1474 of 8 June 2017 supplementing Directive (EU) 2016/797 of the European Parliament and of the Council with regard to specific objectives for the drafting, adoption and review of technical specifications for interoperability:

No	Reference	Title
1	ERA-TD-100	TAF TSI — ANNEX A.5:FIGURES AND SEQUENCE DIAGRAMS OF THE TAF TSI MESSAGES
2	ERA-TD-101	TAF TSI — Annex D.2: Appendix A (Wagon/ILU Trip Planning)
3	ERA-TD-102	TAF TSI — Annex D.2: Appendix B — Wagon and Intermodal Unit Operating Database (WIMO)
4	ERA-TD-103	TAF TSI — Annex D.2: Appendix C — Reference Files
5	ERA-TD-104	TAF TSI — Annex D.2: Appendix E — Common Interface
6	ERA-TD-105	TAF TSI — Annex D.2: Appendix F — TAF TSI Data and Message Model

5.2. Update of chapter 2 (subsystem definition and scope)

The following changes of the legal text, concerning the revision of the basic parameters concerning the RU/IM-communication in TAF TSI chapter 2, have been logged in the change control tool for the TAF TSI revision and adopted by the Working Party:

Table 3: changes concerning the revision of TAF TSI chapter 2 (subsystem definition and scope)

Change#	Headline
TSI_C00000103	Compatibility between TAF TSI and CIM Uniform Rules
TSI_C00000104	TAF Revision - Update of chapter 2 (Definition of sub-system and scope)
TSI_C00000153	TAF Revision - 4RP alignment and fine quality improvements of the TAF TSI recommendation text

These changes were discussed at the meetings of the TAF TSI revision working party. The WP took special care to align these TAF RU/IM basic parameters with the RU/IM basic parameters in the TAP TSI.

5.2.1. TSI_C00000103 - Compatibility between TAF TSI and CIM Uniform Rules.

See description in chapter 5.4.2.

5.2.2. TSI C00000104 - Update of chapter 2 (Definition of sub-system and scope)

One aim of the revision is to simplify the TAF text by avoiding the repetition of processes already described in other documents (legal documents like directives, regulations, TSIs, etc.) or not subject to regulation (business processes).

Another aim is to align TAF TSI with TAP TSI which text is leaner for equivalent chapters. This alignment will improve the synergy between TAF and TAP RU/IM, and also TAP Retail when relevant.

The scope is correctly defined in chapters 2.1 and 2.2. But the chapter 2.3 describes in very detailed manner the freight ecosystem and processes. It copies partly the directives 2012/34 and 2016/797, TSIs or regulation 913/2010 without clear added value and difficulties to update. In addition the TAP TSI has no equivalent chapter 2.3. Chapter 2.3 is hence revised.

5.2.3. TSI_C00000153 - 4RP alignment and fine quality improvements of the TAF TSI recommendation text See description in chapter Error! Reference source not found.

5.3. Update of chapter 3

The following changes of the legal text, concerning the revision of the basic parameters concerning the RU/IM-communication in TAF TSI chapter 3, have been logged in the change control tool for the TAF TSI revision and adopted by the Working Party:

Table 4: changes concerning the revision of TAF TSI chapter 3

Change#	Headline
TSI_C00000105	TAF Revision - Update of chapter 3 (Essential requirements)
TSI_C00000153	TAF Revision - 4RP alignment and fine quality improvements of the TAF TSI recommendation text

These changes were discussed at the meetings of the TAF TSI revision working party. The WP took special care to align these TAF RU/IM basic parameters with the RU/IM basic parameters in the TAP TSI.

5.3.1. TSI_C00000105 - Update of chapter 3 (Essential requirements)

In addition to the update of TAF text according to evolution of the European regulation, the aim is to simplify the text by avoiding the repetition of processes already described in other documents (legal documents like directives, regulations, TSIs, etc.) or bringing no clear added value.

Another aim is to align TAF TSI with TAP TSI which text is leaner for equivalent chapters. This alignment will improve the synergy between TAF and TAP RU/IM, and also TAP Retail when relevant.

The chapter 3 describes the essential requirements of TAF subsystem. Nevertheless the requirement "Accessibility" is missing in sub-chapters 3.2 and 3.3. In addition the sub-chapter 3.4 brings no added value and should be deleted. Note that there is no equivalent chapter 3.4 in TAP TSI.

