

TAP TSI

Telematics Applications for Passenger Services
Technical Specifications for Interoperability



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1 Monthly Progress History

1.1 Document Location

This document will be uploaded to the Steering Committee folder of the project extranet (members' area) and to the TAP TSI project communication website.

1.2 Revision History

Date of this revision: 7 February 2012

Date of next revision: 6 March 2012 (meeting of the Steering Committee)

Revision date	Previous revision date	Summary of Changes	Changes marked
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1.3 Approvals

This document requires the following approvals.

Name/ Entity	Title/ Remark	Approval	Date of Issue	Version
Project Team	Project Manager, Work Stream Leaders, Project Assistant	done	7 Feb 2012	Final (v1.0)

1.4 Distribution

This document is distributed to:

Name/ Entity	Title/ Remark	Date of Issue	Version
TAP Steering Committee	All members	7 Feb 2012	Final (v1.0)
Project Team; UIC and Ticket Vendor project coordinators	All members of the Project Team Michael Stevns (UIC) Klaus Kreher (Ticket Vendors)	7 Feb 2012	Final (v1.0)
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Progress Report

3 Purpose

The purpose of this document is to report, on a monthly basis, the status and progress of the Phase One project to the Steering Committee (SteCo) and interested stakeholders.

The following reporting goals have been approved by the SteCo in the kick-off meeting with the Project Team on 8 July 2011:

- Ensure all SteCo members and stakeholders are kept up to date with progress at regular, short intervals
- Allow the Project Manager to raise issues in-between SteCo meetings and to make better use of SteCo members' time constraints
- Highlight where SteCo action is required and help focus upcoming SteCo meetings
- Explain in more detail the project achievements and next steps.

4 Management Summary

January marked a crucial month for the project as stakeholders' feedback on the Intermediate Report and Steering Committee guidance on governance were taken on board and integrated into the work programme. The TAF/ TAP masterplanning kick-off meeting end of the month offered a unique opportunity to present TAP TSI to a large audience of diverse stakeholders. Intensive working sessions with ERA on the tariff-related Basic Parameters and on the approach to economic evaluation marked important events, too. All of these helped solidify the project work as Phase One is approaching its final stage.

In RU/ IM work is largely going hand in hand with TAF TSI. Areas that need further investigation and alignment are being addressed in a constructive way.

Work on the retail implementation guides is progressing well. The focus is now on populating the contents.

With respect to retail architecture, an FTP-based scenario and a more ambitious one with central unique databases have been further detailed and assessed by the Expert Group. It was agreed with ERA to perform an economic evaluation on both scenarios.

Good progress was made in a full Full-Service Model workshop committed to develop the model as a demonstration of the process to be used as a pre-cursor to the continuation of work in three sub groups using an agreed common process.

In the Governance Work Stream, Steering Committee remarks have been integrated into a substantially enhanced working paper. This is currently undergoing further reviews and detailing and will be circulated to the Steering Committee in preparation of their next meeting early March.

The masterplanning approach and its Phase One focus on central elements have been presented at the TAF/ TAP masterplanning kick-off meeting on 26 January. Focus is now going to be on preparing the transition to Phase Two and on economic evaluation (retail architecture and governance).

The Project Team proposes the following **agenda items** for the **March Steering Committee** meeting:

- Presentation of retail architecture scenarios
- Follow-up of governance options
- Presentation of economic evaluation (methodology)
- Outline of Phase Two transition activities.

