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Committee of Technical Experts

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Proposal to update the references to the Technical Documents of TAF TSI listed in Appendix I of UTP TAF

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1. INTRODUCTION

The version of the Uniform Technical Prescriptions Telematics applications for freight services (UTP TAF) in force since 1.12.2017 lays down requirements with regard to the communication process between railway undertakings and infrastructure managers, databases intended to be used to track trains and wagon movements and information to be provided to freight customers. It is equivalent to European Union (EU) 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[1] (TAF TSI).

The UTP TAF makes reference to technical documents that are published and regularly updated on the website of the EU Agency for Railways (ERA). Such a reference was included in the UTP so that the IT provisions are enshrined in COTIF, but managed by ERA. As modification of these references formally constitutes modification of the UTP TAF, it must be subject to a decision by the Committee of Technical Experts in accordance with Article 20 § 1 b) COTIF and Articles 6 and 8a APTU.

In order to take feedback into account and to correct errors, ERA regularly updates the technical documents. UTP TAF Appendix I makes direct reference to the latest version of these technical documents.

2. CONTEXT AND SUBSTANCE OF THE PROPOSAL

The chapters below describe the proposed changes and the reasons for these changes; it identifies them and the entity which initiated the change proposal at EU level. The descriptions have been provided to the OTIF Secretariat by ERA.

2.1 TAF TSI MAINTENANCE RELEASE 2.4.0

The maintenance release was published on ERA's website on 15 June 2020.

2.1.1 CORRECTION OF ERRORS DETECTED IN TECHNICAL DOCUMENT ERA-TD-105: TAF TSI — ANNEX D.2: APPENDIX F — TAF TSI DATA AND MESSAGE MODEL

Table 1: table of CR for correction of errors

id in the CR tool	*Name of the Change Request*	*Name of Submitter*
TELEM00000473	Correction of Error: Requested Calendar BitmapDays	CER
TELEM00000477	Addition of a Related Identifier Section in TrainRunningForecast and Information	CER
TELEM00000491	Error in pattern for LocoTypeNumber	CER
TELEM00000492	TAF revision - Common Interface specification Annex D.2, Appendix E	CER
TELEM00000497	Spelling mistake in element "MultilateralAuthorisationCountries"	CER
TELEM00000515	Error in xsd of TAF TrainComposition message (duplex of OTN)	CER

[1] Official Journal of the EU: OJ L 356, 12.12.2014, p. 438–488

These CRs concerned errors detected during the implementation of the RU-IM communication functionality by the railway companies:

- In CR 473, the bitmap for the requested Calendar for PathRequests has been extended to more than 2 years
- In CR 477, the TrainOperationalIdentification section of the TrainRunningForecast and TrainRunningInformation messages has be enlarged with an optional block for RelatedTransportOperationalIdentifiers. This allows the identification of linked trains (e.g. for replacement trains)
- In CR 491, the errors in the xs:pattern - expressions for the LocoTypeNumber have been corrected
- In CR 492, the URL for the heartbeat service of the common interface has been corrected
- In CR 497, the name of the element “MultilateralAuthorisationCountries” was misspelled. This error has been corrected
- In CR 515, the TrainCompositionMessage contained the double definition of the operational train number.

These errors were corrected in the TAF TSI baseline 2.4.0. Detailed information about the change requests is available in annex II.

2.1.2 INTRODUCTION OF NEW ELEMENTS IN TECHNICAL DOCUMENT ERA-TD-105: TAF TSI — ANNEX D.2: APPENDIX F — TAF TSI DATA AND MESSAGE MODEL

Table 2: table of CR for new elements

id in the CR tool	*Name of the Change Request*	*Name of Submitter*
TELEM00000472	Update of TrainCompositionMessage with complex TrainActivityType	CER
TELEM00000475	Specification for number in “message type” for national messages	CER
TELEM00000480	Change of annotation of data type “Time” in xsd	CER
TELEM00000485	Identification of a Section (Operation)	CER
TELEM00000489	Indication of coasting in Path construction	CER
TELEM00000493	Customer information in WagonReleaseNoticeMessage	CER
TELEM00000494	Customer information in WagonDepartureNoticeMessage	CER
TELEM00000495	Specification of the Limit Speed in the PlannedTrainData	CER
TELEM00000496	Extension and clarification of overhaul date information in RSDS message	CER
TELEM00000500	Cardinality mistake of element “LoadChangeDevice” in RSRD design dataset	CER
TELEM00000501	Representation of NOI TSI in RSDS message	CER
TELEM00000508	New message header element MessageDateTimeCreated	CER
TELEM00000509	TrainRunningInterruptionMessage additional element "InterruptionStatus"	EIM

These CRs were submitted to introduce new elements in the TAF TSI technical document ERA-TD-105: TAF TSI — Annex D.2: Appendix F — TAF TSI Data and Message Model.