5.3.2. TSI_C00000153 - 4RP alignment and fine quality improvements of the TAF TSI recommendation text See description in chapter Error! Reference source not found.

5.4. Revision of TAF TSI chapter 4 (RU/IM basic parameters)

The following changes of the legal text, concerning the revision of the basic parameters concerning the RU/IM-communication in TAF TSI chapter 4, have been logged in the change control tool for the TAF TSI revision and adopted by the Working Party:

Table 5: changes concerning the revision of TAF TSI chapter 4 (RU/IM basic parameters)

Change#	Headline
TSI_C00000092	TAF Revision - 4.2.10.3. The Rolling Stock Operational Data, 4.2.11.2. Other Databases, Appendix B — Wagon and Intermodal Unit Operating Database (WIMO)
TSI_C00000103	Compatibility between TAF TSI and CIM Uniform Rules
TSI_C00000126	TAF revision - Chapter 4 Alignment with the TAP TSI
TSI_C00000132	TAF Revision - Update of chapter 4
TSI_C00000153	TAF Revision - 4RP alignment and fine quality improvements of the TAF TSI recommendation text
TSI_C00000297	TAF revision - CONSULTATIONS - Chapter 4.2.11.5 update on Common Interface

These changes were discussed at the meetings of the TAF TSI revision working party. The WP took special care to align these TAF RU/IM basic parameters with the RU/IM basic parameters in the TAP TSI

5.4.1. TSI_C00000092 - The Rolling Stock Operational Data, Other Databases, Wagon and Intermodal Unit Operating Database (WIMO)

Representatives in the Joint Sector Group suggested the deletion of WIMO in the TAF TSI regulation for following reasons:

- There is no business case and no use case which requires a WIMO
- All information needed by the actors are already included in existing TAF TSI messages (TCM, wagon movement messages)
- The development of such WIMO(s) is costly but not beneficial for RUs/Keepers Light Impact Assessment by ERA for this CR has concluded that the CR can be approved, however, provisions for WIMO should remain as optional in the revised TAF TSI (instead of the proposed complete deletion).

The CR was agreed by the WP members with the optional character as proposed by the ERA Light Impact Assessment. WP agreed to have a separate chapter in the TSI covering the optional WIMO.

5.4.2. TSI C00000103 - Compatibility between TAF TSI and CIM Uniform Rules.

The UTP TAF was adopted in 2017 with differences in articles 2.3.2 and 4.2.1.2 compared to the TAF TSI in order to ensure compatibility with the COTIF CIM Uniform Rules. Within COTIF, the CIM Uniform Rules governs the rights and the obligations of the parties to the contract (the carrier and the consignor) of international carriage of goods by rail. The TAF TSI sets out provisions concerning the information exchange for rail freight services.

Although the purpose of the TAF TSI is not to regulate contractual relations, it does refer to contractual obligations in articles 2.3.2 and 4.2.1.2. The requirements can lead to ambiguities in relation to the CIM Uniform Rules. The CIM Uniform Rules govern the rights and the obligations between carrier and consignor. In terms of CIM, the carrier means the contractual carrier with whom the consignor has concluded the contract of carriage in accordance with CIM. It is not necessarily a railway undertaking as defined in the TAF TSI. The consignor can be the same entity as the customer of the LRU in the TAF TSI, but the customer of the LRU in the TAF TSI can also be e.g. the contractual carrier.

Working Party agreed that Articles 2.3.2 and 4.2.1.1 of Commission Regulation (EU) No 1305/2014 of 11 December 2014 on the technical specification for interoperability relating to the telematics application for freight subsystem of the rail system in the European Union should be modified as follows:

Article 2.3.2:

For:

"This TSI for the railway freight transport industry is limited in accordance with Directive 2008/57/EC to IMs and RUs/LRUs with reference to their direct customers.

"[...] Under contractual agreement the LRU shall provide information to the Customer in particular:

Read:

"This TSI for the railway freight transport industry is limited in accordance with Directive 2008/57/EC to IMs and RUs/LRUs data exchange.

This TSI enables the LRU to provide information to the Customer in particular: [...]"

Article 4.2.1.1:

For:

"The Consignment Note has to be sent by the Customer to the Lead RU. It must show [...]"

Read:

"The Consignment Note data must contain [...]"

