

TAP TSI

Telematics Applications for Passenger Services
Technical Specifications for Interoperability



Project co-funded by the
European Commission



TAP TSI – Update and Masterplanning

TAF/ TAP Masterplanning Kick-off

Brussels
26 January 2012

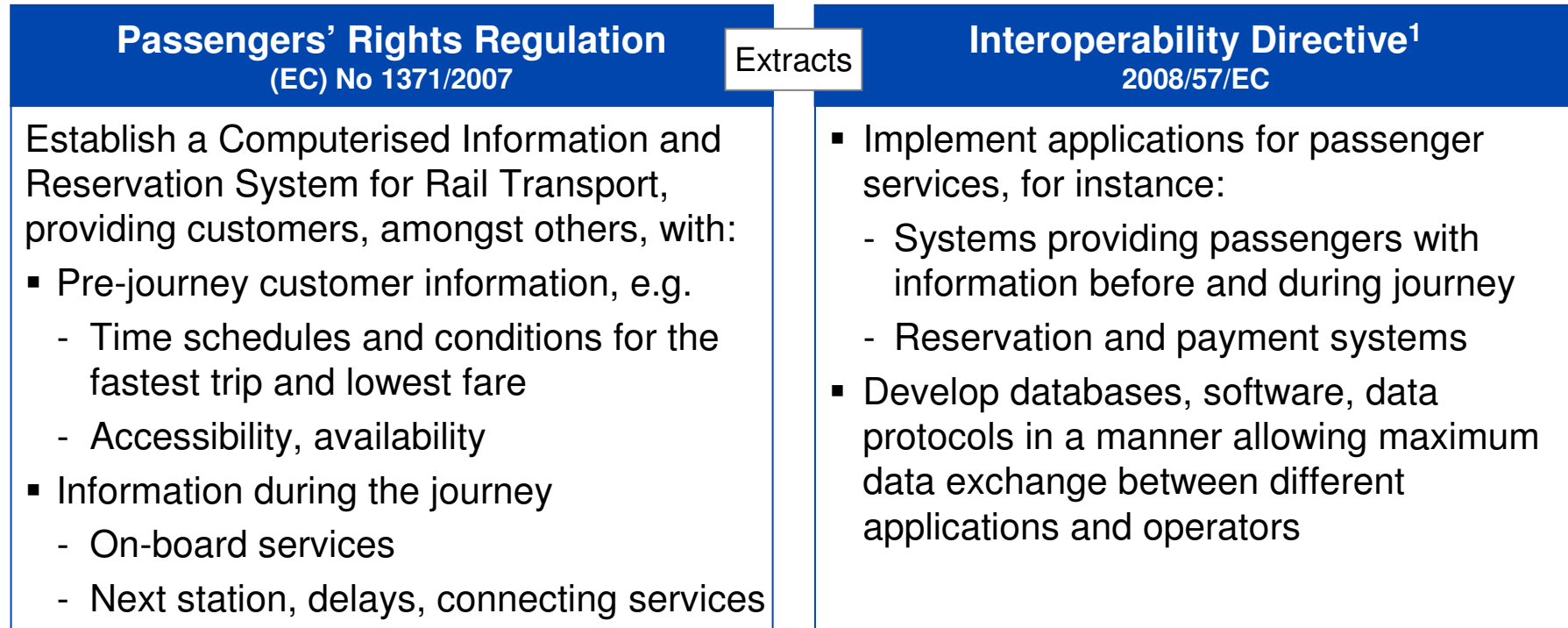


Contents

1. General update on TAP TSI

2. Overall TAP TSI masterplanning approach
3. Focus on RU/ IM – Link with TAF TSI

TAP TSI is about telematics applications for passenger services and addresses several Interoperability Directive and PRR requirements



TAP TSI

Telematics Applications for Passenger Services
Technical Specifications for Interoperability