- CR 472 has extended the TrainCompositionMessage with new elements concerning the TrainActivity
- In CR 475, the message type has been enhanced by allowing numbers for some specific national messages
- In CR 480, the annotation of the time element has been changed to describe the time expressed in HH:MM:SS
- In CR 485, changing the operational sections for the TrainCompositionMessage
- In CR 489, additional elements to support the path construction using coasting are defined
- In CR 493, the customer information in WagonReleaseNoticeMessage has been made optional
- In CR 494, the customer information in WagonDepartureNoticeMessage has been made optional
- In CR 495, the speed limit has been introduced in the PlannedTrainData to allow the speed limit for the train path planning to be taken into account
- In CR 496, additional elements have been added to the DesignDataSet – element in the RollingStockDataset – element to allow data exchange for the overhaul date for wagons
- In CR 500 the LoadChangeDevice has been changed to allow the definition of more than one brake weight for the variable load brake system
- In CR 501, a revised definition of the brake systems (BrakeSpecialCharacteristics) and the usage of a wagon on the silent routes has been introduced
- In CR 508, the time when a message was created has been integrated in the message header
- In CR 509, the TrainRunningInteruptionMessage has been extended by a flag to indicate whether the train will be affected by an interruption, even if the train has not yet arrived at the interruption point.

Detailed information about the change requests is available in annex I.

2.1.3 INTRODUCTION OF CHANGED CODE LISTS IN TECHNICAL DOCUMENT ERA-TD-105: TAF TSI — ANNEX D.2: APPENDIX F — TAF TSI DATA AND MESSAGE MODEL

Table 3: table of CR for changed code lists

id in the CR tool	*Name of the Change Request*	*Name of Submitter*
TELEM00000474	New TypeOfInformation for acceptance and rejection of Draft and Final offer	CER
TELEM00000478	Cancellation of train object	CER
TELEM00000479	Addition of the a new code for the element TractionMode to identify “PushPullTrain”	CER
TELEM00000482	Change of process to reject path offer	CER
TELEM00000498	Clean up of code list of element “RouteClass”	CER
TELEM00000502	New TypeOfInformation code for "draft no alternative available"	CER
TELEM00000512	New Subsidiary Location Type Code for ENEE Codes	CER

These CRs were submitted to introduce new code list values or to modify existing ones in the TAF TSI technical document ERA-TD-105: TAF TSI — Annex D.2: Appendix F — TAF TSI Data and Message Model.

- CR 474, 478, 482 and 502 were submitted to allow more values for the train path request management. This allows a more detailed description if a train path has to be modified by the IM
- In CR 479, a push-pull train can be now specified in the code list TractionMode

- In CR 498, the RouteClass code list has been updated to new values
- In CR 512, the subsidiary location type code for ENEE has been introduced to support the data exchange with actors still using this numeric location code.

2.2 TAF TSI MAINTENANCE RELEASE 2.5.0

The maintenance release was published on ERA's website on 15 December 2020.

2.2.1 CORRECTION OF ERRORS DETECTED IN TECHNICAL DOCUMENT ERA-TD-105: TAF TSI — ANNEX D.2: APPENDIX F — TAF TSI DATA AND MESSAGE MODEL

Table 4: table of CR for correction of errors

id in the CR tool	*Name of the Change Request*	*Name of Submitter*
TELEM00000550	Duplicated definition of DateLastOverhaul element	CER
TELEM00000552	Annotation formatting is changed in element LocoTypeNumber	CER
TELEM00000554	PlannedDateNextOverhaul is not optional but it should be according to CR, OverhaulValidityPeriod missing	CER
TELEM00000574	Errors in structure "CombinedTrafficLoadProfile" in xsd	CER