5.4.3. TSI C00000126 - Alignment of TAF RU/IM related BPs with TAP

The main goal of the change was to harmonise the TAF TSI basic parameters concerning the RU/IM-communication with those from the TAP TSI. Both regulations share the same basic parameters for the RU/IM-communication and therefore a harmonisation will facilitate the implementation of TAF and TAP TSI.

For historical reasons the TAP TSI has created a separate technical document for the RU/IM-communication, containing the messages for the RU/IM-communication. The messages are shared with the TAF TSI. The format and the processes for the message exchange are the same. The accommodation of those messages in two different technical documents in the annexes of TAF TSI and TAP TSI created additional effort for the management of them.

Therefore ERA proposed to harmonise the chapters concerning the RU/IM-communication between TAF and the TAP TSI and to abolish the TAP TSI technical document B.30 and replace the reference to the technical specifications by a cross-TSI reference to the TAF TSI appendix F.

The working party discussed the ingoing proposal of ERA. This proposal has been revised by CER and presented in the WP. This CER proposal concerning the changes of the TAF TSI BPs discussed in the WP. The shared basic parameters of both TSI's for RU/IM-communication are harmonised as much as possible by:

- harmonising the exact wordings of the basic parameters of both regulations
- reorder of the chapters,

The remaining differences between the both TSI's are purely passenger or freight related requirements. This may support the ongoing discussion about the creation of a single telematics TSI, applicable for passenger and freight operations.

5.4.4. TSI_C00000132 - Update of chapter 4

This is a consolidated Change Request superseding the other Change Requests:

TSI_C00000057 TAF revision - Chapter 4.2.4. (Train Running Forecast)

TSI_C00000058 TAF revision - Chapter 4.2.5. (Service Disruption Information)

TSI_C00000062 TAF revision - Chapter 4.2.1 and 4.2.16.2 (Common Interface and Compliance)

TSI_C00000063 TAF revision - Chapters various

TSI C00000066 TAF revision - chapter 4.2.2.7. (Path not available)

TSI_C00000080 TAF Revision - Chapter 4.2.8 (Interchange Reporting - removal)

TSI C00000082 TAF Revision - Chapter 4.2.3 TrainCompositionMessage

TSI_C00000089 TAF revision - Chapter 4.2.10.2. The Rolling Stock Reference Databases

TSI_C00000090 TAF Revision - 4.2.1.2. Consignment orders

TSI C00000093 Integration of Combined Transport

TSI C00000094 TAF Revision - 4.2.10.1. Preface

TSI C00000095 TAF Revision - 4.2.11.1. Reference Files

TSI_C00000106 TAF Revision - Update of chapter 4.2.2 (Path request), 4.2.3 (Train preparation), 4.2.4 (Train running Forecast), 4.2.5 (Service disruption), 4.4.1 (Data quality)

TSI C00000136 Define how to integrate the declaration of Rotterdam

And so the considerations include:

- Rotterdam declaration of 2016;
- Combined Transport specific requirements;
- Responsibilities of RUs and IMs;
- Alignment with TAP TSI which is under revision
- security,
- In addition the IT dedicated sections are updated to take account of the lessons learned of TAF implementation.

Following removal of the Interchange Reporting requirements the Agency shall clean up accordingly the TAF XSD schema and the Technical Documents containing the Interchange Reporting sequence diagrams as soon as the draft TSI is officially approved.

5.4.5. TSI_C00000153 - 4RP alignment and fine quality improvements of the TAF TSI recommendation text

This is 4RP alignment and quality review Change Request for the complete recommendation text.

5.4.6. TSI C00000297 - CONSULTATIONS - Chapter 4.2.11.5 update on Common Interface

This is an error correction change request as a result of public consultation session.

5.5. Revision of chapter 6

The following changes of the legal text, concerning the revision of the basic parameters concerning the TAF TSI chapter 6, have been logged in the change control tool for the TAF TSI revision and adopted by the Working Party:

Table 6: changes concerning the revision of TAF TSI chapter 6

Change#	Headline		
TSI_C00000101	TAF revision - chapter 6.2. Subsystem Telematics Applications for Freight. Assessment		
	of compliance of IT tools.		
TSI_C00000107	TAF Revision - Update of chapter 6 (Assessment of conformity and/or suitability for use		
	of the constituents and verification of the subsystem)		
TSI_C00000138	TAF revision - chapter 6.2. Subsystem Telematics Applications for Freight. Assessment		
	of compliance of IT tools.		
TSI_C00000142	TAF revision - Chapter 6.2.1 update		
TSI_C00000153	TAF Revision - 4RP alignment and fine quality improvements of the TAF TSI		
	recommendation text		

These changes were discussed at the meetings of the TAF TSI revision working party. The WP took special care to align these TAF RU/IM basic parameters with the RU/IM basic parameters in the TAP TSI.

