

Moving Europe towards a sustainable and
safe railway system without frontiers.

OPINION

ERA/OPI/2023-04

OF THE EUROPEAN UNION AGENCY FOR RAILWAYS

for

THE EUROPEAN COMMISSION

regarding

Technical documents of the TAP TSI concerning ticketing

Disclaimer:

The present document is a non-legally binding opinion of the European Union Agency for Railways. It does not represent the view of other EU institutions and bodies, and is without prejudice to the decision-making processes foreseen by the applicable EU legislation. Furthermore, a binding interpretation of EU law is the sole competence of the Court of Justice of the European Union.

1. General Context

1.1. Subject

By its email from 06/04/2023, the European Commission (DG Move) asked the Agency to provide an opinion concerning the technical documents concerning ticketing annexed to the TAP TSI as technical documents.

1.2. Technical scope

The technical scope of this opinion is the usage of technical documents for ticketing in the TSI telematics applications for passengers (TAP TSI). The usage of those technical documents is defined in chapter 4.2.11. - 'Delivery of the product to the customer after its purchase (fulfilment)' of the Commission Regulation (EU) 454/2011. For the detailed technical specification of the ticketing processes, two technical documents are annexed to the TAP TSI:

- › the technical documents Annex B.6 - Electronic seat/berth reservation and electronic production of transport documents - transport documents (RCT2 standard)
- › the technical document Annex B.7 - international rail ticket for home printing.

1.3. Technical background

The technical background is that the technical documents, referred to in chapter 1.2 - Technical scope, have to be upgraded to completely restructured versions of them. The technical documents B.6 and B.7 are structured based on the media the tickets are issued, whereas the technical document B.11 and B.12 are structured based on the functional requirements. Whereas the technical document B.11 specifies the layout of the tickets, the technical document B.12 specifies the technical details of the security elements.

Both technical documents concerning ticketing have to be updated according to the new developments of the ticketing methods. The update and the impact assessment from ERA has been prepared during the revision of the TAP TSI in the revision cycle 2017 – 2019. The resulting recommendation ERA-REC-122, which ERA has submitted in January 2020 to the European Commission, is still pending. However the updated technical documents are needed by the rail sector to implement an interoperable ticketing within the Single European Railway area. The opinion shall authorize the usage of the updated technical documents of the regulation (EU) 454/2011 TAP TSI for ticketing.

1.4. Technical requirements

The technical requirements for the ticketing are defined in the TAP TSI basic parameter 4.2.11. Delivery of the product to the customer after its purchase (fulfilment). This basic parameter defines the process and the technical details how tickets can be issued to the rail customers. The TAP TSI specifies the technical details for the ticketing media security paper, plain paper and mobile phones. Further ticketing media such as NFC or chipcards are not covered. This technical opinion addresses the ticketing on mobile phone screen, plain paper and security paper.

The detailed technical requirements are laid down in the changed technical documents for the TAP TSI, annexed to this opinion.

2. Legal Background

According to the provisions of Article 10(2) of Regulation (EU) 2016/796 of the European Parliament and of the Council of 11 May 2016 on the European Union Agency for Railways and repealing Regulation (EC) No 881/2004¹ (Agency Regulation), the European Commission has the possibility to request the opinion of the Agency on specific matters concerning Interoperability and railway safety.

¹ OJ L 138, 26.5.2016, p. 1.

3. Analysis

The Commission Regulation (EU) 454/2011 (TAP TSI) is using technical documents to describe the business processes and technical details how to deliver the product after the purchase to the customer. This process is widely known as ticketing.

The ticketing is described in two technical documents of the TAP TSI:

- Annex B.6 - Electronic seat/berth reservation and electronic production of transport documents - transport documents (RCT2 standard)
- Annex B.7 - International Rail Ticket for home printing

Both documents were originally derived from UIC leaflets 918-2 and 918-3. The technical changes of those documents are managed in a change control management process according to chapter 7.5. Change Management of the TAP TSI. This change management process is in use to cover the technical changes of the attached technical documents of the TAP TSI.

Due to the introduction of new basic parameters in the TAP TSI during the revision of the TSI in 2017-2019 it has been decided in the revision working party to create new technical documents for ticketing, covering the remaining parts of the technical documents B.6 and B.7 and the additional basic parameters, introduced in the recommendation ERA-REC-122. For this purpose works of the sector have been reused. The existing UIC international railway solutions UIC IRS 90918-8 and 90918-9 have been transformed into new technical documents B.11 and B.12. The former technical document B.6 and B.7 have been removed from the Annex III - List of technical documents referenced in this TSI.

