**TAP Phase One**

**Masterplan**

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## Document maintenance

This document is published by the European Railway Agency. Any reader detecting errors or needing clarification should contact the European Railway Agency.

* + 1. Proposals for additions or updates can be sent to the European Railway Agency, and will undergo the Change Control Management process described in the TAP regulation.

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# List of abbreviations

The following abbreviations are used in the text.

|  |  |
| --- | --- |
| **Abbreviation** | **Meaning** |
| BP | Basic Parameter |
| DG MOVE | European Commission Directorate-General for Transport |
| ERA | European Railway Agency |
| GM | General Manager |
| IM | Infrastructure Manager |
| ITT | Invitation to Tender |
| LCC | Life Cycle Costs |
| PSO | Public Service Obligation |
| RU | Railway Undertaking |
| SB | Supervisory Board |
| SMG | Service Management Group |
| TAF CCM | Telematics Applications for Freight Change Control Management |
| TAF TSI | Commission Regulation (EU) No 328/2012 of 17 April 2012 amending Regulation (EC) No 62/2006 concerning the technical specification for interoperability relating to the telematic applications for freight subsystem of the trans-European conventional rail system |
| TAP CCM | Telematics Applications for Passengers Change Control Management |
| TAP TSI | Commission Regulation (EU) No 454/2011 on the technical specifications for interoperability - Telematics Applications for Passenger Services |
| UIC | Union Internationale des Chemins de Fer |
| WG | Working Group |

# Purpose

## Project deliverables for Masterplan

This document forms the Masterplan of the final TAP TSI Phase One Implementation project deliverable.

The masterplan contents shown below are those defined in the current version of the TAP TSI Regulation. The Regulation proposes:

The identification of the activities necessary to achieve the implementation of the system

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

A detailed milestone plan

A risk assessment of the crucial phases of the master plan

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.

The activities have been defined as a set of requirements. The detailed requirements and rules of the governance entity are in chapter 7 of the Governance report. The detailed requirements for the operational computer services are in chapters 9 to 11 of the TAP TSI Retail Architecture report. The detailed requirements for the technical and administrative services are in chapter 9 of the TAP TSI Governance report. The masterplan provides the plan for forming the governance entity and for procuring these regulatory services.

The document provides an assessment of the total lifecycle costs associated with the deployment and operation of the system, together with a funding plan. The cost-benefit analysis for the regulatory operational computer services can be found in the Retail Architecture report.

The following sections provide more detailed plans of the components that make up the overall masterplan. Each section identifies major risks to the masterplan and these risks and possible mitigations are summarised in the section on risks in chapter 15.15. The document contains the following sections:

* Masterplan summary

Phase two transition

Governance entity formation

Computer services procurement

Retail technical services procurement

RU/IM technical services procurement

Administrative services procurement

Individual RU and IM implementations

Governance entity operation

Development and operations funding

Issues and risks

Revised Chapter 7 text

The best estimate of individual stakeholder plans is in chapter 12, Individual RU and IM implementation plans. As described in chapter 6 of the Governance report, ticket vendors will not be required to prepare implementation plans as they have no regulatory obligations.

Detailed requirements for the team needed to manage the implementation and operation of the TAP TSI governance entity and for the procurement of all the regulatory services are in chapter 6, Phase Two Transition.

Regulatory service implementation plans are in the various sections on service procurement. Stakeholder implementation plans are in the section on Individual RU and IM implementation plans.

Operational plans are in the section on governance entity operation.

The consolidation of cost estimates is in chapter 14, Development and Operations Funding. Note that this document makes estimates only for costs incurred by the governance entity as needed to provide the regulatory services. The costs for individual RUs and IMs are not known and are likely to be commercially sensitive and therefore never available in a public document.

Overall, the document provides the master plan as defined in chapter 7 of the TAP TSI Regulation 454/2011. Recommendations for updates to the re-published Regulation are in Chapter 1616.

# Masterplan summary

## Plan overview

The overview of the TAP TSI masterplan is shown in the following chart[[1]](#footnote-2):



The masterplan, as summarised above, identifies all the activities necessary to achieve the implementation of the TAP TSI sub-system as required by the Regulation.

The masterplan has five main components:

* Oversight through the project phases and into full operation

Phase two transition tasks

Entity formation project

Common services procurement projects

* + - Operational computer services
    - Retail technical services
    - RU/IM technical services
    - Administrative services

Individual RU and IM implementation planning and projects.

Each of these components is described in the following sections.

In summary, the plan starts with the Phase Two Transition project. This project will start once the Phase One delivery is approved by the ERA and DG MOVE. Until this approval is in place the project will not start. In addition, if the approval is delayed then the stakeholder funding process will be subject to postponement or cancellation and the execution of the masterplan will be subject to significant delays of at least one year. To achieve the dates set out in this masterplan there must be approval of the Phase One project delivery according to the timetable in the current Chapter 7 of the Regulation. This is a significant risk is mentioned again in the later chapter on risks.