These CRs concerned errors detected during the implementation of the RU-IM communication functionality by the railway companies:

- In CR 550, RollingStockDataset syntax consistency correction, not to use locally duplicated definition of DateLastOverhaul element, but global element instead
- In CR 552, LocoTypeNumber element syntax correction by moving the annotation location within the complex type
- In CR 554, there is a correction to the implementation of CR 496 changes to the baseline 2.4.0. PlannedDateNextOverhaul element is defined as optional, and the missing OverhaulValidityPeriod element is introduced
- During incorporation of the changes in the XSD-files, ERA recognised that the element OverhaulValidityPeriod has not been submitted by the requestor. ERA has asked the requestor to provide this element and has introduced it in the TAF TSI message catalogue:

```
    <xs:element name="OverhaulValidityPeriod">
        <xs:annotation>
            <xs:documentation>Validity period of last overhaul in years as
marked on the wagon</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
            <xs:restriction base="xs:integer">
                <xs:minInclusive value="1"/>
                <xs:maxExclusive value="20"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
```

The documentation of CR 554 has been updated accordingly.

- In CR 574, there is a correction to avoid validation errors for the CombinedTrafficLoadProfile integer element - to be defined as string 3 instead of range. Also, child elements have been changed to optional, since in some cases the values are not available. Redundant maxLength restriction is removed from the element.

These errors were corrected in the TAF TSI baseline 2.5.0. Detailed information about the change requests is available in annex II.

2.2.2 INTRODUCTION OF NEW ELEMENTS IN TECHNICAL DOCUMENT ERA-TD-105: TAF TSI — ANNEX D.2: APPENDIX F — TAF TSI DATA AND MESSAGE MODEL

Table 5: table of CR for new elements

id in the CR tool	*Name of the Change Request*	*Name of Submitter*
TELEM00000449	Change of company code to 4-letter-alphanumeric	ERA
TELEM00000486	Change to TrainCCSystem element and code	CER
TELEM00000513	Wagon Interchange Sub Notice message	CER
TELEM00000514	Add new optional element PlannedSpeed to PlannedTrainTechnicalData	CER
TELEM00000549	Make element BookedLocationTime global	CER
TELEM00000551	Element AirBrakedMass documentation is changed.	CER
TELEM00000553	Types 0046 and 0047 are missing from the annotation in the element TrainActivityType	CER
TELEM00000562	Change of cardinality of TrainCCSystem element	CER
TELEM00000564	Incorrect reference in documentation of element "ExceptionalGaugingCode"	CER
TELEM00000567	Change of documentation of element SerialNumber of complexe type LocoTypeNumber	CER
TELEM00000568	Optional LimitedQuantityIndicator for type DanGoodsType	CER
TELEM00000569	Restriction of ‘CargoCodingType’ inconsistent	CER
TELEM00000575	Shift of elements "TrainCC_System" and "TrainRadioSystem"	CER

These CRs were submitted to introduce new elements in the TAF TSI technical document ERA-TD-105: TAF TSI — Annex D.2: Appendix F — TAF TSI Data and Message Model.

- CR 449 was approved by the CCM Board at its meeting on 27 May 2020. It changes the company code format from 4-letter numeric to 4-letter-alphanumeric format.
- CR 486 enables multiple train protection and control systems to be specified in structure TractionDetails
- CR 513 makes the OperationalTrainNumber element optional in order to enable exchange of the WagonInterchangeSubNoticeMessage in situations where the next path is not yet known
- CR 514 introduces the optional element PlannedSpeed to the speed elements within the element PlannedTrainTechnicalData
- CR 549 applies the syntax consistency correction. The purpose is to make the BookedLocationTime element global instead of being repeated with potential inconsistencies. So a new element is added as a copy BookedLocationTime element from low level to top level
- CR 551 applies the documentation error correction for the AirBrakedMass element