In the analysis ERA has compared the technical documents B.11 and B.12 with the technical documents B.6 and B.7 to ensure that the chapters, necessary for the interoperable ticketing, are consistent with the existing technical documents B.6 and B.7.

4. The opinion

The Agency considers that the TAP TSI technical documents:

- B.11 - Layout for electronically issued rail passenger tickets
- B.12 - Digital security elements for rail passenger ticketing

can be used to provide interoperable ticketing for railways in EU. This can be achieved by replacing the TAP TSI technical documents “B.6 - Electronic seat/berth reservation and electronic production of transport documents - transport documents (RCT2 standard)” and “B.7 - International Rail Ticket for home printing” with the technical documents B.11 and B.12.

The updated documents should be published on the website of the Agency.

The Agency considers that the TAP TSI should be updated with these both technical documents to reflect the most recent technical developments concerning ticketing, as recommended in the recommendation ERA-REC-122.

The following amendments are proposed:

- *Change of the Annex III of Commission Regulation (EU) No 454/2011 (TAP TSI)*

ANNEX III – LIST OF TECHNICAL DOCUMENTS REFERENCED IN THIS TSI

Reference	Label
B.1.	Computer generation and exchange of tariff data meant for international or foreign sales – NRT tickets

B.2.	Computer generation and exchange of tariff data meant for international and foreign sales – Integrated Reservation Tickets (IRT)
B.3.	Computer generation and exchange of data meant for international or foreign sales – Special offers
B.4.	Implementation guide for EDIFACT messages covering timetable data exchange
B.5.	Electronic reservation of seats/berths and electronic production of travel documents - Exchange of messages
B.8	Standard numerical coding for railway undertakings, infrastructure managers and other companies involved in rail-transport chains
B.9	Standard numerical coding of locations
B.10	Electronic reservation of assistance for persons with reduced mobility - Exchange of messages
B.11	Layout for electronically issued rail passenger tickets
B.12	Digital security elements for rail passenger ticketing

The Agency considers that the TSI should be updated to reflect the most recent technical developments.

Valenciennes, 20/06/2023

Josef DOPPELBAUER
Executive Director

ANNEX 1 – original request

Email from Yann SEIMANDI to opinionadvice@portal.era.europa.eu from 06.04.2023, 16:23:

Dear ERA colleagues,

This email to provide EC support to a request identified within the Agency for the release of an ERA Technical Opinion with regards to the TAP TSI technical documents for ticketing for ERA to analyse if the new proposed technical documents B.11 and B.12 can be accepted as replacement for the existing TAP TSI technical documents B.6 and B.7.

While an updated ERA recommendation ERA-REC-122 has been submitted to the European Commission early 2022, it is still subject to gaps identified by the EC and require further work. Meanwhile, the gap between the publication of the future recast of the TAP TSI and the urgent need of the rail sector to use the revised technical documents for issuing barcode tickets based on up-to-date specifications would need to be mitigated with an ERA Technical Opinion referencing both technical documents B.11 and B.12 to replace the existing ones, B.6 and B.7.

Indeed, pending further recast of the Regulation, these new technical documents are not yet applicable for the implementation of the TAP TSI. Nevertheless, they have a certain value for the rail sector and are used anyway to implement ticketing solutions based on technical documents B.11 and B.12. It would therefore be helpful if the documents are accepted to be used as e.g. alternative means of compliance.

Consolidated technical documents are already available on ERA extranet:

- [Recommendation on TAP TSI Revision - Technical Document - B11](#) (9.78 MB)
- [Recommendation on TAP TSI Revision - Technical Document - B12](#) (5.07 MB)

The update technical documents B.11 and B.12 are covering international and domestic ticketing based on barcodes or as e-ticket and are meant to be backward compatible with the existing technical documents B.6 and B.7 of the TAP TSI.

Kind regards,

Yann

Yann SEIMANDI

Policy Officer – Digitalisation & Vehicles



European Commission

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ANNEX 2. List of appendices

Appendix 1. ACCOMPANYING REPORT TO THE OPINION OF THE EUROPEAN UNION AGENCY FOR RAILWAYS for THE EUROPEAN COMMISSION regarding technical documents for ticketing

Technical document B.11 - Layout for electronically issued rail passenger tickets

Technical document B.12 - Digital security elements for rail passenger ticketing