5 Follow-ups from Previous Reports

Status update on issues and risks highlighted in the previous progress reports:

A) Issues	Status (as of 31 January 2012)
<p>Misconceptions in Expert Groups about TAP TSI and the Phase One objectives, scope and deliverables</p>	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> </div> <ul style="list-style-type: none"> • The project is now at a stage of increasingly stable solution scenarios and recommendations that are based on a widely shared understanding of TAP TSI as well as on a widespread, working-level endorsement of the scenarios laid out in the Intermediate Report • The Commission meeting with UITP and EPTO early February and the initial contacts made with Public Transport Authorities (see next point) promise to further align conceptions about TAP TSI </div>
<p>Insufficient involvement of the stakeholders outlined in §7.2.2.1 5. of the Regulation</p>	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> </div> <ul style="list-style-type: none"> • Contacts between the Commission, Project Manager and Public Transport Authorities (PTA) established; PTAs demonstrate a comparatively low degree of EU-wide coordination, thus making it difficult to reach a large audience with one-off communications • The Project Team seized the opportunity of the TAF/ TAP masterplanning kick-off on 26 January to inform a targeted audience, including Member States representatives; attendees have been asked to help inform stakeholders on a national level </div>
<p>Technical Documents: Restrictions and appropriateness of documents as-is, esp. of B.3 (exchange of data meant for</p>	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> </div> <ul style="list-style-type: none"> • Solid functional and technical discussion between ERA, the Project Manager and a rail tariff expert on 24 January; mutual understanding of requirements and concerns and some degree of convergence of views; a </div>

international or foreign sales – special offers)		second meeting has been fixed on 24 February to clarify remaining issues
Interpretation of BP 4.2.2 (exchange of tariff data): Does the legal text mean all RUs shall make available – unconditionally – all their tariffs to all other RUs?		<ul style="list-style-type: none"> Clarification from competition law point of view pending
Despite close collaboration, it may not be possible for sound reasons to fully match the governance proposals and the masterplans for both TAF and TAP TSI		<ul style="list-style-type: none"> Phase One team will make a governance proposal to the TAP SteCo. It is suggested that the TAP SteCo discusses that same proposal with the TAF SteCo Regular meetings are still being held between the masterplan task members for TAF and TAP to ensure the maximum coherence between the two projects; the preparations for the TAF/ TAP masterplanning kick-off end of January was helpful to clarify the approaches to masterplanning
There is no committed budget or staff for the Phase Two transition work (i.e. mid-May 2012 until approx March 2013)		<ul style="list-style-type: none"> At the March Steering Committee meeting the Project Team will present an outline of Phase Two transition activities, the associated efforts, funding requirements and options as well as a proposal for an organisational set-up
The budget for governance and common services starting in 2013 will need to be agreed in principle by the sector representative bodies prior to the completion of the Phase One project		
Methodology and level of detail of economic evaluation		<ul style="list-style-type: none"> ERA and Project Team agreed on the methodology, level of detail and timeline in their meeting on 31 January (see Chapter 6.6 of this report)

Note: → symbolises “was yellow in previous reporting period, is now green”.

B) Risks		Status (as of 31 January 2012)
Common reference files - areas where Retail Work Stream analysis and review is required in order to ensure		<ul style="list-style-type: none"> All-day a follow-up meeting between the Project Team, retail and RU/ IM experts is scheduled for 23 February Clarification mechanism between the RU/ IM

consistency		and Retail Work Stream leaders established
The scope and scale of the FSM may exceed the capability of the FSM team resources to complete in Phase One	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<ul style="list-style-type: none"> Proposals for post-Phase One activities will be presented at the March Steering Committee meeting

6 Activities since Last Monthly Report

The following **overall project management and stakeholder engagement** activities have been carried out in January apart from the day-to-day project management tasks:

- Presentations to various stakeholder groups and liaison with TAP-related initiatives¹
- Project Manager actively involved in the TAF Joint Sector Group
- Preparation of and follow-up on the Steering Committee meeting 10 January
- Alignment meeting with ERA on 24 January (ERA/ PM jour fixe), including detailed discussion of the tariff-related Basic Parameters, and special meeting with ERA on economic evaluation on 31 January
- Bi-weekly Project Team meetings
- Ongoing addition of project website and extranet contents.