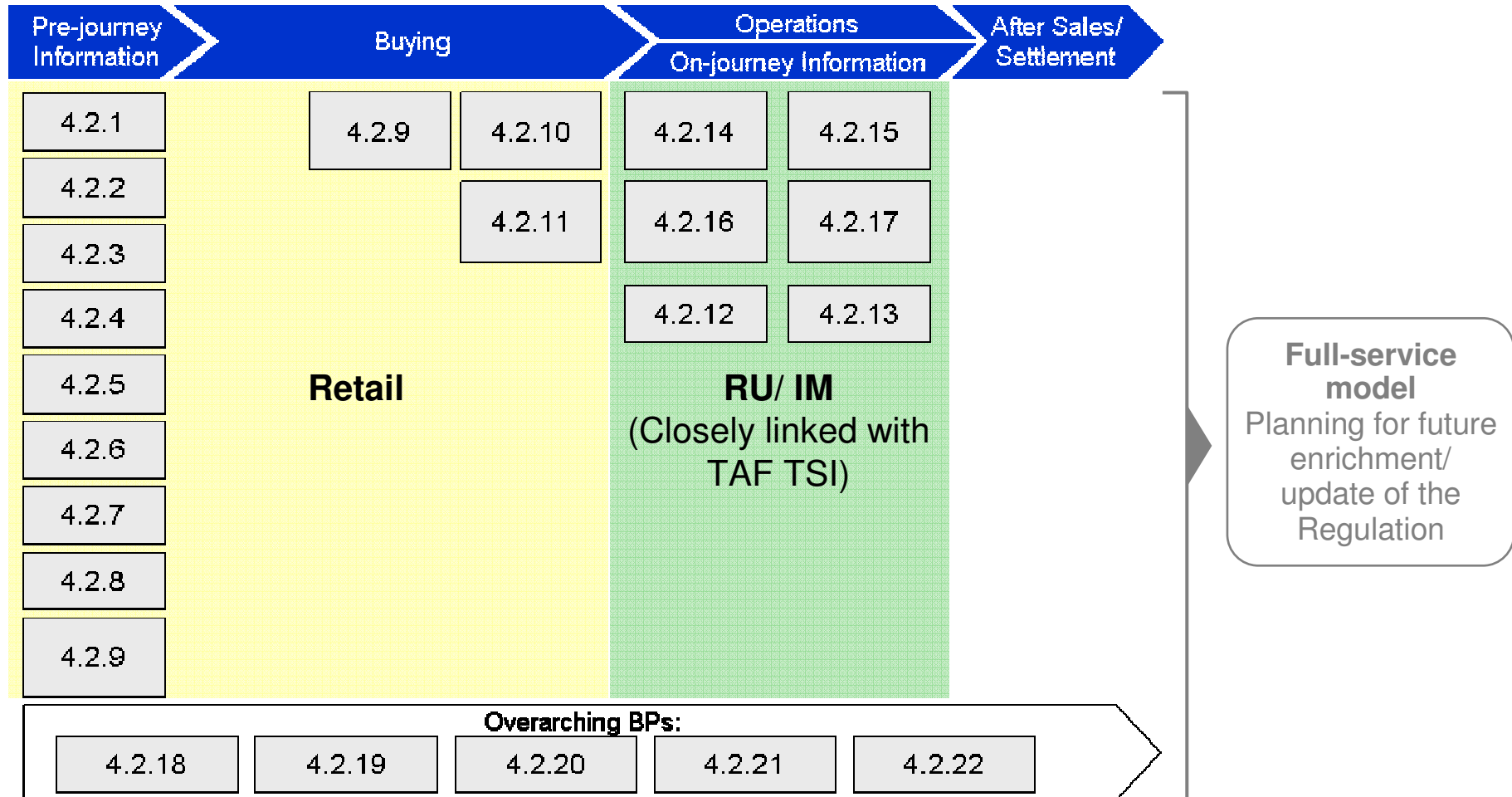
In force since

13 May 2011

as Commission Regulation
(EU) No 454/2011

1) Primary legal basis for TAP TSI

The Regulation contains retail and RU/ IM elements – different approach to implementation preparation needed



