LEGACY SYSTEMS DELIVERABLE
(for intermediate report)

Project: TAP Phase One

Release: 4 – To members of EGs and Project Team
Date: 25 November 2011
Author: Ugo Dell’Arciprete (Workstream Leader)
Owner: TAP Phase One Project Team
Client: TAP Steering Committee
Version No: v1.0
1 Progress History

1.1 Document Location
This document will be uploaded to the “TAP TSI/TAP Retail activities/_Retail general interest” folder of the project extranet (members’ area).

1.2 Revision History
Date of this revision: First issue
Date of next revision: 28 November 2011

<table>
<thead>
<tr>
<th>Revision date</th>
<th>Previous revision date</th>
<th>Summary of Changes</th>
<th>Changes marked</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>First issue</td>
<td>None</td>
</tr>
</tbody>
</table>

1.3 Approvals
This document requires the following approvals.

<table>
<thead>
<tr>
<th>Name/ Entity</th>
<th>Title/ Remark</th>
<th>Approval</th>
<th>Date of Issue</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Expert Groups</td>
<td>EG S, EG T, EG R, EG F, EG A, EG FSM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Team</td>
<td>Project Manager, Work Stream Leaders, Project Assistant</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.4 Distribution
This document is distributed to:

<table>
<thead>
<tr>
<th>Name/ Entity</th>
<th>Title/ Remark</th>
<th>Date of Issue</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Expert Groups</td>
<td>EG S, EG T, EG R, EG F, EG A, EG FSM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Team; UIC and Ticket Vendor project coordinators</td>
<td>All members of the Project Team Michael Stevns (UIC) Klaus Kreher (Ticket Vendors)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Table of Contents

1. Progress History .................................................. 2
2. Table of Contents ............................................... 3
3. Purpose ........................................................... 5
4. Management Summary ........................................... 5
5. Background ........................................................ 5
6. Organization of work ............................................. 6
7. Results of survey .................................................. 6
   7.1. Schedules / Timetables .................................... 7
   7.2. Tariffs / Fares ............................................... 7
   7.3. Reservation .................................................. 8
   7.4. Fulfilment ................................................... 8
   7.5. 3rd party ticket vendors ................................ 9
8. Issues and opportunities ......................................... 13
   8.1. Schedules / Timetables .................................... 13
   8.2. Tariffs / Fares ............................................... 21
   8.3.a Reservation of places .................................... 25
   8.3.b Reservation of assistance for PRM ..................... 29
   8.4. Fulfilment ................................................... 31
9. Final comments & recommendations ............................ 34
10. Next steps ........................................................ 35
Appendices

A. Composition of the experts groups
   1. Schedules / Timetables
   2. Tariffs / Fares
   3. Reservation
   4. Fulfilment
   5. Architecture
   6. Full Service Model

B. Text of questionnaires
   1. Schedules / Timetables
   2. Tariffs / Fares
   3. Reservation
   4. Fulfilment
   5. Full Service Model

C. List of RUs / TVs having answered the questionnaires
   1. Schedules / Timetables
   2. Tariffs / Fares
   3. Reservation
   4. Fulfilment
   5. Full Service Model

D. Detailed results of questionnaires
   1. Schedules / Timetables
   2. Tariffs / Fares
   3. Reservation
   4. Fulfilment

E. SJ's proposal to solve some Schedules/Timetables issues
3 Purpose

Regulation 454/2011 requires at the end of Phase One the issuing of deliverables on three areas:
- detailed IT specifications
- governance
- master plan

In particular the detailed IT specifications must include “The outline of the global architecture of the system. It shall describe how the requisite components interact and fit together. This shall be based on the analysis of the system configurations capable of integrating the legacy IT facilities, while delivering the required functionality and performance.”

The purpose of this document is to provide a preliminary report, that will later contribute to the final deliverable on detailed IT specifications for retail. This document focuses on the survey conducted on the legacy IT facilities, pointing out the main findings resulting from it and the main issues and opportunities arising from the survey.

4 Management Summary

The representative bodies of the RUs and of the 3rd party ticket vendors have performed surveys among their members to collect information on how the retail business is currently performed, in particular in the domains of Schedules/timetables, Tariffs/fares, Reservation and Fulfilment. The results of the surveys are summarized in chapter 7 of this document, and in its appendices.

Working groups composed by experts in those same domains, plus IT Architecture, have debated the issues and opportunities arising from the surveys, as well as from their long experience in the field. The results are summarized in chapter 8 of this document.

A proposal is given on how to deal with each issue, be it by a Change Request to the CCM WP, or with further studies during Phase One, or relaying the question to the experts group which, under leadership of the 3rd party ticket vendors, is focusing on the gaps existing between the current TAP and the full service model of the rail retail business.

5 Background

The TAP TSI Phase One is being managed by a Project Team, whose tasks have been divided in work streams.

The retail activities are in charge to three of them:
- Retail Specifications, led by Ugo Dell’Arciprete
- Retail Architecture, led by Dominique Margottin
6 Organization of work

The survey and the following analysis of its results have been performed with two distinct though coordinated approaches, depending on the target:

- One aimed at the legacy systems of the Railway Undertakings
- The other aimed at the legacy systems of the 3rd party Ticket Vendors

To this scope the work stream leaders, with the help of the experts groups, have defined 5 questionnaires, whose texts can be found in Appendix B. The questionnaires have been published on the web using SurveyMonkey, a specialized tool for online surveys.

No questionnaire has been prepared for the Architecture domain, given the practical impossibility to restrict in predefined questions such a vast concept.

The invitation to fill up the questionnaires has been sent:

- as far as the RUs are concerned, to all RUs listed in ERA’s database ERADIS, to all UIC members, and to the members of UITP and EPTO through their representatives in the TAP Phase One Steering Committee
- as far as the TVs are concerned, to all members of ETTSA and ECTAA (between 1000 and 2000 organisations) through the FSM work stream leader.

7 Results of survey

The questionnaires addressed to the RUs received a number of answers, ranging between 15 and 18.

The main reasons for this result were:

- Difficulty to contact small RUs and RUs that are not members of rail sector representative bodies
- Reluctance of some RUs to disclose data that they felt commercially sensitive
- Limited understanding of the importance of the TAP process, and how it will affect the future RUs’ business.

The questionnaires addressed to the TVs found a larger audience with 157 answers.
Although multiple reminders were sent and translation into French carried out, there was an unbalanced response from a geographical point of view. The Scandinavian countries were particularly well represented and the Southern Europe countries poorly represented.

The list of RUs and TVs having answered each questionnaire can be found in Appendix C.

A summary of the main findings resulting from each questionnaire is presented hereunder.

A more detailed analysis of the answers to all questions in the questionnaires for RUs can be found in Appendix D. The results are in any case presented in anonymous, statistical form, to comply with the request of the RUs not to make evident who answered what.