Within the Work Streams, the following key activities have been executed:

1. RU/ IM

- Sixth series of Expert Group (EG) meetings took place on 17 - 19 January 2012:
 - **EG 1 (Planning)** works on business scenarios and related messages. Work on most messages is finished. Due to the discovery that a receipt confirmation² for a path request is missing, the EG could is still delayed by about 4-6 weeks. All other path request messages have now been discussed, with an ongoing discussion only to split the dossier message into (technically) two messages. Main focus of the work has shifted to describe different business scenarios (e.g. how to request a path for trains that join or split on route) to facilitate interoperable implementation
 - **EG 2 (Train Running)** is on time. All TAP EG 2-related messages have been modelled into xsd now. That includes changes to messages available from TAF and the completely new messages Change of Track and Train Journey Modified, in order to fulfil Basic Parameter 4.2.12³. Input for implementation guides has been worked on in parallel to the messages and has to be cleaned and aligned with TAF now (where appropriate)

¹ CENELEC/ TC 9X WG 15 on "On Board Communication Network" and CEN/TC 278 WG 3; presentation at the Transport Ticketing 2012 conference; meeting with ECTAA management

² This receipt confirmation is not a technical message between two Common Interfaces but a business message between the legacy systems. It can be compared to an acknowledgement, confirming that the IM has received a path request.

³ Requires the Station Manager to inform about change of track/ platform, train cancellation, rerouting. These information have to be delivered by IM and/ or RU. Messages are not specified in the Regulation.

- **EG 3 (IT)** is on time. The specifications for the Common Interface (CI) developed by the TAF community (Common Components Group CI) have been approved as fit for passenger RU/ IM as well, with a request to make available the external specification/technical configuration needed for those building their own CI. No change requests are foreseen by the TAP RU/ IM Work Stream
- Intensive liaison with the TAF TSI community continued: TAF Chairs have been in EG 1 and 3 meetings, the TAF Deployment Team participated in EG 2 and 3 and work to align the Implementation Guides for reference data (TAP EG 3 and TAF WG 1) has started
- The process of getting one joint message schema and joint Implementation Guides has started with the main alignment dates planned in February
- Feedback from the Retail Work Stream on joint elements between TAP RU/ IM and Retail Work has been made available. It appears that technically no change is needed but governance might have to be adapted to allow primary codes to be attributed by other actors than just the IM. This will need further work in a joint meeting in February.

2. Retail system specifications

- January has been dedicated to setting the common foundations for the writing of the retail Implementation Guides (IGs)
- The overall list of IGs to be drafted has been agreed
 - One general introduction
 - Six IGs dedicated to specific functionalities (Timetable, Tariffs, Reservation, Direct Fulfilment, Indirect Fulfilment, PRM assistance)
 - Two IGs dedicated to information provision (to other stakeholders, to the public)
- A common structure has been agreed for all functional IGs
- A first partial release has been drafted for the timetable, tariffs, reservation and direct fulfilment IGs
- They have been discussed with the respective Expert Groups in the meetings 30 January to 2 February
- UIC and CIT have been asked for possibilities of including abstracts from existing proprietary documents into the IGs.

3. Retail system architecture

- From before Christmas until 23 January the architects weighted sub-criteria and scored several solutions for Timetables and for Tariffs/ Fares. They also described a new, alternative architecture solution for Reservation. No alternative solution was presented for exchanging data regarding Print@home ticketing and reference data
- On 23 January 2012, the fifth architecture meeting resulted in a preferred solution for Timetables and one for Tariffs/ Fares. The preferred solution for Reservation remains the one that is already widely in use. This will constitute the Project Scenario 1⁴. A second solution was chosen for Timetable, Tariffs/ Fares and the alternative solution for Reservation presented by the Ticket Vendors. This will

⁴ Key features: FTP Timetable, FTP Tariffs/ Fares, current Hermes Protocol for Reservation, FTP for Print@Home certificates, and FTP for reference data.

constitute the Project Scenario 2⁵. Common services associated with the two scenarios need now to be detailed in view of their economic impact

- On 31 January, the Project Team and ERA agreed on these two project scenarios as the ones to be assessed in the economic evaluation part of the masterplan deliverables.