4.2.x = Basic Parameters (BP) of the Regulation

Implementation preparation – TAP Phase One – started with the publication of the Regulation in May 2011



1) Travel technology providers, (online) travel agencies, tour operators etc. 2) Available on <http://tap-tsi.uic.org>

Phase One shall produce the deliverables required for the development and deployment phases of the TAP TSI “system”



Objectives

1. Define the **data exchange system** (‘the system’) consisting of common components and of the interconnection of information and communication systems of stakeholders able to fulfil the requirements of this Regulation
2. Confirm such a system from the viewpoint of **technical and economic feasibility**
3. Draw up a **roadmap** of the activities deemed necessary in order to implement the system, including appropriate milestones for the implementation progress monitoring by the Commission, ERA, the Member States and the stakeholders concerned

Deliverables

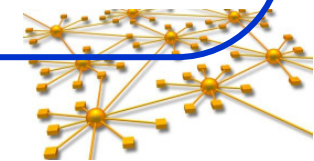
Detailed IT specifications

1. Functional, technical and performance specifications, associated data, interface requirements, security and quality requirements of the TAP TSI retail, information and operations obligations
2. Outline of the global architecture of the system based on the analysis of the system configurations capable of integrating the legacy IT facilities (...)

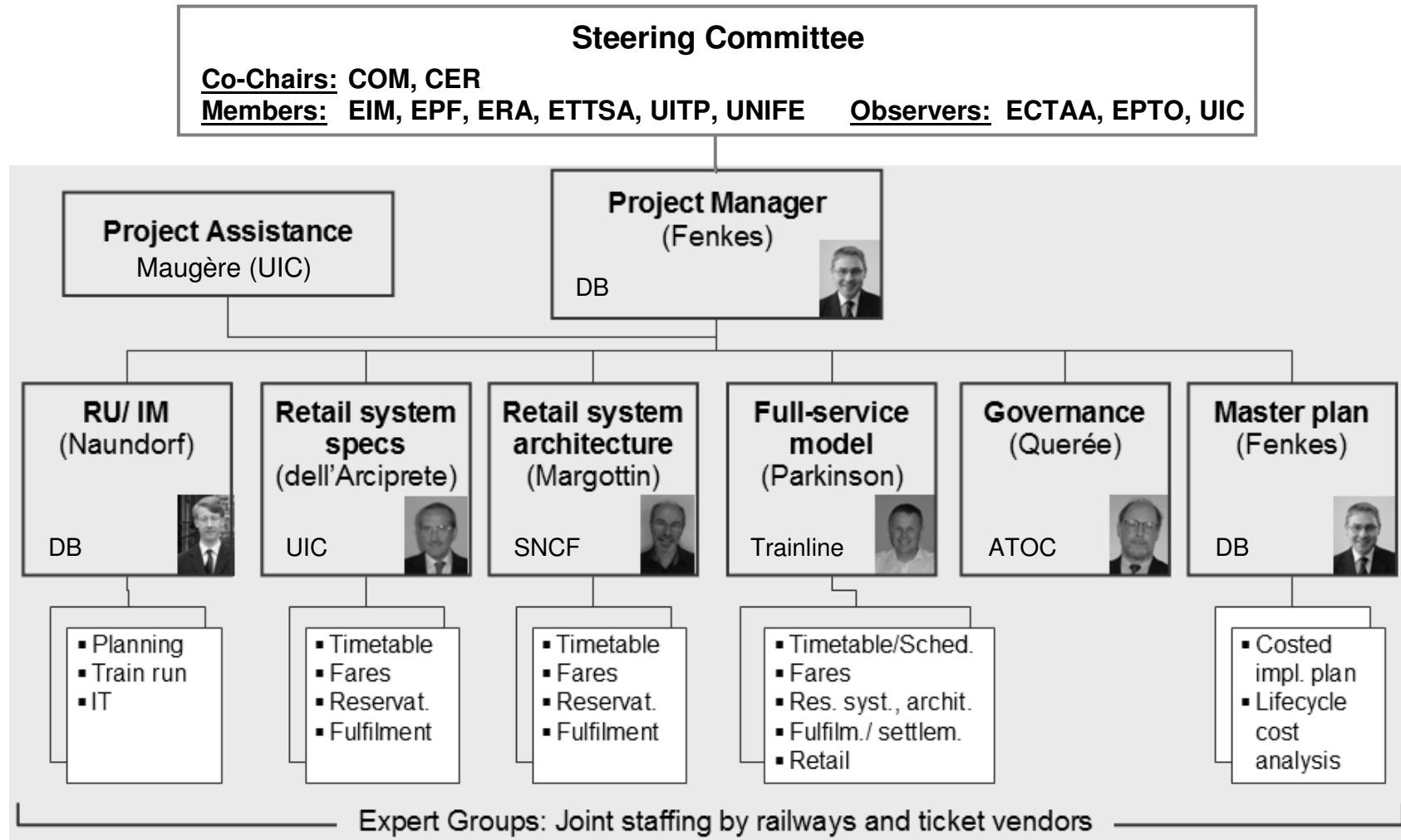
Master plan

1. Identification of activities necessary to achieve the implementation of the system
2. Migration plan
3. Detailed milestone plan
4. Risk assessment
5. Assessment of total lifecycle costs

Governance



Phase One delivery is organised in a project that represents multiple stakeholder interests and draws on expertise from various sources



We need to take care the TAP TSI vision is not a mirage!



Therefore multiple communication activities have been launched – the audience can support and engage



- ✓ Project website <http://tap-tsi.uic.org>
- ✓ Mailings by sector representative bodies and ticket vendor associations (call for experts, legacy surveys)
- ✓ Regular sector and ticket vendor mirror group meetings
- ✓ Presentations to stakeholder organisations' assemblies
- ✓ Stakeholders' internal media and (some) press releases
- ✓ Communication following intermediate report
 - Member States contact point list
 - National seminars envisaged after submission of deliverables (Member States will be asked to organise)
- ✗ Targeted information to and engagement of
 - **RUs that are not members of any rail sector representative body**