5.5.1. TSI_C00000101 - chapter 6.2. Subsystem Telematics Applications for Freight. Assessment of compliance of IT

The TSI should be amended to allow the Agency to assess the compliance of the IT tools deployed by the European rail sector against the TSI requirements.

This is stated in Art 13 (6) of the COMMISSION DELEGATED DECISION (EU) 2017/1474 of 8 June 2017 supplementing Directive (EU) 2016/797 of the European Parliament and of the Council with regard to specific objectives for the drafting, adoption and review of technical specifications for interoperability.

5.5.2. TSI_C00000107- Update of chapter 6 (Assessment of conformity and/or suitability for use of the constituents and verification of the subsystem).

This is alignment Change Request for Chapter 6 in TAF TSI and TAP TSI (regulation 454/2011 under revision)

5.5.3. TSI_C00000138- chapter 6.2. Subsystem Telematics Applications for Freight. Assessment of compliance of IT tools.

This was enhancement proposal regarding technical details of assessment of compliance of IT tools as introduced in the CR TSI_C00000101. However as a result of discussion the proposal did not met support of the Working Party - and so no change is introduced with this CR.

5.5.4. TSI_C00000142 - Chapter 6.2.1 update

TAP TSI Change Request TEREV00000025 proposed further enhancements to the new compliance testing provisions. This CR proposes alignment the TAF with TAP proposal as in line with the TAP REV WP Lille on 24.09.2019.

5.5.5. TSI_C00000153 - 4RP alignment and fine quality improvements of the TAF TSI recommendation text See description in chapter Error! Reference source not found.

5.6. Revision of chapter 7 – Implementation

The following changes of the legal text, concerning the revision of the basic parameters concerning the TAF TSI chapter 7, have been logged in the change control tool for the TAF TSI revision and adopted by the Working Party:

Table 7: changes concerning the revision of TAF TSI chapter 7 (Implementation)

Change#	Headline
TSI_C00000061	TAF revision - Chapter 7.2. (Change Management)
TSI_C00000130	Update of the TAF TSI chapter 7 (Implementation)
TSI_C00000153	TAF Revision - 4RP alignment and fine quality improvements of the TAF TSI recommendation text

These changes were discussed at the meetings of the TAF TSI revision working party. The WP took special care to align these TAF RU/IM basic parameters with the RU/IM basic parameters in the TAP TSI.

5.6.1. TSI_C00000061 - Chapter 7.2. (Change Management)

The goal of the revision of the procedures for the change control management for the TAF and the TAP TSI is to simplify the change control management process and to reduce the number of decision making instances for the approval of change requests. The procedure should be simplified in such a way, that the decisions about the changes of the documents in the annexes of the TAF and TAP TSI regulation can be made exclusively in the change control management working parties of ERA. The step for the approval of those purely technical changes by EC and RISC should be removed to streamline the CCM process for both TSI's. Proposed changes to both TAF and TAP TSI CCM process have been covered with a single ERA recommendation to the European Commission.

Change Request became obsolete since amendment of the TAF TSI by the Commission Implementing Regulation (EU) 2019/778 of 16 May 2019, which updated the chapter 7.2.

5.6.2. TSI_C00000130 - Update of the TAF TSI chapter 7 (Implementation)

The current chapter 7 was relevant when it was revised in 2014. Now the organisation has changed with the new scope of RU/IM Steering Committee and the fulfilment of phases one and two.

In addition the role of the TAF ICG should be better described.

An update to describe the existing and future situation and organisation was hereby introduced by the Change Request.

5.6.3. TSI_C00000153 - 4RP alignment and fine quality improvements of the TAF TSI recommendation text See description in chapter Error! Reference source not found.