4. Full-Service Model

- **Developing the Full-Service Model:**

Progress in the early part of January was limited due to the impact of holidays and the difficulties of making progress with definition of the Full Service Model. However, very good progress was made in a full Expert Group meeting when the majority of the day was committed to a workshop to develop the model as a demonstration of the process to be used as a pre-cursor to the continuation of work in three sub groups using an agreed common process. The sub-groups will address the following stages of the end-to-end customer process:

Sub Group 1: Pre Purchase Information; Look-Timetables; Look-Fares and Availability.

Sub Group 2: Purchase; Reserve; Book; Ticket Fulfilment; Payment; Post Purchase Support.

Sub Group 3: Pre-Journey Information; In-Journey Information and Support; Post-Journey Support

In addition to the above customer-centric stages it was recognised that there are a number of areas that are necessary pre-cursors and enablers. These will be addressed once the above areas have been elaborated.

Each Sub Group has got allocated leaders and 4 or 5 members.

The sub groups will take the relevant sections of the FSM working matrix, clean-up and edit the current contents, enhance and complete the requirements as necessary organise them ready for elaboration.

As previously reported, it is recognised that maximum use must be made of previous work undertaken by Railteam and it has been confirmed that these documents will be made available via DB subject to agreeing a suitable sub-licence for the individual EG members to be able to use the materials. This is ongoing and it is now anticipated that documents should be available to the working group in February.

The Railteam documents together with the UIC “Feasibility Study on Availability and Booking Service including NRT Fares”, also known as the “New Price Message” work will be used to assist in the generation of the use case definitions

⁵ Key features: More ambitious architecture based on a central unique database for timetables, one central unique database for Tariffs/ Fares, mixed process for reservation using B.5 with Hermes protocol and Push availability, FTP for Print@Home certificates and FTP for reference data.

of the Full Service Model based on the elaborated requirements that are output from the sub groups.

- **Gap Analysis:** Members of the FSM EG continue to carry out an ongoing review of the other Work Stream findings to enable the gap analysis between these findings and the requirements of the FSM.

5. Governance

- The current governance proposals were discussed in some depth at the January Steering Committee meeting
- The Steering Committee asked for an introduction to the principles that lay behind the proposals
- It also asked for a clearer presentation of the options that were considered and the reasons for making the choice
- In parallel to this work, discussions have continued with stakeholders and with representative bodies that may need to provide funds in 2013 for the formation of the entity and the development of the regulatory services
- TAP governance as currently discussed will have to provide services to a large number of stakeholders. These are:
 - Operational computer services
 - Reference data service
 - Data distribution services
 - Technical services
 - Technical document service
 - Change management service (input to TAP CCM)
 - Administrative services
 - Registration of parties and objects defined in the TAP TSI architecture
 - Management of access control to regulatory services
 - Management of charging for regulatory services
 - Member and third party communication.
- The Project Team input for the March Steering Committee meeting will elaborate on the services, options etc.

6. Masterplan

- The Project Team presented TAP masterplanning at the TAF/ TAP masterplanning kick-off meeting on 26 January. The key messages on TAP were:
 - TAP RU/ IM standards will be close to TAF RU/ IM, with some identical prerequisites and some new messages for passenger information
 - New stakeholders compared to TAF are Station Managers and passenger RUs; IMs form the logical link between TAF and TAP
 - Companies falling under TAP TSI are asked to consider taking part in the TAF implementation harmonisation
 - The masterplan deliverables for the retail Basic Parameters of TAP TSI are work in progress and will be delivered together with the other TAP Phase One deliverables mid-May 2012
 - These will describe clearly what implicated parties (e.g. RUs, IMs, Station Managers, Ticket Vendors) shall implement, and in which sequence, in order to realise the TAP TSI target system