 - **Public transport authorities**
- ✗ Consolidated contact details of national stakeholders

✓ = done, ■ = planned, ✗ = open

For more information, visit <http://tap-tsi.uic.org> – Steering Committee minutes, progress and intermediate reports available on website, too

TAP TSI  

Telematics Applications for Passenger Services
Technical Specifications for Interoperability

Introduction

What, why, who. TAP TSI Phase 1

On 5 May 2011 the European Commission formally adopted the Telematics Applications for Passenger Services Technical Specifications for Interoperability (TAP TSI). It entered into force on 13 May 2011 as the Commission Regulation (EU) No 454/2011.

The purpose of the TAP TSI is to define European-wide procedures and interfaces between all types of railway industry actors (passengers, railway undertakings, infrastructure managers, station managers, public transport authorities, ticket vendors and tour operators). It will contribute to an interoperable and cost-efficient information exchange system for Europe that enables the provision of high quality journey information and ticket issuing to passengers in a cost effective manner, thus also fulfilling requirements of the Passenger Rights Regulation (Regulation (EC) No 1371/2007).

The TAP TSI shall be implemented in three phases:

- Phase 1 - implementation preparation, containing detailed IT specifications, a master plan and a governance model

Introduction

What, why, who. TAP TSI Phase 1

The legal background

Documents related to the legal framework

How the work is organized

Presentation of work groups and project managers

Communication

Newsletters, seminars, press releases

Calendar of events

Members area

Extranet

Partners

FAQ

Frequently Asked Questions

Contact

Contents

1. General update on TAP TSI

2. Overall TAP TSI masterplanning approach

3. Focus on RU/ IM – Link with TAF TSI

Masterplanning deliverable of Phase One

(as per § 7.2.3 of the Regulation)

“The master plan shall include:

1. The identification of the activities necessary to achieve the implementation of the system.
2. A migration plan which includes a set of phases that is conducive to intermediate and verifiable tangible results, from the current framework of stakeholders' information and communication systems to the system itself.
3. A detailed milestone plan.
4. A risk assessment of the crucial phases of the master plan.
5. An assessment of the total lifecycle costs (LCC) associated with the deployment and operation of the system, together with a subsequent investment plan and the relevant cost-benefit analysis.”

