EUROPEAN UNION AGENCY FOR RAILWAYS

Making the railway system
work better for society.

Light Impact Assessment

TAP Revision 2019/20 – Closure of Open Point related to tariff data for domestic sales in TAP TSI

Contents

1. Context and problem definition

1.1. Problem and problem drivers

For ticket vendors (travel agencies, GDS operators, railway undertakings), the integration of tariff data for domestic sales from different sources (e.g. other RU's, foreign RU's) into their distribution systems can be very complicated as it can require a lot of manual post-processing, e.g. if tariff conditions are in free text – these textual conditions have to be analyzed/formalized and manually integrated in the distribution system.

As a consequence, if the costs to integrate these tariffs are too high, they will not integrate these tariffs into their applications. For this reason end customers (potential passengers) will have access to these tariffs via a very limited number of distribution channels (e.g. usually via the application of the RU offering the related service to this tariff, ticket vending machines of this RU).

The current TAP TSI already mandates the standards B1, B2, B3 for tariffs for foreign and international sales however these standards do not cover the tariff conditions from railway/transport products for domestic sales. They are intended for domestic sales only (e.g. sales in a foreign distribution system for another member state). A certain amount of domestic tarrifs, such as full-price tickets could be accommodated in these data structures, but this is not used.

Problem/need to be addressed:

Ticket vendors need simplified access to tariff data for domestic sales. This is currently not the case because there are a lot of national co-existing proprietary standards to echange tariffs for domestic sales which make the integration into distribution systems very difficult.

1.2. Main assumptions

1. *For the exchange of tariff data, a part of the European railway sector already uses the European Standard NeTEx for the exchange and processing of tariff data for domestic sales. For this reason we assume that this European Standard fully meets the needs of the European Railway Sector in the framework of exchanging tariff data for domestic sales.*
2. *We received basic input information for the LIA from selected experts, which were recommended by the European Stakeholder Organisations. These experts work within national organisations or are freelancer – however we assume that they expressed the view of the European Stakeholder Organisation, which recommended them as contact point.*

1.3. Stakeholders affected

Category of stakeholder	*Importance of the problem (*)*
Railway Undertakings (offering regional railway	4

<table>
<tr><td></td><td>
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<tr><td>services for different tariff and transport associations)</td><td>The integration of the different tariff models in the ticket machines can be very challenging</td></tr>
<tr><td>Transport Associations, Regions</td><td>4
In order to promote the use of public services, they are interested that the citizen has simplified access via 3rd party distribution channels (applications and/or applications of the public service operators/ RUs informing about timetables and tariffs for domestic services).</td></tr>
<tr><td>Citizens</td><td>4
Similar to transport associations.</td></tr>
<tr><td>Ticket vendors</td><td>5
They are interested in a simple integration of timetables and tariffs in their distribution systems/ applications for their end customers</td></tr>
<tr><td colspan="2">Note:
Other stakeholder than those mentioned above (e.g. vehicle suppliers, vehicle leasing companies or infrastructure managers) are not concerned by the problem</td></tr>
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*) 1=low; 5=high
</td></tr>
<tr><td>1.4. Evidence and magnitude of the problem</td><td>The evidence of the problem was confirmed within bilateral meetings with stakeholders (e.g. UIP/VDV e-ticket, Norwegian Railway IT service provider, European Passenger Transport Operators)</td></tr>
<tr><td>1.5. Baseline scenario</td><td>The current Open Point (chapter 4.2.2.1 and partly chapter 4.2.11.3/4) will not be closed in TAP TSI.</td></tr>
<tr><td>1.6. Subsidiarity and proportionality</td><td>Directive 1926/2017 (Provision of EU-wide multimodal travel information services) already obliges railway undertakings to provide these tariffs to national access points using TAP TSI standards and protocols see article 4 (b)“…for other transport modes, the use of one of the following standards and technical specifications: NeTEx CEN/TS 16614 and subsequent versions, technical documents defined in Regulation (EU) No 454/2011 and subsequent versions, technical documents elaborated by IATA or any machine-readable format fully compatible and interoperable with those standards and technical specifications”. For domestic tariffs the TAP TSI does not provide any standard. Consequently the standard to be used for the publication of those fares is NeTEx or another format “fully compatible and interoperable”.