7.1. Schedules / Timetables

17 RUs filled up the questionnaire, 15 of them are incumbent UIC members, 2 are local transport companies.

The main findings can be so summarized:

- In between the official annual/semiannual releases, the timetables are updated rather frequently (5 RUs do so in average once per week, 4 RUs once per day)
- The number of trains present in average at any time in the timetables varies very much with the size of the answering RU, ranging from around 200 to more than 50,000
- 13 out of 14 answering RUs offer on the Internet a journey planner to their customers. All 13 can be consulted also in English, 11 of them also show trains operated by RUs different from the owner of the planner, many are multimodal (8 show buses, 5 ships, 2 planes). 8 of them use Hafas as search engine, 3 use Hewlett-Packard, the others use proprietary SW
- 12 of the answering RUs are members of the Merits community, but only 8 usually download from MERITS the data of other RUs. This is done not only to provide verbal/printed information to customers and for inclusion of the data in the web journey planner, but also (with only one exception) to support the sales processes
- 7 of the answering RUs provide their timetable data to 3rd parties for free, 1 do so against payment.

7.2. Tariffs / Fares

16 RUs filled up the questionnaire, 14 of them are incumbent UIC members, 2 are local transport companies.

The questionnaire was divided in two sections, a first one regarding fares for trains operated solely by the Company answering the questionnaire, the second one regarding trains cooperated by it and other RU(s). This reflects the basic difference by which an RU unique owner of a train can decide autonomously its pricing system, while if the train has more than one owner "compromise" rules can apply.
It is also to be noted that the questions were only asked with reference to the two tariff systems acknowledged in the TAP, i.e. NRT and IRT. Nevertheless more than one RU reminded that a third form of pricing is being commonly used, the so called TLT (Train Linked Ticket), and this possibility should in future be introduced in TAP.

The main findings of the survey can be so summarized:

- For NRT trains of first section the price of the same ticket is normally different when sold by the train owning RU or another retailer; most pricing systems are distance based, but the price can vary with the time the train runs or the channel where the purchase was made.
- For NRT trains of the second section the situation is more stable, since the price of a ticket in most cases does not change if it is sold by the owner or a third party, nor according to the time the train runs or the sales channel.
- For IRT trains of both sections the price is normally the same independently of who sells the ticket, while it varies by definition with other parameters like the tariff. Most RUs use the technique of pricing points inside a tariff.

7.3. Reservation

18 RUs filled up the questionnaire, 17 of them are incumbent UIC members, 1 is a local transport company.

The reservation questionnaire was also divided in two sections, in this case the first one concerned the role of the answering RU as receiver of reservation requests for its own trains, the second one the mirroring role of the RU as sender of reservation requests to other RUs.

The main findings of the survey were as follows:

- For the RU as receiver of requests, it appeared that not all RUs use just one inventory to store their trains open to reservation: 5 RUs use 2 different systems, 2 RUs even use 3 of them.
- The booking horizon (number of days a train can be booked before circulation) varies much from RU to RU (from 45 to 365).
- All 13 answering RUs accept reservation requests for their trains according to the protocols of TD B.5 (UIC 918-1), 9 use in addition one or more proprietary standards. 11 RUs are able to answer to availability requests, 8 to price requests. 9 RUs can send availability requests, 8 price requests.
- For the RU as sender of requests, 12 stated to be able to book trains in the inventories of other RUs, vs 3 who don’t do so.
- The average number of reservation requests sent monthly in 2010 by the answering RUs to their most significant reservation partners ranged between 4.500 and 1.500.000.

7.4. Fulfilment

15 RUs filled up the questionnaire, 14 of them are incumbent UIC members, 1 is a local transport company.
The questions concerned the formats used when issuing tickets, and were grouped in three sections respectively for:

- trains operated solely by the answering RU (or domestic sections of international trains co-operated by it)
- cross border or foreign sections on international trains co-operated by the answering RU
- trains not (co-)operated by the answering RU.

It was possible to select one or more from the following formats:

- tickets on paper ATB format
- tickets on paper ISO format
- tickets on paper other standard format
- tickets on paper proprietary format
- tickets A4 printed at home according to UIC 918-3, security elements inside printed barcode
- tickets A4 printed at home protocol different from 918-3, security via barcode as above
- electronic tickets with travel rights loaded on chip card
- electronic tickets with travel rights loaded on mobile phone as MMS
- electronic tickets with travel rights stored in carrier’s system, check by identification

The survey showed that:

- tickets on paper ATB format are still the most used form of ticketing among answering RUs, followed by home printed tickets according to UIC 918-3 (TD B.7)
- Very few RUs use the ISO format (aka Credit Card Size), none in international traffic
- Around half of answering RUs offer TOD (Ticket on Departure), also outside their own country.

7.5. 3rd party ticket vendors

A total of 157 responses were received, with the following geographical distribution:

<table>
<thead>
<tr>
<th>Country</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1</td>
<td>0.6%</td>
</tr>
<tr>
<td>Belgium</td>
<td>8</td>
<td>5.1%</td>
</tr>
<tr>
<td>Croatia</td>
<td>1</td>
<td>0.6%</td>
</tr>
<tr>
<td>Denmark</td>
<td>10</td>
<td>6.4%</td>
</tr>
<tr>
<td>Finland</td>
<td>22</td>
<td>14.0%</td>
</tr>
<tr>
<td>France</td>
<td>5</td>
<td>3.2%</td>
</tr>
<tr>
<td>Germany</td>
<td>18</td>
<td>11.5%</td>
</tr>
<tr>
<td>Greece</td>
<td>2</td>
<td>1.3%</td>
</tr>
<tr>
<td>Italy</td>
<td>11</td>
<td>7.0%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>7</td>
<td>4.5%</td>
</tr>
<tr>
<td>Portugal</td>
<td>1</td>
<td>0.6%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>2</td>
<td>1.3%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1</td>
<td>0.6%</td>
</tr>
<tr>
<td>Spain</td>
<td>4</td>
<td>2.5%</td>
</tr>
<tr>
<td>Sweden</td>
<td>33</td>
<td>21.0%</td>
</tr>
</tbody>
</table>
The respondents described their business as follows:

- Travel Management Company: 32.5% (51)
- Travel Agency: 48.4% (6)
- Tour Operator: 10.8% (17)
- Online Travel Agent/Retailer: 1.9% (3)
- Rail planning & booking systems provider/distributor GDS/CRS: 3.2% (5)
- Other: 3.2% (5)

Two thirds of them described rail as important to their business as follows:

- Critical to my business: 14.6% (23)
- Very important: 31.2% (49)
- Important: 29.9% (47)
- Minor importance: 19.7% (31)
- Not important: 4.5% (7)

68% of them declared that they sell rail tickets for travel both inside and outside their home country.

They each declared the type of activities in rail as follows:

- Seller: Provider of rail journey planning & ticketing to end traveller: 78.3% (123)
- Distributer: Provider of systems for other companies to sell rail to end traveller: 4.5% (7)
- Both Seller and Distributer: 6.4% (10)
- Do not handle rail travel: 10.8% (17)

The Sellers completed Section A of the survey whilst the Distributers completed section B and those that did not handle rail were asked just two questions in section C. Each section is summarised below.