5.7. Revision of Appendix II - Glossary

The following changes of the legal text, concerning the revision of the basic parameters concerning the RU/IM-communication in TAF TSI Appendix II, have been logged in the change control tool for the TAF TSI revision and adopted by the Working Party:

Table 8: changes concerning the revision of TAF TSI Appendix II (Glossary)

Change#	Headline
TSI_C00000120	TAF revision - Glossary - Allocation Body
TSI_C00000133	TAF Revision - Update of the Appendix II (Glossary)
TSI_C00000153	TAF Revision - 4RP alignment and fine quality improvements of the TAF TSI recommendation text

These changes were discussed at the meetings of the TAF TSI revision working party. The WP took special care to align these TAF RU/IM basic parameters with the RU/IM basic parameters in the TAP TSI.

5.7.1. TSI_C00000120 - Glossary - Allocation Body

Missing glossary item added.

5.7.2. TSI_C00000133 - Update of the Appendix II (Glossary)

The Glossary is quite long and contains numerous IT related items that are well-known. Some items related to Combined Transport should be updated or added. Some items introduced in the TSI_C00000132 (update of chapter 4) should be also added.

5.7.3. TSI_C00000153 - 4RP alignment and fine quality improvements of the TAF TSI recommendation text See description in chapter Error! Reference source not found.

5.8. Revision of Appendix III - NCP

The following changes of the legal text, concerning the revision of the basic parameters concerning the RU/IM-communication in TAF TSI Appendix III, have been logged in the change control tool for the TAF TSI revision and adopted by the Working Party:

Table 9: changes concerning the revision of TAF TSI Appendix III (NCP)

Change#	Headline
TSI_C00000140	TAF revision - Appendix III update
TSI_C00000296	TAF revision - CONSULTATIONS - update Appendix III point (2) NCP tasks
TSI_C00000153	TAF Revision - 4RP alignment and fine quality improvements of the TAF TSI recommendation text

These changes were discussed at the meetings of the TAF TSI revision working party.

5.8.1. TSI_C00000140 - Appendix III update

Current Appendix III does not address the NCPs role sufficiently in order to continue the TAF TSI implementation/operation monitoring as projected beyond 2020. This Change Requests proposes corresponding update of the Appendix III.

5.8.2. TSI C00000296 - CONSULTATIONS - update Appendix III point (2) NCP tasks

This is the Change Request resulting from the social consultations, raised by the NCP Spain, processed by the Working Party at its last 7th meeting and incorporated in the Recommendation text. It modifies the change proposed by the TSI_C00000140.

5.8.3. TSI_C00000153 - 4RP alignment and fine quality improvements of the TAF TSI recommendation text See description in chapter Error! Reference source not found.

6. To attention of the European Commission

6.1. TAF TSI Ch. 4.2.3.3. Train Ready message - "national rule"

At the 6th Working Party Meeting the NSA FI raised question if there's a the need of MS notification of "national rules" mentioned in the current TSI Annex Ch. 4.2.3.3.: "The ResponsibleRU shall send a 'train ready' message to the infrastructure manager every time a train is ready to start after train preparation, unless under **national rules** the infrastructure manager accepts the timetable as a 'train ready' message."

At its 7th meeting, Working Party agreed that Agency to flag the item in the current report to attention of the European commission.

6.2. TAF TSI Appendix 1 - ERA-TD-102 "WIMO"

One of the comments received from CER as a result of public consultations held between 10 January and 13 April 2020 stated as follows:

Reference (e.g. Art, §)	Туре	Reviewer	Reviewer's Comments, Questions, Proposals
Appendix I	Mistake	CER	The WIMO (described in section 4.2.10.2) is optional /see ch. 5.4.1/but in Appendix I the technical document ERA-TD-102 'WIMO) remains mandatory. Proposal: The technical document ERA-TD-102 should be optional in Appendix I.

ERA has created corresponding change requests proposal which was processed at the 7th meeting of the working party, with participation of the commenting organisations. WP agreed that the proposal will not impact the TAF TSI recommendation since members were divided whether there's any impact. And so further legal check at DG MOVE shall determine whether the final text shall be updated. WP agreed that ERA shall flag this subject in the TAF recommendation to the EC.

6.3. TAF TSI text to be used for the TAF 2020-2021 revision package

ERA will use for the purpose of the TAF 2020-2021 revision package the draft version TAF TSI recommendation "The Agency Recommendation_006REC1128_taf-tsi_en.docx" amended during 2018-2020.

ERA kindly asks DG MOVE to confirm that this version can be used for the TAF 2020-2021 revision package.