Delegated Decision 1474/2017 Art. 14 (6) mandates the Agency to revise TAP TSI with the objective to facilitate the emergence of through-ticketing, integrated ticketing and multi-modal travel information and reservation systems.</td></tr>
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2. Objectives

2.1.	Strategic and specific objectives	Strategic objective(s) of the Agency with which this initiative is coherent. ☐ Europe becoming the world leader in railway safety ☐ Promoting rail transport to enhance its market share ☐ Improving the efficiency and coherence of the railway legal framework ☐ Optimizing the Agency's capabilities ☐ Transparency, monitoring and evaluation ☒ Improve economic efficiency and societal benefits in railways ☐ Fostering the Agency's reputation in the world The specific objectives are: *A. Simplify (Allow automated) integration of tariffs for domestic sales into distribution systems of ticket vendors and RU's.* *B. Facilitate for the passengers the access to tariff information for domestic railway products* *C. Facilitate for the passengers the purchase of national railway products (for domestic sales)* *D. Keep the cost impact for providers of tariffs for domestic sales as low as possible*
2.2.	**Link with Railway Indicators**	N/A

3. Options

3.1. List of options	Baseline Option 1 – NeTEx only Option 2 – NeTex and existing TAP standards only
3.2. Description of options	**Baseline** Open Point is not closed, National standards apply for the exchange of Tariffs for domestic sales. **Option 1** It is only allowed to use the standard NeTEx for the exchange of tariff data for domestic sales ▪ *for information only – **O1A*** ▪ *for information and ticketing – **O1B*** **Option 2** The following standards - existing TAP standards B1 or B2 or B3 or NeTEx - are allowed to use for the exchange of tariff data for domestic sales ▪ *for information only – **O2A*** ▪ *for information and ticketing – **O2B*** Note: In all options, we assume that the receiver of tariff data is not forced to adapt his current distribution system to import and automatically process the tariff data for customer information or for the issueing of tickets, e.g. if the current distribution system is not at the end of its lifetime and its adaptation is too costly. The receiver is free to decide whether to implement the necessary adaptations in his systems for the automated processing of tariff data. However the receiver has the right to receive the necessary information in a semi-formal data model which is an essential pre-requisite for the automatic processing of tariff data. As a consequence all options result in an obligation for the tariff data providers, to translate their tariffs into a harmonized semi-formal data model.
3.3. Uncertainties/risks	For option 2 only: There could technical limitations if existing TAP standards are used. These shall be not taken into account in the framework of the Impact Assessment

4. Impacts of the options

4.1. Impacts of the options (qualitative analysis)

The positive or negative impacts from the option are derived by comparing the option against the baseline.

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For the Option 1

Category of stakeholder		*Option 1a*	*Option 1b*
Railway Undertakings offering regional railway services for different tariff and transport associations (tariff data provider)	Positive impacts	Very limited - simplified customer information concering tariffs – especially if tariff models of tariff associations change	Simplified integration of different tariff models in their distribution systems (e.g. ticket machines) especially if tariffs models from tariff and transport associations change
	Negative impacts	Limited additional costs concerning the translation of existing tariff data into semi-formal data model conforming to NeTex	Like 1a) however somehow higher additional translation costs (to cover ticketing aspects)
Transport Associations, Regions	Positive impacts	Very limited - Increased use of public transport due to easier access of tariff data via additional 3rd party apps	Like 1b) however much higher positive impact due to easier access to ticketing services via additional 3rd party apps
	Negative impacts	Limited additional costs concerning translation of existing tariffs (if they are tariff data providers)	Like 1a) however somehow higher additional translation costs (to cover ticketing aspects) – if they are tariff data providers
Citizens	Positive Impacts	Easier access to tariff information of local public/ national transport	As 1a) however in addition easier access to tickets for local public or national transport.
	Negative Impacts	N/A	N/A
Ticket Vendors/ RUs/ Third Parties (tariff data receiver)	Positive Impacts	Less integration efforts to process tariffs for domestic sales in their distribution systems	Less integration efforts to process tariffs and to issue tickets for domestic sales in their distribution systems
	Negative impacts	N/A	N/A

Overall assessment *(input for section 5.1)*	Positive impacts	Simplified Access for ticket vendors and EU citizens to tariffs for domestic sales	As option 1a) plus Simplified Access to Tickets for the customer Simplified Ticketing procedures for ticket vendors
	Negative impacts	Translation costs to convert existing tariffs into a semi-formal data model	Somehow higher translation costs (compared to option 1a) due to additional conversion of ticketing information