Section A – Ticket Sellers

Just over half the Sellers gave answers to the detailed questions about their sales activities. Two thirds of these operated travel agency desks, half internet sites and 35% had telesales operations and sales to businesses both large and small dominated the client groups being sold to. When asked about the mix of travel products sold almost all who answered the question, sold Rail but on average the value it represented of their travel business represented only 14% for domestic and 8% for International rail whilst Air travel represented 50%.

55% of International rail sales by value were for outbound travel from the sellers country to a neighbouring country whilst 21% were for travel entirely in a single foreign country with significantly less involving travel across one or more borders. Rail travel is sold to an average of 9 foreign countries although many sell to well over twice that number.
About half answered a question about the value of their International rail sales and 54% of responders indicated their International rail sales were less that 250 Euro per annum whilst 24% were between that and 1m Euro, 13% between 1m and 5m Euro and 5% between 5m and 25m Euro – note that several were unable to give this information.

We received the following replies when we asked how selling rail can be improved:

<table>
<thead>
<tr>
<th>Answer Options (ticked all that apply)</th>
<th>Response Percent</th>
<th>Response count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved accessibility of systems and information</td>
<td>69.8%</td>
<td>37</td>
</tr>
<tr>
<td>Easier to understand products</td>
<td>67.9%</td>
<td>36</td>
</tr>
<tr>
<td>Greater access to best fares</td>
<td>64.2%</td>
<td>34</td>
</tr>
<tr>
<td>Greater access to all international destinations</td>
<td>66.0%</td>
<td>35</td>
</tr>
<tr>
<td>Standardisation of products and terms</td>
<td>54.7%</td>
<td>29</td>
</tr>
<tr>
<td>Access to on-line information</td>
<td>47.2%</td>
<td>25</td>
</tr>
<tr>
<td>International rail products offered on the same page as air products for a journey enquiry</td>
<td>49.1%</td>
<td>26</td>
</tr>
<tr>
<td>Please list any others:</td>
<td>13.2%</td>
<td>7</td>
</tr>
</tbody>
</table>

Answered questions 53

Section B – Distributers

10 responders indicated that they were both sellers and distributors however although they all completed section A, none of these 10 completed section B as requested which indicates that the survey logic may have failed to allow this.

7 responders indicated they were Distributers only and hence went straight to section B however no questions had more than 3 responses and many had only 1 or 2 responses making the results statistically valueless. It is likely that this part of the survey may be re-run with the 10 who completed section A where these can be identified.

Section C – Responders who do not sell Rail.

There were 17 responders in this section. 50% of them indicated that rail was currently of minor importance and 33% of no importance to their business. When asked what is preventing them from selling Rail and/or what would enable them to consider selling Rail 11 responded and we received the following freeform answers

- the fact that international tickets are often more expensive than domestic tickets
- it is hard to know all the domestic rail regulations.
- very little profit compared with other travel agents’ business
- we are a tour operator offering group tours worldwide. We just started with offering trips within Europe which could be reached by train, however we normally sell flight inclusive trips and airlines give us allotments for our groups so we have a fixed price. It's quite difficult to sell trips including the train ticket and get allotments. Also it's quite hard to find the right connections for destinations a bit further away like Spain and Italy. The other issues are the price and the lack of a user friendly
booking system, a flight ticket is up to 4 times cheaper than a train ticket and can be booked in 3 minutes.

• we have no booking system for making the reservations
• time schedules and logistics
• too complicated or not possible at all if you consider France. We have a need of selling for example ticket in France only, from airport to destination.
• no provision and difficult to book. Low requests.
• We would gladly sell rail but the product is not sellable in Europe due to timetables, infrastructure and lack of common booking systems to be able to easily pick up information trough XML/API connections.
• We don't think the prices are competitive if you look at the flight tickets.
• We would like to sell some products but it is far too complicated both to get access to the products and the setup on how to book and be an agent.
• Too complicated to switch train when travelling through Europe.

When asked if this were corrected or made possible, how likely would they be to start to sell Rail, 5 said “Definitely” or “Highly likely” and a further responded with a medium likelihood.
8 Issues and opportunities

All valid comments received from the experts, as well as problems already known to the Project Team from their personal experience, have been discussed by the competent expert groups in dedicated meetings held in the first decade of November. The issues have been divided in three categories:

1- solved issues (no more an issue after the TAP CCM Board approved the corresponding Change Requests creating the new TAP-TSI baseline 1.1.1)
2- Issues with solution proposals
3- Issues for open discussion (with no solution proposal)

As far as the opportunities were concerned, the general understanding of all groups was that they must be taken into account in the Full Service Model workstream. Therefore in what follows the expressed opportunities are listed without further comments.

There is no separate chapter for Full Service Model issues and opportunities, because the 3rd party ticket vendors’ remarks were fully expressed during the four dedicated meetings and are included in what follows.

The debate in the dedicated meetings gave the following results (originally expressed issues in italics, results in normal font):

8.1. Schedules / Timetables

ISSUES

Solved

*Geo Coordinates should be made mandatory for locations*

The CCM has actually made mandatory the geo-coordinates in baseline 1.1.1, but the group didn’t consider the solution entirely applicable, because it is acceptable for physical stations, but has no sense for non physical stations such as meta stations or virtual border points (mid of the sea)

We need to be able to distinguish between those 2 types of stations so that we can provide geo-localization only for the physical stations.

There is a data element called Type of location which could help in this differentiation: it was decided that we must state for which values of this element the coordinates are mandatory, and for which ones not. In addition we must request a new code to differentiate land border points, which can have coordinates, from sea border points which can’t.

SJ (Henrik Nyman) sent a proposal for both points, it can be found in Appendix E.

---

*Border Points and Via points should be added to help construct NRT fares*
With solution proposal

**Double expression of operation days**

EDIFACT allows that days of operation can be expressed in different ways:

1. **Tag 4440** Bit string: 0 (no operation day) and 1 (operation day)
   
   Example: POP+273:2010-12-12/2011-12-10::11111111111 1…111’

2. **Tag 2160** Given weekdays: 1 for Monday, 2 for Tuesday … 7 for Sunday (used by ZSR only)
   
   Example: POP+273:2010-12-12/2011-12-10::1234567’

Proposal: submit a change request to make tag 2160 not applicable in B.4; in the meantime state in the Implementation Guide that only tag 4440 is to be used

This change was proposed by DB and aims at simplifying the message, allowing only one variant of it. Only one RU (ZSR) is using the second variant, and Jan Klaumuenzner informed that they are now ready to use the first one.

Conclusion: the group agreed to the simplification proposed, a change request in this sense will be agreed with UIC.

---

**Double expression of service details (ASD)**

EDIFACT allows that service details can be expressed at different positions:

**Position 1:** Under segment PRD – valid for all following train variants

**Position 2:** Under segment POP – valid for all operation days and the complete itinerary of this variant

**Position 3:** Under the itinerary of a variant – with explicitly given validity for operation days and explicitly given sections of the itinerary for this variant in combination with the segment ODI

Proposal: submit a change request to make the use of position 1 and position 2 not applicable in B.4; in the meantime state in the Implementation Guide that only position 3 is to be used

3 positions can be used to insert this data element in the message. The Proposal from DB was to simplify to only one position which is the 3rd one in the ODI segment.