7. Consultations

According to the internal procedures for the drafting of recommendations, a social consultation had to be performed to inform the freight customers, social partners and OTIF about the results of the revision of the TAF TSI. For this purpose a dedicated website² including a functional mailbox³ has been made available by ERA, where the drafted TAF TSI version from 18 December 2019, containing all agreed changes until this date, has been made available to the public.

The consultation has been published on 10 January 2020 on the website of the agency. The organisations were asked to provide their opinion concerning the revised TAF TSI to ERA.

ERA has received until 13 April 2020 feedback from the following organisations:

- Agencia Estatal de Seguridad Ferroviaria (AESF)
- > Community of European Railway and Infrastructure Companies (CER)
- Hamburg Port Authority (HPA) on behalf of European Sea Ports Organisation (ESPO)

CER & ESPO organizations are also a Member of the Working Party.

For all received comments proposals ERA has created corresponding change requests proposals. The latter were processed at the 7th meeting of the working party, with participation of the commenting organisations. It has been concluded as follows:

- AESF Change Request adopted with changes (see chapter 5.8.2)
- Community of European Railway and Infrastructure Companies (CER) 2 Change Requests, from which 1 was adopted (see chapter 5.4.6) and 1 flagged as a discussion point in this report see chapter 6.2.
- Hamburg Port Authority (HPA) on behalf of European Sea Ports Organisation (ESPO) 7 Change Requests postponed for elaboration within the next TAF TSI revision project.

² https://www.era.europa.eu/library/consultations en#consultation1045

³ <u>006REC1128@era.europa.eu</u>

8. Impact assessment

For the impact assessment the following classification of the change requests has been prepared:

- > Error correction no impact assessment needed: in this case the change request corrected an error
- Impact negligible: only minor changes in the TAF TSI core text with negligible economic impact.
- Impact assessment covered by another TSI: The impact assessment has been already executed for another TSI
- Impact assessment: An impact assessment has been executed for the change request.

The changes were classified according to the rules, as listed in the table below.

Table 10: Classification of adopted change requests for the impact assessment

id	Headline	Impact assessment necessary
		Error correction – no impact assessment
TSI_C00000061	Chapter 7.2. (Change Management)	needed.
101_00000001	4.2.10.3. The Rolling Stock Operational	Impact assessment: This change was
	Data, 4.2.11.2. Other Databases, Appendix	subject to an impact assessment. The light
	B — Wagon and Intermodal Unit Operating	impact assessment is available
TSI_C00000092	Database (WIMO)	·
	chapter 6.2. Subsystem Telematics	Impact negligible
TOI 000000404	Applications for Freight. Assessment of	
TSI_C00000101	compliance of IT tools.	
TCI C00000400	Compatibility between TAF TSI and CIM	Error correction – no impact assessment
TSI_C00000103	Uniform Rules	needed.
TSI C00000104	Update of chapter 2 (Definition of sub-	Error correction – no impact assessment needed.
TSI_C00000104	system and scope) Update of chapter 3 (Essential	Error correction – no impact assessment
TSI_C00000105	Update of chapter 3 (Essential requirements)	needed.
131_000000103	Update of chapter 6 (Assessment of	Impact negligible
	conformity and/or suitability for use of the	impact negligible
	constituents and verification of the	
TSI_C00000107	subsystem)	
		Error correction – no impact assessment
TSI_C00000120	Glossary - Allocation Body	needed.
		Error correction – no impact assessment
TSI_C00000126	Chapter 4 Alignment with the TAP TSI	needed.
TO ! 000000100	Update of the TAF TSI chapter 7	Impact negligible
TSI_C00000130	(Implementation)	Laurent or effects to
TSI_C00000132	Update of chapter 4 [ERA] New Annex II	Impact negligible
TSI_C00000132	Update of the Appendix II (Glossary)	Impact negligible
131_000000133	chapter 6.2. Subsystem Telematics	Error correction – no impact assessment
	Applications for Freight. Assessment of	needed.
TSI_C00000138	compliance of IT tools.	needed.
TSI_C00000140	Appendix III update	Impact negligible
		Error correction – no impact assessment
TSI_C00000142	Chapter 6.2.1 update	needed.
	4RP alignment and fine quality	Error correction – no impact assessment
	improvements of the TAF TSI	needed.
TSI_C00000153	recommendation text	
	CONSULTATIONS - update Appendix III	Error correction – no impact assessment
TSI_C00000296	point (2) NCP tasks	needed.
TOL 00000000	CONSULTATIONS - Chapter 4.2.11.5	Error correction – no impact assessment
TSI_C00000297	update on Common Interface	needed.