- Implicated parties will be asked to run their internal TAP TSI implementation studies from approx June 2012 to March 2013
- Following the summer holiday season (goal: September 2012), a specific TAP TSI masterplanning meeting will take place, similar to the one on 26 January
- A meeting was held at ERA on 31 January to agree on the way forward regarding Phase One economic evaluation/ impact assessment:
 - The Project Team will analyse two different project scenarios (see retail architecture description above) and compare them against each other as well against the reference scenario
 - Scope of the impact assessment will be:
 - Retail architecture
 - Common elements and services (unless already treated in TAF)
 - Governance
 - RU/ IM architecture not will be in scope because it will (has to) follow the ongoing TAF implementation
 - The Project Team has shown one project scenario describing an FTP retail solution with and without notification subscription. ERA has asked to highlight more the parts which are subject to central governance; ERA has asked furthermore to include in this solution the hosting of a central data validator (in order to ensure data quality)
 - Another project scenario was shown describing a database based retail solution
 - It was agreed at the meeting that the future economic evaluation should be based on the comparison of these two scenarios, with different common components, different retail architectures and different governances
 - It was agreed that a possible reference scenario will cover only common elements and governance. It will be mentioned that this reference scenario will not meet alone the TAP obligations and at least one of the project scenarios shall be met
 - The outcome of the evaluation should deliver the arguments from an economic point of view why one of the two project scenarios was selected as the preferred architecture for TAP Phase One
- The following next steps regarding economic evaluation/ impact assessment were agreed between the Project Team and ERA:
 - 1 March 2012: Deliver to ERA the aggregated draft cost impact related to the retail architecture for the two project scenarios
 - 9 March: Second economic evaluation meeting between the Project Team and ERA
 - 1 April: Deliver to ERA the aggregated cost impact for the two project scenarios covering retail architecture and governance aspects by; deliver a first draft impact assessment report
 - 24 April: Present the final impact assessment to the TAP SteCo.

Working documents, meeting agendas and minutes etc. are available on the members' area (extranet) of the project website.

7 Activities Completed in Reporting Period

The following Work Stream activities were completed in November and December:

1. RU/ IM

- Discussion and review of RU/ IM messages transformed from working sheets into the xsd (XML Schema Definition).

2. Retail system specifications

- First draft of Timetable, Tariffs, Reservation and Direct Fulfilment IGs
- Identification of UIC and CIT documents relevant for the writing of IGs
- Third round of meetings of the Fulfilment and Reservation Expert Groups.

3. Retail system architecture

- Two project scenarios are now identified for a global architecture covering all retail-related Basic Parameters.

4. Full-Service Model

- Revised process for development of the FSM
- Continued analysis and elaboration of the FSM requirements including identification of the process for completion
- Ongoing attendance at other Work Stream meetings and identification of gaps with proposed FSM.

5. Governance

- Revised governance draft for 10 January SteCo meeting
- Statement of governance principles and options as basis for discussion in March SteCo meeting.

6. Masterplan

- Updated outline masterplan
- Draft of the approach to economic evaluation.

8 Issues and Risks Occurred, Proposed Mitigation

The following tables summarise new major issues and risks that occurred in January. These should be addressed in the Steering Committee meeting on 6 March 2012 unless resolved prior to the meeting.

A) Issues	Proposed Mitigation
RU/ IM Expert Group 1 discovered that a functional receipt confirmation (receipt from legacy system) has not been developed . This will have to be	<ul style="list-style-type: none"> • EG 1 and RU/ IM Work Stream leader will make a proposal before the Expert Group meeting in February • Further discussion will have to be done

developed from scratch and may lead to further delay of the group in completing their final deliverables. This message was not foreseen to be a deliverable of TAF WG 5 ⁶ , which has now been realised by TAP RU/ IM EG 1. It is of high relevance for TAF and should be discussed and accepted there as well	<p>by mail and/ or by dedicating parts of the plenary meeting in March to this topic</p> <ul style="list-style-type: none"> The TAF community needs to be informed by TAF WG leader (initiated)
Doubts have been raised during the last Tariffs Expert Group meeting on the TAP obligations of the “entities” defined in B.2 (regarding joint ventures like Thalys)	<ul style="list-style-type: none"> ERA agreed to clarify
Doubts have been raised during the last Schedules Expert Group meeting on the TAP obligations for the annual timetable publication, and for the inclusion in the timetable of data concerning Passengers with Reduced Mobility (priority seats and accessibility of stations)	<ul style="list-style-type: none"> ERA agreed to clarify