This change may simplify the message structure but will increase the length of the message.

Amadeus was in favor of this change that reflects what is done in the airlines world, but for the rail world this would complicate far more the data exchange as there are many stops on the route, differently from the flights.

SJ and Trenitalia expressed their preference to keep in use the three possibilities, as they currently use them. Since those who want to use only one position can anyway do so, the group rejected the proposal.

Conclusion: the 3 positions remain possible.

In the course of the debate doubts were expressed by some participants on the content difference between elements ASD and SER, object of the next change request. SJ
Double expression of facilities (SER)
EDIFACT allows that facilities can be expressed at different places:
Position 1: Under segment PRD – valid for all following train variants
Position 2: Under segment POP – valid for all operation days and the complete itinerary of this variant
Position 3: Under the itinerary of a variant – with explicit given validity for operation days and explicit given sections of the itinerary for this variant in combination with the segment ODI
Proposal: submit a change request to make the use of position 1 and position 2 not applicable in B.4; in the meantime state in the Implementation Guide that only position 3 is to be used

The situation is exactly the same as the one of data element ASD, and the request was to simplify to only one position. For the same reasons as with the change request concerning ASD, the proposal was rejected and the 3 positions remain possible

---

Double expression of train category (PDT)
EDIFACT allows that train category can be expressed at different places:
Position 1: Under segment PRD – valid for all following train variants
Position 2: Under segment POP – valid for all operation days and the complete itinerary of this variant
Position 3: Under the itinerary of a variant – with explicit given validity for operation days and explicit given sections of the itinerary for this variant in combination with the segment ODI
Proposal: submit a change request to make the use of position 1 and position 2 not applicable in B.4; in the meantime state in the Implementation Guide that only position 3 is to be used

Same situation as the two previous ones, and same conclusion: no change.

---

Minimum connection time in station file “tsdupd”
Current situation:
• More and more DSU’s use the exchanged data for their own travel planners
• The important field for “Minimum connection time at a station” is not filled by all DSUs
Proposal: submit a change request to change the status from C (conditional) to M (mandatory) in B.4 – section tsdupd – in segment POP; in the meantime encourage in the Implementation Guide all RUs to fill up the field “Minimum connection time at a station”
This field is now optional and not filled in by all RUs; DB proposed to make this info mandatory.

SJ was not in favor of such change, stating that there are cases where there is no change of train possible. If the field was made mandatory, SJ would want to have the possibility to have a “null” value (0 would still mean that change is possible).

The debate highlighted the situation where in the same station there could be differences between trains owned by a carrier and trains owned by another when they are situated at different places in the station. The connection time could be 5mn for interchanging within the same carrier but would need 10mn interchanging with the other carrier.

Some of the participants informed that to solve this problem the UIC’s Merits expert group is studying the possibility of defining more than one “minimum connection time” in a station.

Conclusion: UIC is currently studying this subject and we shall follow the result of it. No change so far.

In addition ERA pointed out that the future Implementation Guide will have to define clearly who is responsible for determining the minimum connection time within a station and between stations in the neighborhood (Station manager ? Infrastructure Manager ? Carrier ?

---

New field for “TRAIN ID”

Current situation:

- Segment PRD: “product identifier” – train number
- Segment RFR+AVI: “number of the travel service” – differing number for travel information

Now TAF TSI has defined an new “TRAIN ID” (28 digits), which allows to trace a data set from the order of a path to the exchange for the different travel planners or other systems.

Proposal:
1. study the best way to include a mandatory field to express the new “TRAIN ID” in section skdupd
2. propose a change request to the EDIFACT board and then in B.4

TAF-TSI has defined a new Train-Id element on 28 digits, but its use is not yet consolidated, therefore the proposal to include this element in the Edifact message was for the moment rejected.

Attendees were informed that a data harmonization TAP-TAF meeting will be held on 1st December 2011 in Frankfurt to discuss this subject.

---

Problem: the train category of a train changes when crossing the border
Example: Train 412 from Beograd to Zagreb
Beograd to Sid – train category “code 68 – International train”
Sid to Zagreb – train category “code 37 - Train”

Proposal: governance problem, no changes needed in B.4; make mandatory a signed agreement on a common train category when deciding an international train (FTE)
Raw data sent from different RUs for the same cross-border train are defined by each involved RU for its own country. It happens that one RU can attribute a category to a train, and the neighboring RU a different one. The group agreed that this situation doesn’t require a change request in the TAP documents, but must be resolved by the governance: in particular signed agreements should be needed between RUs to convene on a single and homogenous definition of all attributes of cross-border trains operated jointly.

---

Explicit statement of the service mode

Current situation:
- Segment PRD in tag 7009 “Item description code” for service mode (default value 37 for train)
- Segment PDT in tag 7009 the “Item description code” (train category/service brand)

Problem:
- The statements in the segments PRD and PDT can be inconsistent
- The reason is the implicit value 37 if the field is empty

Example from MERITS:
PRD+1:19:1:::+1154*1154 – implicit service mode “code 37 - Train”
PDT++:::162 – service brand “code 162 - Replacement bus”

Proposal: governance problem, no changes needed in B.4; make mandatory a signed agreement on a common train category when deciding an international train (FTE)

This issue has been raised for many years without finding common practice, DB would like to make it a rule in TAP-TSI reflected in the Implementation Guide.
Conclusion: to be defined when writing the Implementation Guide.

---

Data for composition of a train

Problem:
- Before booking, the passenger would like to see the composition of a train service
- Before boarding, the passenger would like to know the platform section

Current situation:
- There are no adequate fields in the format description and in the code list

Proposal:
1. study the best way to expand the format description and the code list
2. propose a change request to the EDIFACT board and then in B.4

The train composition is currently not in Merits message, and it is not yet clearly defined technically how it could be included. Moreover, its Implementation would require a major change, and would require a business case study. The problem must be discussed first in the UIC Merits experts group, and will not be ready before end of TAP Phase One.
Conclusion: not in TAP phase 1 scope

---

Track data
Problem:

- Demands from passenger to RU growing up
- Before boarding, the passenger would like to know the track at the station
- Extremely important for disabled passengers

Current situation:

- Provision of such data possible according to B.4
- Only NS delivers track data

Proposal: submit a change request to change the status of track data from C (conditional) to M (mandatory) in B.4; in the meantime encourage in the Implementation Guide all RUs to provide the track data

Many RUs don’t know which platform the train will be allocated until few minutes before departure. So, this is not possible for them.

Conclusion: proposal rejected.

---

Data for a barrier free travel chain

Problem:

- PRMs have to be sure:
  - to get into the station and to get to the platform
  - to get into the train and to get out of the train
- Political request to all companies in public transport

Current situation:

- There are no adequate fields in the format description and in the code list

Proposal:

1. study the best way to expand the format description and the code list
2. propose a change request to the EDIFACT board and then in B.4

DB would like its travel planner to calculate travel solutions taking into account access limitations to PRM, giving as much info as possible.