A set of key elements for the TAP TSI masterplan will be produced in the Phase One project



**Phase One
master-
planning**

- Costed plan for Phase Two covering
 - the formation of the TAP TSI governance
 - together with a costed and budgeted plan covering the procurement of the common elements needed for Phase Three
- Set of tasks to be done in conjunction with TAF TSI
- Staged project plan for retail Full-Service Model follow-up activities
- Plan of Phase Two mobilisation activities for RUs to prepare for their internal projects
- Set of project support activities needed for this internal preparation¹

1) Although currently such support is neither planned nor budgeted by the sector

Stakeholders need to differentiate between the RU/ IM and retail parts of TAP TSI for their individual implementation planning

RU/ IM

- IMs will set the pace (TAF TSI)
 - TAF TSI asks RUs and IMs for committed dates for meeting their obligations
 - This is practicable for freight RUs as there is now a stable TAF TSI architecture
 - The passenger RU architecture is not far from being agreed
 - Passenger RUs are formally speaking under no obligation to study the matter until the Phase One project is complete and all details are known
 - Passenger RUs need to decide what they will do, but the Phase One Project Team suggests they take part in TAF implementation plan harmonisation
- *Also see TAF presentations today*

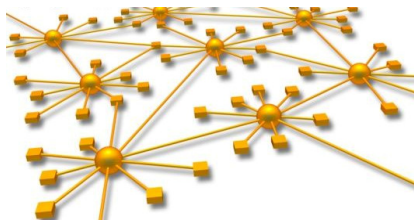
Retail

- RUs – and ticket vendors – will only be in a position to study the way they will implement their retail obligations once the Phase One project is complete and its deliverables are accepted
- The Project Team will make a reasonable estimate in the project masterplan
- Stakeholders will be requested to carry out their internal retail implementation studies between June 2012 and approx. March 2013
- A Phase Two Transition “phantom” project team will provide support – including stakeholder meeting(s) after the summer break

The baseline for individual stakeholders' masterplanning will be a set of documents that will be delivered by the Phase One project in mid-May

Final Report & Annexes (extract)

Global architecture
outline & masterplan



Implementation
guidelines



Cost estimate
(governance, common
elements)



Plus: Baseline of the ERA Technical Documents annexed to the Regulation, including change requests already approved in the ERA Change Control Management process.

Contents

1. General update on TAP TSI
2. Overall TAP TSI masterplanning approach
- 3. Focus on RU/ IM – Link with TAF TSI**

TAP RU/ IM functions take into account different stakeholders than TAF, with an overlap on the IM side

The goal of TAP RU/ IM standards is providing interoperability...

... for Passengers

- Providing passengers with important travel information on all rail journeys
→ This is different to TAF
- Involved actors:
 - Infrastructure Managers
 - Passenger RUs
 - Station Managers

... for Rail Companies

- Railway companies can – in the same way for domestic and interoperable services –
 - order train paths
 - control and manage their train services
 - improve passenger information
- Involved actors:
 - IMs and Passenger RUs

- Station Managers (SMs) in the sense of TAP are entities responsible for passenger information in the stations
- SMs and Passenger RUs are actors that fall under TAP and have had limited or no implication by TAF