B) Risks	Proposed Mitigation
<i>No new risks identified in the reporting period</i>	

9 Work Planned in Upcoming Reporting Month

Overall project management & stakeholder engagement

- Prepare team input to the Steering Committee meeting on 6 March and settlement workshop on 5 March
- Liaise with stakeholder organisations and TAP TSI related initiatives⁷
- Finalise financial reporting toolset
- Finalise article(s) on the project for publication in specialised media.

1. RU/ IM

- Seventh series of Expert Group meetings on 7 – 9 February
- Finish description of RU/ IM messages
- Get major input for Implementation Guide (IG) and issue first draft of joint IG for review and alignment with TAF
- Have the second meeting on joint elements between RU/ IM and Retail; outline the required governance

⁶ The assumption by TAF WG 5 was that this message is already described with the technical receipt confirmation in use between two Common Interfaces.

⁷ E.g. ERTICO-ITS, Public Transport Authorities

- Finish message alignment with TAF to have a joint (working) catalogue in March.

2. Retail system specifications

- Third meetings of the Tariffs and Schedules Expert Groups on 1 – 2 February
- Fourth series of meetings of the Schedules, Tariffs, Reservation and Fulfilment Expert Groups on 27 February – 1 March
- Meeting on PRM assistance IG on 10 February
- Meeting on Retail - RU/IM harmonisation on 23 February (see RU/ IM above)
- Produce the second draft of the functional IGs and review with experts
- Produce and review the first draft of the non-functional IGs.

3. Retail system architecture

- Sixth Expert Group meeting on 21 February to:
 - Finalise a common view on the two architecture scenarios
 - Define common services attached to each of the scenarios
 - Estimate the costs for these.

4. Full-Service Model

- Ongoing review of the other Work Stream findings
- Continue development and move to elaboration of the requirements of the FSM using sub groups
- Continue identification of gaps between other Work Stream findings and FSM
- Continue process for developing a proposal for addressing the gaps.

5. Governance

- Further work on the governance model
- Further work on stakeholder acceptance and funding.

6. Masterplan

- Cost estimate of the two scenarios in retail architecture
- Further research into funding requirements and opportunities for Phase Two transition.

10 Activities to be Completed in Upcoming Reporting Month

Overall project management & stakeholder engagement

- SteCo meeting preparation, sending due on 29 February
- Financial reporting toolset.

1. RU/ IM

- Finish translation of RU/ IM messages into xsd format
- Align messages with TAF.

2. Retail system specifications

- Second draft of the functional Implementation Guides
- First draft of the non-functional IGs.

3. Retail system architecture

- Detailing of common retail architecture services
- Economic Evaluation on the two architecture project scenarios.

4. Full-Service Model

- Secure access and licence to use the Railteam documents
- No other activities will be completed in February as all are currently ongoing.

5. Governance

- Complete consolidation of governance work for March Steering Committee.

6. Masterplan

- Updated outline masterplan and aggregated draft cost impact related to the TAP retail architecture.
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11 Budget Status

Appropriate reporting instruments are currently being set and information is consolidated. The February report will contain an overview of the budgetary status.

12 Suggested Agenda Items for next Steering Committee Meeting

Based on the outcome of the last Steering Committee meeting and the January progress report at hand, the Project Manager suggests the following topics for the Steering Committee meeting on 6 March:

- **Presentation of retail architecture scenarios**
- **Follow-up of governance options**
- **Presentation of economic evaluation (methodology)**
- **Outline of Phase Two transition activities.**