Similarly to the train composition, this proposal is complex and requires first a technical and economic evaluation by the UIC Merits experts group.

Conclusion: not in TAP phase 1 scope

For open discussion

B4 in Edifact mandatory format: format should not be in the law

The question is left for the FSM group, the Schedules and Architecture EGs only have to implement the existing TAP. In any case the group is informed that Stefan Jugelt has checked the possibility of mapping the Edifact data to the NeTEx format used in many regional multimodal planners, and can provide a presentation on that at the next EG meeting.

---

Commercial conditions and costs for the provision of timetables must be defined.

The question concerns the Governance workstream
Improved quality, accuracy, completeness and timeliness of data is needed, both for reference data and for timetable data

The Architecture EG will define, in the future Implementation Guide, the quality requirements.

Multi-lingual handling is lacking and is needed

Multi-language is a possible option as Edifact message proposes synonyms, up to 99. The possibility of offering to the customer the GUI to the web based - travel planner systems in different languages is a choice of the single RU.

Improved validation is needed to ensure data accuracy and consistency, both for reference data and for timetable data

From a technical point of view, the validation could be facilitated by the existence of a central timetables database, though this is not mandatory by law. From an organizational point of view, the national enforcement bodies (see http://ec.europa.eu/transport/passengers/rail/doc/2007_1371_national_enforcement_bodies.pdf) are responsible to enforce the rail passenger rights regulation. This can include also the check of the accuracy of the delivered data.

A central repository is necessary to provide a consolidated list of timetables. This will simplify the import and export of data for all parties. It will also simplify the validation and governance of the data.

The question was discussed by the architects. In its meeting on 15 November the Architecture EG reached the following conclusion: Architects just have to say when and how one can get the timetable data of an RU. Possibly architects can propose that the law is changed to impose one single Database (if there is a business case). But, if there is a common interest to be in a central database, we don’t need to make it a legal obligation. The problem is that small railways may not all consider this is in their interest. For the moment, should some major RUs be willing to use a common database, it’s their right. Should other RUs (there are hundreds of them in Europe) not willing to join such a database, it’s their right too. The Regulation does not force them to do so. Therefore, with this new understanding, experts came to the following conclusions:

- RUs will fulfill their obligation by making their timetables available at an FTP address that will be communicated to parties that would like to enjoy their rights
- RUs, PA and TV exercise their rights by having access to the FTP addresses given by RUs.
Without a central repository validation across multi RUs will not be possible (ex. to validate location IDs are unique for a station)

See above

---

Central database should be frequently updated, at least on a daily basis

Daily updates will be possible with new Merits in 2013. Weekly updates will be the standard. In case of strike, weather problems, etc. a daily update is possible). Weekly updates are already done by Railteam members. Monthly updates for the others.

---

Strict governance is needed to ensure RUs are providing accurate up to date data

Question already discussed

---

It would be beneficial to have timetable updates in real time

Not in TAP-TSI scope

---

It would be ideal for ticket vendors to request timetables for a specific service provider

There is an existing possibility in Merits to select the country or the service brand, but not the Carrier. Request to be discussed within the Architecture workstream. Concerning the download of the Delta (changes from the last download) rather than the totality, this possibility exists but is not used. This will need to be discussed within the architecture workstream. If the discussion ends in some requirements to MERITS, then the owner (UIC) has to be informed.

OPPORTUNITIES:
- Airline experience with OAG should be further studied
- Architecture based on the Cloud should be in the loop of the study.
8.2. Tariffs / Fares

ISSUES

Solved

For B.1 series (NRT-tickets) there should be a possibility to define, which series must be printed on separate tickets

This issue has been solved by the TAP CCM Board with the creation of the new table M in TD B.1

---

The tariff description for the NRT-fares within the ERA TD B.1 is based on series. Each series describes an O-D and a route between them. These routes can be specified in more detail with via-stations. If the timetable data contains no stop at one of the defined via stations no link between timetable and TCV-fare can be found (see also timetables section)

As already said, this issue has been resolved by the CCM, but the Tariffs Expert group suggested two changes for the adopted CR: in the sentence “Border stations and significant via stations which are linked to fare definitions (technical documents B.1, B.2, B.3) must be indicated in the timetable with their passing time.” the underlined words should be cancelled (significant is useless and misleading, introduction of passing time is useless and requires additional work from RUs).

The sector will evaluate the possibility of submitting a change request.

With solution proposal

Technical Document B3 is not fit for the current commercial scenario, has never been implemented by any RU, its Implementation would request huge expenses and has no business justification

Technical Documents B.1 to B.3 do not cover the case of TLT (Train Linked Tickets)

These two issues were together the subject of a long and animated debate about the “open” tariffs system.

The RUs use the B.1 format to publish full fares, which are fixed for one year and are usually full fares (highest level of price).

DB is offering special fares (Sparpreis) with its open system: there is no need for a reservation to travel but the fare to get the authorization to travel on a specific train is changing according to quota managed fares. Those fares are cheaper than the full fares. Since those fares are quota managed, they cannot be accurate if they are stored in a fixed database with an indication of price ranging between a minimum and a maximum price.
ERA highlighted that the fares within the TAP TSI TDs B.1 – B.3 are indicative fares like a catalogue. It is at the time of effective sale that the customer knows which of the offered fares is available. ERA highlighted further that there is a difference between the exchange of fare information between RU’s - supported by the TAP TSI TDs B.1, B.2 and B.3 - and the process “Ticket sale to a customer” between RU and the customer. In the case “Ticket sale to a customer” the PRR EC 1371/2007 is applicable.

Unfortunately, the TAP standard for online sales (B.5) is attached to reservation, and DB fares are not linked to a reservation. So there is no TAP compliant solution at the moment for other RUs or TVs to sell DB’s best prices. That’s why DB built a proprietary interface with some RUs to be able to exchange availability and to sell those best prices.

The group agreed that the problem could be solved with the new interactive message of price request that the UIC working groups are developing, valid for all kind of tariff systems (NRT, IRT and TLT). If the design of the new message and its specifications are completed before end of TAP Phase One, there is the possibility of an agreement with the Commission and ERA in order to decide its application directly in TAP phases 2 and 3, bypassing the obligation of TDs B.1, B.2 and B.3. In any case, the mandate of our group is to define clear IT specifications for TDs B.1, B.2 and B.3, in order to make them fully usable if there remains the obligation to adopt those formats to fulfil the legal obligation to inform public authorities and third parties authorized to sell.

To this regard a concern was raised about the competition issue. Marko Kelsch showed the example of the agreements DB has with two Austrian carriers, OeBB and Westbahn, by which DB can sell tickets e.g. Frankfurt-Wien at different prices dependent on the carrier used in Austria. DB is afraid that the wording of BP 4.2.2 “The railway undertaking shall make available all its tariffs … to the railway undertakings and third parties to which it grants authorisation to sell according to distribution agreements” would oblige DB to disclose to OeBB and Westbahn also the revenue sharing agreement it has with the competing carrier, since DB has a distribution agreement with both.