TAP RU/ IM prerequisites are very close to TAF TSI

Overview of TAP RU/ IM prerequisites

	<u>Content</u>	<u>Relation to TAF</u>
Reference Files	<ul style="list-style-type: none">▪ Data on Locations, Countries, Companies	<ul style="list-style-type: none">▪ Very close to TAF
Common Interface	<ul style="list-style-type: none">▪ Tools to allow interoperable message exchange	<ul style="list-style-type: none">▪ TAF tool is an option▪ Individual solutions possible¹
Train Identifiers	<ul style="list-style-type: none">▪ Unambiguous identification for IT applications▪ Not replacing rail operational numbers	<ul style="list-style-type: none">▪ Phased approach using existing identifiers is developed in collaboration with TAF²
Governance	<ul style="list-style-type: none">▪ Availability of rules for standards and common elements	<ul style="list-style-type: none">▪ Not specified yet

1) Companies can implement all sorts of solutions allowing the exchange of standard TAP messages, e.g. using Enterprise Service Bus

2) Start using TAP messages with existing identifiers, move towards technical identifiers as developed by TAF

TAP RU/ IM functions are close to TAF RU/ IM Communication

Overview of TAP RU/ IM functions

	<u>Content</u>	<u>Relation to TAF</u>
Short Term Path Requests	<ul style="list-style-type: none">▪ Dialogue between RU and IM to order paths	<ul style="list-style-type: none">▪ Very close to TAF
Train Preparation	<ul style="list-style-type: none">▪ Info from RU to IM that train is ready	<ul style="list-style-type: none">▪ Close to TAF▪ Other TAF functions not relevant¹
Train Running Info & Forecast	<ul style="list-style-type: none">▪ Info from IM to RU and SM about punctuality	<ul style="list-style-type: none">▪ Close to TAF▪ Involving SMs▪ Other TAF functions not relevant²
Service Disruption	<ul style="list-style-type: none">▪ Info from IM to RU that train stopped and continuation is unclear	<ul style="list-style-type: none">▪ Close to TAF▪ Triggers further communication

1) TAF functions for Train Preparation not relevant for TAP: Train Accepted, Train Composition, Train Not Suitable, Train Position, Train at Start

2) TAF functions for Train Running not relevant for TAP: all Enquiries and Enquiry Responses

Some TAP RU/ IM functions are new and not relevant for TAF

Additional TAP RU/ IM functions

	<u>Content</u>	<u>Relation to TAF</u>
Change of Track	<ul style="list-style-type: none">▪ Info from IM to RU/ SM about platform	<ul style="list-style-type: none">▪ Passenger information; not relevant for TAF
Train Journey Modified	<ul style="list-style-type: none">▪ Info during operation from IM/ RU to SM that train is rerouted, cancelled etc.	<ul style="list-style-type: none">▪ Passenger information; not relevant for TAF

TAP stakeholders' implementation plans formally foreseen after Phase One, but passenger business should consider joining TAF alignment

Harmonisation of company implementation plans

TAP specification shall be fixed at the end of Phase One (May 2012)

- TAP stakeholder companies can commit to a detailed plan after specifications are fixed
- Formal process might start autumn 2012

TAF implementation plans are harmonised before May 2012

- IMs involved in both TAF and TAP have a strong interest in having one aligned plan for both TSIs

Harmonised TAF implementation plan might be the road map for TAP as well

- Companies involved in TAP could influence this roadmap when talking to IMs now



Companies involved in TAP (e.g. passenger RUs, SMs, IMs) should consider to take part in TAF implementation plan harmonisation

Note: TAF implementation plan harmonisation is not part of TAP TSI nor the TAP Phase One Project.

Commercial solutions outside the TAP legal frame are being prepared by some sector organisations

Availability of support from stakeholder groups

Specifications

- TAP RU/ IM standards will be finalised by May 2012

Usability

- Ability of companies to use the standards will be known via TAF (by May) or TAP (Phase Two transition)

Commercial/ voluntary support of activities outside the legal TSI frame

- Related initiatives such as PCS¹ can support IMs and RUs on a voluntary basis
- Activities to implement TAP in these initiatives will take place after the final specifications and the ability of users become clear

1) Path Co-ordination System