For the Option 2

Category of stakeholder		*Option 2a*	*Option 2b*
Railway Undertakings offering regional railway services for different tariff and transport associations (tariff data provider)	Positive impacts	Very limited - simplified customer information concering tariffs – especially if tariff – like Option 1a	Simplified integration of different tariff models in their distribution systems (e.g. ticket machines) - especially if tariffs models from tariff and transport associations change – like Option 1b
	Negative impacts	Very limited additional costs concerning the translation of existing tariff data, where such tariffs in TAP standards B1-3 are not available.	Like Option 2a - however somehow higher additional translation costs (to cover ticketing aspects)
Transport Associations, Regions	Positive impacts	Very limited - Increased use of public transport due to easier access of tariff data via additional 3rd party apps (same as Option 1a)	Like Option 2a - however much higher positive impact due to easier access to ticketing services via additional 3rd party apps (same as Option 1b)
	Negative impacts	Very limited additional costs concerning translation of existing tariffs – see RUs (if they are tariff data providers)	Like 2a) however somehow higher additional translation costs (to cover ticketing aspects) – if they are tariff data providers
Citizens	Positive Impacts	Easier access to tariff information of local public/ national transport	As 2a) however in addition easier access to tickets for local public or national transport.

		Negative Impacts	N/A	N/A
	Ticket Vendors/ RUs/ Third Parties (as tariff data receiver)	Positive Impacts	Less integration efforts to process tariffs for domestic sales in their distribution systems, however they are higher than in option 1a.	Less integration efforts to process tariffs and to issue tickets for domestic sales in their distribution systems, however they are higher than in option 1b.
		Negative impacts	N/A	N/A
	Overall assessment *(input for section 5.1)*	Positive impacts	Simplified Access for ticket vendors and EU citizens to tariffs for domestic sales Similar as Option 1a	As option 1a) plus Simplified Access to Tickets for the customer Simplified Ticketing procedures for ticket vendors Similar as Option 1b
		Negative impacts	Limited translation costs to convert existing tariffs into a semi-formal data model which are not yet available in TAP format B1-B3 or NeTEx Lower than in Option 1a	Somehow higher translation costs (compared to option 2a) due to additional conversion of ticketing information Lower than in Option 1b
4.2. Impacts of the options (quantitative analysis)	A quantitative analysis is not possible because all impacted stakeholders were not able . *to quantify additional cost impact due to translation of existing tariff data* . *to quantify benefits resulting from an easier access to tariff information and tickets (for the citizen as user of rail transport service or the transport and tariff association offering national public rail services to citizens)*			

5. Comparison of options and preferred option

5.1. Effectiveness criterion (options' response to specific objectives)

Based on the provided feedback by stakeholders the proposed options response to the specific objectives (SO) as follows

(score 1: lowest response // 5: highest response)

	1A	1B	2A	2B
SO A Simplify (Allow automated) integration of tariffs for domestic sales into distribution systems of ticket vendors and RU's.	3	5	2	4
SO B Facilitate for the passengers the access to tariff information for domestic railway products	5	5	5	5
SO C Facilitate for the passengers the purchase of national railway products (for domestic sales)	3	5	3	5
SO D Keep the cost impact for providers of tariffs for domestic sales as low as possible	2	1	4	3
Total	13	16	14	17

5.2. Efficiency (NPV and B/C ratio) criterion

N/A as no quantitative data were provided.

5.3. Summary of the comparison

Options including the exchange of ticketing information related to domestic tariffs (Option **1B/2B)** in a semi-formal and harmonized data model meet the specific objectives in a better way than the options focusing only on the exchange of information related to domestic tarifs.

The reason is that the additional efforts to translate the ticketing information into a semi-formal data model are low compared to the

	additional benefits concering a simplified access to tickets for the traveler.
5.4. Preferred option(s)	The proposed option is Option 2B as it provides similar benefits as Option 1B to customers and the negative impact concerning the translation of existing domestic tariffs is reduced to a minimum due to the permission to echange tariffs in existing TAP B1-B3 standards if they cover the needed information.
5.5. Further work required	N/A

6. Monitoring and evaluation

6.1. Monitoring indicators	N/A
6.2. Future evaluations	N/A