The understanding of a large part of the group was that the obligation of information only concerns the fares that the partner RU is allowed to sell, somebody on the contrary understood that the limitation “allowed to sell” is only valid towards 3rd parties but not towards all other RUs. Stefan Jugelt agreed that the wording could raise doubts and promised to consult ERA and Commission to give an official interpretation.

A different problem is the one that can arise when, on the above mentioned Germany-Austria route, a customer may board an Austrian train that he shouldn’t with the fare he got. This situation is not new but TAP risks maintaining and giving an official support to a situation that should be avoided (though a clear information to the customer on the conditions of the fare would restrict the problem).

---

Technical Document B2 (UIC 108.2) on IRT is not fit because, while the tariff conditions are relatively stable, the fares can vary from a day to another (or even second by second if yield managed)
ERA asked for clarification if the fare tables or the availability of the fares are changed frequently. It was confirmed, that the availability of fares can vary. Nevertheless in some yield managed systems (e.g. the Swedish one) there is no real fare table, because the fare, calculated by internal algorithms, can assume every value (rounded to an entire amount of SEK).

TD B.2 should be used to publish tariffs and fares for IRT. As we have more and more IRT fares subject to yield management, there can be a difference between the fare that is stored in a database and the real fare of the moment. Therefore, more and more RUs don’t use B.2 to publish fares. Some RUs use it for exchanging Tariffs. Nevertheless, TD B.2 is in the law, so RUs shall at least make available those IRT fares for Public authorities. Regarding the provision of such data to 3rd parties it relies on an agreement between parties. Therefore, there is the need of writing the Implementation Guide to make those IRT (tariffs and fares) available.

For open discussion

Technical Document B1 (UIC 108.1) on NRT fares has many limitations:

- Settlement is performed by the issuer, the product owner must trust the issuer’s accounts
- Not fit for 3rd party ticket vendors as RUs need to keep control on settlement
- Not fit for competition (2 carriers on the same route)
- No differentiation possible by product categories (example regional trains, long distance trains, high speed trains etc.)
- No differentiation possible by sales channel
- Cross border series of a single carrier cannot be represented
- Multi carrier series of one system managing carrier are not presentable (one OD with parallel traffic but different carriers / Competition cannot be represented; one OD with more than one sequential carrier).
- Different pricing parameters of OD with several Carriers cannot be represented.
- For quota managed offers only price range information can be calculated, concrete fare information cannot be calculated (e.g. Sparpreis or Europe special price from 19 € to 139 €).
- No price differentiation possible for "peak" and "off-peak".
- Booking of quota managed offers not possible, because missing information about availability
- There are only two classes, new classes cannot be mapped (e.g. premium on Railjet trains of ÖBB)
- No automatic combination of tickets and reservations are available (e.g. offers exclusively with sleeper)
- No interoperability with other modes of transport
- Large investments necessary for the processing of offer data and pricing functions
- No benefit for RUs, TVs, EC, because bookings are not available
- To expect further expensive regulations (e.g. online interface for quota managed offers)
- A change of the carrier is only possible at border points, for national tariff crossing points (e.g. Köln or Frankfurt) fictitious border points must be established
The exchangeable routes per carrier are limited to 99.999 (In Germany there are ca. 6300 tariff points. This results in a price matrix of about 20 million connections. Different routes will even increase the number of connections.)

A central repository is necessary to provide a consolidated list of fares and pricing rules

This will simplify the import and export of data for all parties

It would be beneficial to publish fares and pricing rules updates in real time

It would be ideal for ticket vendors to request fares and pricing rules for a specific service provider

Agree interactive calls to the RU systems would be the best solution for providing accurate fare information.

For ticket vendors it would still be beneficial to provide a fare and pricing rules via a bulk data exchange. A new tariff type can be defined to support yielded NRT fares.

If the RUs send Availability Status messages to the ticket vendors directly they can support yielded NRT fares

This series of issues regards mostly the inadequacy of B.1 in front of the current evolving scenario (problems deriving from the liberalization, the competition, the relationship with TVs, etc.).

The group discussed in detail only a few of them, reaching in general the conclusion that:

- Some issues are implicit in the structure of the NRT fares, and will only be overcome by the solutions deriving in future from the Full Service Model workstream;
- Some issues could be corrected with limited changes to B.1, those cases will be studied in more detail during the remaining of Phase One and will possibly be object of CRs;
- In any case, detailed IT specifications and quality requirements must be given in the Implementation Guide to allow any newcomer RU to apply correctly the TAP, if B.1 remains a mandatory format;
- It seems difficult, under the current rules, to allow a TV to sell NRTs according to B.1, because of the lack of settlement standards. This too should be overcome by the solutions deriving in future from the Full Service Model workstream.

OPPORTUNITIES:

- completely review the business model of price info and sales, reducing gradually the use of NRTs and introducing for all sales an interactive message to the product owner from the distributor to get the right price;
- Airline experience with ATPCO should be further studied;
- introduce TVs in the loop, adapt BCC;
- avoid unnecessary huge expenses.
8.3.a Reservation of places

ISSUES

With solution proposal

An update to leaflet 918-1 has been published on the UIC TAP-MD extranet as version 5.1. This includes the existing single price message – also known as pseudo-bookings (value 9 of element 11) – and the new multiple price message, agreed by the Team Message Group and TAP-MD at their last meeting but not present in Technical Document B5. The version of leaflet 918-1 available for the UIC members is therefore no more aligned with B.5.

Proposal: submit a change request to include the new message in B.5; in the meantime RUs willing to start using it can do so on bilateral agreement according to process 4.2.9.1 of Regulation 454/2011.

DB would like to include this new way of obtaining all available fares in a given train for a given day in Phase 1. As the work is not totally finalized, it is unlikely that it can be part of Phase 1 due to the CCM process for approving such a change and for publishing the changes in the law.

The group agreed that the implementation of the multiple price message should for the moment be limited to the volunteering UIC members, in order to test and improve it. A CR for inclusion in B.5 could come later, in any case the TV representatives didn’t express any special interest in an extension of functionalities of B.5, considering this standard a complex and obsolete one.

For open discussion

Technical Document B5 provides a set of outdated messages which allow limited products to be sold by a distributor

This opinion was confirmed basically by TV representatives and some RUs, while e.g. SJ considered that B.5 standards, though having been created many years ago, are not yet outdated, they are still valid if properly used.

ERA made clear that B.5 is not mandatory and other proprietary solutions can be used. If a newcomer would like to implement B.5, it can request it to an RU but the latter can decline if it does not fit its needs or meet a positive business case. Reservation and ticketing first rely on commercial agreements between Carrier and Distributor. If the commercial agreement describes that the solution should rely on the TAP-TSI regulation, then the 2 parties will use what TAP describes.

DB highlighted a problem on NRT with mandatory place reservation (case of City Night Line). In such case, the NRT ticket should be coherent with the reservation using the right tariff code. If you use the wrong one, the distributor will be applied a penalty for misusing the products of the carrier. As TAP-TSI does not describe connection between
B.1 and B.5, DB sees the TAP interface as not filling their needs which push them to use proprietary interface. Same issue happens with NRT to be used with quota managed fares per train.