- CR 553 recovers the documentation parts missing from the latest TAF scheme - types 0046 and 0047 missing from the annotation in the element TrainActivityType
- CR 562 deals with the cardinality of the TrainCCSystem element to enable inclusion of the multiple train CCS systems available on the train. This CR will be dealt with together with CR 575
- CR 564 replaces the erroneous reference "UIC 404-2 chapter 4.9.2" with the description in the documentation of the element ExceptionalGaugingCode
- CR 567 changes the documentation of element SerialNumber of complex type LocoTypeNumber. Current documentation states that the element must not be used in the planning phase. Since it is needed in some cases, documentation must be updated accordingly to describe the use case option for the element.
- CR 568 makes the LimitedQuantityIndicator element optional in order to enable use of the DangerousGoodsIndication in PlannedTrainData. The clarification of whether the dangerous goods are in limited quantities according to RID Chapter 3.4 is not always relevant information, and is not always available, depending on the phase of the path elaboration
- CR 569 adapts the restriction of the CargoCodingType element to match the listed enumeration values for this element
- CR 575 CR is submitted in combination with CR 486 with the list of available systems and enumerations. CR shifts the TrainCC_System and TrainRadioSystem elements from traction details to the upper level from the locomotive traction details to the train technical data, to be applicable to the train as a whole and not traction unit only.

Detailed information about the change requests is available in annex I.

2.2.3 INTRODUCTION OF CHANGED CODE LISTS IN TECHNICAL DOCUMENT ERA-TD-105: TAF TSI — ANNEX D.2: APPENDIX F — TAF TSI DATA AND MESSAGE MODEL

Table 6: table of CR for changed code lists

id in the CR tool	*Name of the Change Request*	*Name of Submitter*
TELEM00000481	New TypeOfInformationCodes	CER
TELEM00000526	Code list TrainActivityType update	CER
TELEM00000570	New Subsidiary Location Type Code for Intermodal Terminals	CER

These CRs were submitted to introduce new code list values or to modify existing ones in the TAF TSI technical document ERA-TD-105: TAF TSI — Annex D.2: Appendix F — TAF TSI Data and Message Model.

- In CR 526, the code list TrainActivityType is updated in order to enable cross border trains to be linked where no Train ID is available
- CR 570 introduces the new subsidiary type code in order to distinguish the Intermodal Terminals in cases where they are defined as subsidiary locations.

3. PREPARATORY WORK

The change requests for the Technical Document were published on ERA's website on 15 December 2020, This means that it was not possible to inform the WGTECH 42 meeting held on 17 and 18 November 2020. According to the agreed process to ensure continued equivalence between the TAF UTP and TAF TSI (TECH-20020-WGT40-5e dated 20 March 2020), in the event of delay, the change requests should be submitted to the OTIF Secretariat by January of the following year in order to be submitted to the CTE in June of the same year. Following ERA's submission of the document describing

the changes and the objective of the changes to the relevant Annexes of the Technical Document, the OTIF Secretariat has drafted this proposal for decision.

4. JUSTIFICATION FOR THE AMENDMENTS

Modifications of the technical documents referred to in Appendix I of the UTP TAF are necessary in order to correct errors, take feedback into account, keep up with technical progress and maintain equivalence with the specifications applied in the EU.

PROPOSALS FOR DECISION

1. In accordance with Article 20 § 1 b) COTIF and Articles 6 and 8a APTU, the Committee of Technical Experts adopts the modifications to Appendix I of the Uniform Technical Prescriptions concerning Telematics applications for freight services (UTP TAF), in the version of 1 June 2020, as set out in the annex to this document.
2. The Committee of Technical Experts instructs the Secretary General to publish this decision, together with a consolidated version of the UTP TAF, on the Organisation’s website.

ANNEX

Appendix I
List of technical documents

N°	Reference	Title	Version	Date
1	ERA-TD-100	TAF TSI - ANNEX A.5: FIGURES AND SEQUENCE DIAGRAMS OF THE TAF TSI MESSAGES	2.1	10.02.2015
2	ERA-TD-101	TAF TSI - Annex D.2: Appendix A (Wagon/ILU Trip Planning)	2.0	17.10.2013
3	ERA-TD-102	TAF TSI - Annex D.2: Appendix B - Wagon and Intermodal Unit Operating Database (WIMO)	2.1	10.02.2015
4	ERA-TD-103	TAF TSI - Annex D.2: Appendix C - Reference Files	2.5	15.12.2020
5	ERA-TD-104	TAF TSI - Annex D.2: Appendix E - Common Interface	2.5	15.12.2020
6	ERA-TD-105	TAF TSI - Annex D.2: Appendix F - TAF TSI Data and Message Model	2.5	15.12.2020