The impact assessment for the revision of the TAF TSI has been focused on the following change request in order to assess potential options for solutions and to identify the best option:

TSI_C00000092 - 4.2.10.3. The Rolling Stock Operational Data, 4.2.11.2. Other Databases, Appendix B — Wagon and Intermodal Unit Operating Database (WIMO)

The document is available as separate annex [1],

9. Annex 1: Definitions and abbreviations

9.1. Definitions

Table 11: Table of definitions

Definition	Description
	The European Railway Agency (ERA) such as established by the Regulation (EU)
Agency	2016/796 repealing (EC) No 881/2004 of the European Parliament and of the
	Council of 29 April 2004.

9.2. Abbreviations and acronyms

Table 12: Table of abbreviations

Abbreviation	Description	
ССМ	Change control management	
CER	Community of European Railway and Infrastructure Companies	
CIT	International rail transport committee	
CR	Change Request	
CRD	Central Reference Database	
EC	European Commission	
EIM	European Rail Infrastructure Managers	
ERA	European Agency for Railways (also referred to as Agency)	
IA	Impact assessment	
IM	Infrastructure Manager	
RI	Railway indicator	
RISC	Rail Interoperability and Safety Committee	
RNE	Rail Net Europe	
RU	Railway Undertaking	
SM	Station manager	
SO	Strategic objective	
TAF	Telematics Applications for Freight	
TAP	Telematics Applications for Passengers	
TEN	Trans European Network	
ToR	Terms of Reference	
TSI	Technical Specification for Interoperability	

Abbreviation	Description
UIC	Union Internationale des Chemins de fer
UIP	International Union of Wagon Keepers
UNIFE	Association of the European Rail Industry
WK	Wagon Keepers
WP	Working Party organised by ERA

10. Annex 2: Reference documents

Table 13: Table of reference documents

N°	Title	Reference	Version
[1]	Light Impact Assessment TAP Revision 2019/20 –	TAF Revision – CR WIMO	
	Closure of Open Point related to tariff data for		
	domestic sales in TAP TSI		
[2]	Consultations - Comment Sheet Agencia Estatal de	"20200327_AESF comments	27/04/2020
	Seguridad Ferroviaria (AESF)	TAF TSI revision"	
[3]	Consultations - Comment Sheet Community of	"TEM REC 003 Comment	20/03/2020
	European Railway and Infrastructure Companies	sheet_TAF_JSG_20-03-2020"	
	(CER)		
[4]	Consultations - Hamburg Port Authority (HPA) on	"TEM REC 003 Comment	11/04/2020
	behalf of European Sea Ports Organisation (ESPO)	sheet_Hamburg Port	
		Authority"	

11. Annex 3: Reference legislation

Table 14: Table of reference legislation

N°	Title	Reference	Version
[1]	Directive (EU) 2016/797 of the European	OJ L 138, 26.5.2016,	N.A.
	Parliament and of the Council of 11 May 2016 on	p. 44.	
	the interoperability of the rail system (Recast)		
[2]	Regulation (EU) 2016/796 of the European	OJ L 138, 26.5.2016,	N.A.
	Parliament and of the Council of 11 May 2016 on	p. 1.	
	the European Union Agency for Railways and		
	repealing Regulation (EC) No 881/2004		
[4]	COMMISSION DELEGATED DECISION (EU)	OJ L 210/5,	N.A.
	2017/1474 of 8 June 2017 supplementing Directive	15.8.2017.	
	(EU) 2016/797 of the European Parliament and of		
	the Council with regard to specific objectives for		
	the drafting, adoption and review of technical		
	specifications for interoperability		
[5]	Commission Regulation (EU) No 1305/2014 of 11	OJ L 356,	N.A.
	December 2014 on the technical specification for	12.12.2014, p. 438–	
	interoperability relating to the telematics	488	
	applications for freight subsystem of the rail		
	system in the European Union and repealing the		
	Regulation (EC)		
[6]	Commission Implementing Regulation (EU)	OJ L 1391 ,	N.A.
	2019/778 of 16 May 2019 amending Regulation	27.5.2019, p. 356–	
	(EU) No 1305/2014 as regards Change Control	359	
	Management		