---

Technical Document B5 doesn’t allow the concept of shopping cart, that would be needed e.g. to book in one transaction a ticket with mandatory return

A partial possibility to link together more than one reservation in a single transaction is allowed by UIC leaflet 918-1, in its appendix B4, but this appendix was not transposed into B5 because no RU is using it. It would have in any case a very limited effect, since the two transactions would not be linked together (e.g. cancelling both with one request). A good solution to the “shopping cart” problem can only come from the introduction of the PNR concept. A PNR can be managed by the allocating system when the products to be sold together are homogeneous (e.g. outgoing and return rail tickets), or by the distributor when the requested products belong to different owners (two RUs, RU + car rental, etc.)

---

It should be possible to ask availability and price according to traveller type, loyalty program, fare allowance of the customer

The group considered that this problem will be solved by the FSM workstream.

---

Are all messages of B.5 really used? (replacement proposals, negative replies, correction messages, distribution message description)

Members of the group with a long direct experience confirmed that all those messages have a rather frequent use, and must therefore remain in B.5

---

According to draft minutes of last UIC Technical Group, leaflet 918-0 is being reviewed to reflect current business conditions: is this going to have consequences on 918-1 and therefore on B.5?

918-0 is the current Implementation Guide for leaflet 918-1. The current revision of it within UIC does not affect B.5, but can be useful when drafting the TAP reservation Implementation Guide.

---

UIC members (part of them) make available to partner RUs a reservation list prepared according to UIC leaflet 171, with data useful to better perform the reservation process. Are there data that it would be interesting introducing in B.5 too?
UIC leaflet 171 is currently used by many but not all UIC members. The group didn’t see any need to modify B.5 to insert data taken from leaflet 171. Will this help in building the Implementation Guide? To be checked.

---

The following statements in the TAP Regulation:

4.2.9 “This basic parameter shall ensure that the issuing and attributing railway undertakings shall exchange appropriate availability and reservation information.”

4.2.9.1 “This process will be performed following a request from a customer transmitted to the distribution system of the railway undertaking.”

imply that only RUs can have ‘distribution systems’, so ticket vendors can only get access to rail content via the distribution system of an RU. The same concept appears in the summary of B.5 “The arrangements contained in these Technical Documents enable a RU to reserve seats from an inventory managed by another RU”.

ERA made clear that TVs can use B.5 to access carrier’s attributing systems. There is no need to change the law as the text is clear in this subject in some chapters. So chapters 4.2.9 and 4.2.9.1 shall not be changed, moreover because changes in the text of the Regulation are much more complex than changes in the TDs.

---

The 2-digit tariff codes listed in code list B.5.42 can have different meanings by different train operators and/or train categories. To avoid confusion the tariff should be represented either by the pair “2-digit tariff code + carrier code” or by the 2-digit code “04” followed by the digits 3, 4, 5 and 6 of element 42. In the ERA Directory of code lists there should be a list for the coding of digits 3, 4, 5 and 6 of element 42 (even though not used at the moment).

Tariffs codes in code list B.5.42 are in 2 digits and a very same value could have different meaning according to the Railway allocating system. How to make it clear for TVs what codes are relevant or not. A solution could be to combine the 2 digit tariff code with the carrier code. B.5 does not need to be changed as it is already in the right format but the definition of it needs to be changed for feeding the field. The question will be solved in the Implementation Guide.

---

A reservation made through a GDS must show what selling terminal is the requester so that it can be charged by the carrier for the sold product.

918-1 being used between RUs, only RUs were charging each other without the need to know who really sold the products (agencies or RU’s channels).

B.5 with Ticket Vendors shows there is an identification subject to be discussed so that RUs can be aware who is selling (and eventually reject the requester if it is not authorized by an agreement). Details such as country, terminal ID, type of point of sales,…need to be exchanged. The question will be solved in the Implementation Guide.
What is the meaning of “Best Price” in the Passenger Right Regulation?

ERA had not been involved in the PRR and could not give an official answer, but noted that TAP-TSI contains technical specifications not commercial ones. TAP-TSI only eases the exchange of data between systems and doesn’t interfere with commercial choices. When writing the TAP Regulation, the subject was raised and it was convened that “best price” is a notion attached to the retailer. It does not impose carriers to provide the same best price to everyone.

OPPORTUNITIES:
• Completely review the business model of price info and sales, reducing gradually the use of NRTs and introducing for all sales an interactive message to the product owner from the distributor to get the right price
• Modelling RUs business elements should come first, then XML messages could be build to get the most of them
• Build specific richer interfaces to distributors to be able to offer the full range of products
8.3.b Reservation of assistance for PRM

The group agreed that PRM assistance booking has nothing to do with B5. Furthermore, the survey on legacy systems didn’t contain questions related to this subject, and therefore it didn’t raise issues and opportunities. The only ones expressed were the result of a detailed reading of TD B.10, and are listed hereunder without comments from the group.

Nevertheless the Project Team is well aware of the social importance of the PRM question, and will dedicate specialized meetings with the few experts working on this, in principle different from the experts of seat reservation.

ISSUES

With solution proposal

The “Staff on board” shown in Figure 3 of B.10 is not defined in the Actors’ list in Table 1
Proposal: submit a change request to include “Staff on board” in Table 1

The actor on the right in Figure 2 of B.10 is not only “Assistance coordinator of allocating RU” but rather “Assistance coordinator of allocating RU, IM or SM”
Proposal: submit a change request to amend Figure 2

The option “Is it accessible for PRMs?” under point 6.10 of B.10 has no unique answer. A platform only accessible via stairs is not accessible for a PRM on wheelchair, but is perfectly accessible for a blind person
Proposal: submit a change request to modify the option as “Is it accessible for PRMs on wheelchair?”

Figures 5, 6 and 7 of B.10 are repeated twice
Proposal: submit a change request to cancel the second instance of the figures

The actors on the right in Figures 5 and 6 of B.10 are not “Staff on station A” but rather “Staff on station B”
Proposal: submit a change request to amend Figures 5 and 6

For open discussion

The scope of B.10 is limited to requesting assistance for PRMs at stations. No procedure is defined to book assistance during the journey on board the trains.

The “passenger data catalogue” mentioned under different points of B.10 (6.2, 6.5, 6.10, etc.) is not defined anywhere

OPPORTUNITIES:
• Complete the assistance chain to PRMs
8.4. Fulfilment

ISSUES

Solved

Data type definitions are missing in Technical Document B7 (UIC 918.3) for some elements:

- Undefined data types for the Element MessageHeader:
  - Version
  - MessageId
  - RefToMessageId
- Undefined data type for the element PassengerType

The missing definitions for some elements in Technical Document B7 have now been approved by the CCM.

With solution proposal

Technical Document B.6 (UIC 918.2) only defines layouts for NRTs and IRTs. There is no standard for the TLTs (see also tariffs section)
Proposal: submit a change request to introduce the TLT layout in B.6.

These new kind of tickets are linked to a specific train, but do not provide the booking of a specific seat on the train, the level of fare being quota managed.
TAG Group has started defining the layout of the TLT. Next 918.2 version in June 2012 could include this evolution. This timing is not compatible with TAP Phase One, therefore a CR for inclusion of the TLT layout on B.6 will possibly be submitted in a subsequent phase.

---

Technical Document B7 (UIC 918.3) only defines how to establish home printed tickets, but doesn't define how to handle after sales (changes, refunds, on board usage). To this scope the UIC has recently created leaflet 918-4
Proposal: submit a change request to create a new TAP Technical Document based on 918-4.

Leaflet 918-4 has been created to define how to handle after sales (changes, refunds, annotations, on board usage) both for home printed tickets and for pure e-tickets. This is necessary to avoid copy and misuse, since the printing is not on value paper. This will also allow to adapt to live changes (incident, new route to be used).
918-4 defines the functional data to be exchanged, not the technical aspects to implement it. It is an official UIC leaflet since 2010 but, since it has not yet been implemented and tested in real use by any RU, the group decided that it is not advisable to propose already during Phase One a CR to transform 918-4 into a Tap Technical Document.
ATB tickets, as described in Technical Document B6 (UIC 918.2) are commonly used by RUs but not anymore by 3rd Party Ticket Vendors.
Proposal: TVs can use low-cost printers with front feeder.

It was clarified that RCT2 tickets do not require the use of ATB printers, since the use of the magnetic stripe is no more required. The ticket vendors can print RCT2 tickets using low cost desktop printers and A4 sheets including a value paper section (as defined in GTT-CIV of CIT).
Nevertheless they still experience two problems:
- having to keep more than one stock if the travel agent wants to represent more than one RU (for this they would like to have “neutral” ticket stock)
- having to perform a stock control to justify the use of each coupon.
Therefore the TVs expressed a strong wish for the rail sector to adopt soon the e-ticket as unique solution, as the airlines already did.

For open discussion

Home printed tickets, as described in Technical Document B7 are used by different RUs in their own market with some free interpretations of the standard.

B.7 actually allows for some degrees of flexibility in the use of the standard (e.g. the free distributor zone described in chapter 3.2.6). The Implementation Guide will better define which parts can be freely interpreted and which must be applied in a strict way.

Should the new UIC format CCST (Credit Card Size Ticket) be introduced in TAP?

This is not yet in UIC leaflet 918.2, the final version could be ready in June 2012. This timing is not compatible with TAP Phase One, therefore a CR for inclusion of the RCCST on B.6 will possibly be submitted in a subsequent phase.

Should the new UIC standard for “pure” e-ticket (918-5) be introduced in TAP?

This new standard is still under development in UIC. It will be used for “pure” e-tickets, and prepared for two use cases : with security obtained via a (bar)code, or obtained from the identity of the traveller. The best estimate is to have it approved in UIC in autumn 2012. This timing is not compatible with TAP Phase One, therefore a CR for transposition of 918-5 into a new Technical Document will possibly be submitted in a subsequent phase.
Standards needed for the closure of open points on Ticket on Departure and Manifest on List not yet approved by CEN.

The group acknowledged that, though the CEN working group has completely defined the new standards for Ticket on Departure and Manifest on List, they have not yet been approved by the plenary CEN because of lack of support by the representatives of the national standardization bodies. The approval request will be submitted to them once again, with clearer explanation of the content and of the importance of approving it.

- - -

According to draft minutes of last UIC Technical Group, leaflet 918-2 has been reorganised and updated so that it is clearer and easier to read. It has also been changed to make Method of Payment mandatory, as requested by the Commercial Group. This new version 4.1 is due January 2012. Is this going to have consequences on B.6?

David Sarfatti, leader of the UIC group in charge of this, explained that the new version will be published by UIC as of 1.1.2012. The new version did not change the substance of the content but reviewed the editing. In particular the terminology has been reviewed, using the word “ticket” for all documents providing a right to travel, and the generic word “document” for the others. The two only real changes are the decision to make mandatory the printing of the payment method on the ticket and the complete update of Rail Pass Ticket chapter. In line with UIC Technical Group advice, the group considered that it is necessary to submit a change request to align the TD B.6 with these changes, while the list of admitted codes to indicate the possible payment methods will be included in the TAP Passenger Code List.

OPPORTUNITIES:
• New ticketing solution to emerge from the open points
9 Comments & recommendations

The results of the analysis performed on the legacy systems and on the current situation of the sector can be summarized as follows:

- Some of the identified issues are editing or trivial errors, Change Requests should be submitted without need of any further study;
- Some have an identified solution but it implies material changes, therefore the opportunity of a CR must be coordinated with the Technical and Commercial Groups of UIC;
- Some already have working groups (UIC or other) which are preparing a solution, therefore it seems logic to wait for those solutions to be finalized and then to evaluate if they fit our needs;
- Some will be further studied by the Expert Groups and the solutions will be described in the Implementation Guides to be completed in Phase One;
- Some will be studied in the Full Service Model workstream, and a possible solution will only come in a phase subsequent to Phase One.

Two cases require a special attention, because their solution doesn’t seem limited to a simple CR:

- The whole sector of the tariffs and fares, as it is represented in the TAP and its Technical Documents, seems inadequate because:
  - B.1 reflects an old situation and is unfit for the recent push towards competition (two carriers on the same route) and liberalization (a carrier operating trains outside of its national territory)
  - B.2, being offline, can accommodate the tariffs (terms and conditions) but not the rapidly changing yielded fares
  - B.3 has never been experimented by any RU
  - There doesn’t exist a way to distribute the new yielded NRT.
  A global solution to those problems can come from the implementation of the new business model, where all tickets are sold via an online transaction, also the NRTs. This change is not only technical, because it also implies deep organizational changes (the settlement of the NRTs will be done by the product owner and no more by the retailer as today)

- The print@home type of fulfillment (the only kind of e-ticket described in TAP, as long as the open points are not closed), seems inadequate as it is represented in the TAP and its Technical Documents because B.7:
  - has never been fully experimented by any RU (in particular with the exchange of the XML messages for the collection of security certificates)
  - only describes how to create a print@home ticket, but doesn’t define how to modify or cancel it, therefore forcing the RUs to only use it for non exchangeable and non refundable tariffs.
  A solution to those problems (or at least the second one) can come from the adoption, as a new TAP Technical Document, of the recently approved UIC leaflet 918-4, defining the conditions for after sale of a print@home ticket.
One last important remark must be added: the whole chapter on issues and opportunities has been written on basis of the inputs collected in the expert groups meetings, where only incumbent RUs and 3rd party ticket vendors were present, while small railway undertakings and railway undertakings that are not members of rail sector representative bodies were completely missing.

The Project Team cannot exclude that those railways could experience significant problems when implementing the TAP TSI, but if this is the case, there has been no way to become aware of those problems.

10 Next steps

After the present work on the legacy systems surveys and the subsequent analysis of issues and opportunities, the TAP Expert Groups will concentrate their efforts on the drafting of the Implementation Guides.

Further meetings of the groups have already been scheduled in the following time slots in 2012:

30th January - 2nd February
27th February - 1st March
19th March - 22nd March