The Phase Two Transition project runs from the end of the Phase One project to the date of TAP TSI re-publication, assumed to be the second quarter of 2012. The transition project team will prepare the tender documents needed for the procurement of the governance entity and the regulatory services. It will continue the Phase One activities related to the securing of funding. This activity will ensure that all procurements can be launched immediately the TAP TSI is re-published. The team will also identify the personnel and secure the budget for the Phase Two Development team which will carry out the procurements. Upon re-publication, the Phase Two Development team will be formed and will take over all activities from the Transition team.

Decisions needed for the Phase Two Transition team will be made by the current TAP TSI Steering Committee. Decisions needed for the Phase Two Development Team will also be made by the current TAP TSI Steering Committee until such time as the governance entity exists and is effective and both parties agree to pass decision-making to the governance entity. At that time the TAP TSI Steering Committee can disband.

The first procurement by the Phase Two Development team will be the creation of the governance entity. This is expected to take six months, ending last quarter 2013. Once it exists, Stakeholder Group Associations will be asked to provide nominations for the Supervisory Board and the Service Management Groups (SMGs). Once these nominations are complete, the Board and the SMGs can become informed of the work of the Phase Two Development team, decision-making still resting in the TAP TSI Steering Committee. Members of the Supervisory Board could, if approved by the Steering Committee, become observers at the Steering Committee during the overlap.

At the earliest date that can be agreed by both parties, decision-making will transfer from the Steering Committee to the Supervisory Board and the project supervision will pass to the SMGs. It is essential that the Supervisory Board is in a position to approve the various regulatory service contracts and hand-overs, once procured by the Phase Two Development team.

During the six months of entity formation, the Phase Two Development team will issue the tenders for the regulatory services and will assess the bidders. The Phase Two Development team will recommend the preferred bidder and the Steering Committee will confirm the decision. Authority for the governance entity to enter into the development contracts will be given jointly by the Steering Committee and by the Supervisory Board. In this way it can be clear that the Supervisory Board has explicitly agreed to accept the delivered service provision contracts.

It will not be legal for the Supervisory Board to agree to the contracts until it has sufficient commitment from stakeholders to guarantee all the payments that will fall due from the service contracts, recognising that some payments can be avoided if needed through early termination. The figures are presented in more detail in Chapter 1414, but the minimum commitment will be in the order of 30 stakeholders agreeing to a payment of €20,000 each. This sum corresponds to five years advance payment of €4,000 per annum (cf figure of €3,900 in section 14.1 based on an eventual conservative membership estimate of 350). This is a vital dependency for the proposed masterplan.

Once the development contracts are signed, development will start under the supervision of the Phase Two Development team and run, according to the plan, until the last quarter of 2014. The Phase Two Development team will keep the SMGs up to date with progress so that the results of the procurements will be acceptable to the SMGs. The regulatory services once operational, including contracts and assets, will be handed over formally to the governance entity to be taken into service and managed by the SMGs. The hand over will include document assets created in the TAP TSI Phase One project such as the IT specifications and the Architecture descriptions. In this way, the governance entity will acquire ownership in the document resources it needs and that will be subject to its control as described in the governance proposal.

Once the regulatory services are handed over to the governance entity, Phase Three Deployment and Operation starts. The governance of Phase Three is described in the Governance report. Note that Phase Three will exist in perpetuity – there are no provisions in either the TAP TSI Regulation or the Interoperability Directive for termination.

In parallel to all this activity associated with the regulatory services, work will take place with individual RU and IM implementation plans. Note that the work on RU/IM implementation plans will build on the plan prepared by the TAF implementation team

For the TAP TSI RU/IM and retail obligations, RUs and IMs will prepare their individual implementation plans in the second half of 2012, once the Phase One architecture is confirmed. This requires that the TAP Phase One Project deliverables are approved. These plans will be assembled by the Phase Two Transition team in the first half of 2013. RUs will make budget requests to their managements during calendar 2013 and 2014, depending on their own financial cycle. Implementation projects will start during 2014 and take place mainly during 2015, once the regulatory services are available at the end of 2014.

In summary, and to simplify the presentation of the life cycle costs, the plan expects that the regulatory services will be in place from the beginning of calendar 2015 onwards. It also expects that 2015 is the year in which RUs are completing their own individual implementation plans to meet the retail regulatory obligations and are testing the results. In summary, therefore, it is expected that RUs should be able to meet their retail regulatory obligations from the beginning of calendar 2016, except where already planned major upgrades or renewals, or other issues justifying a derogation, prevents them from doing so.

It is clear this is an ambitious timetable. First of all, it depends on the proper approval by the authorities of the TAP Phase One Project delivery in accordance with the Chapter 7 timetable and timely execution of the re-publication of the Regulation. Experience shows that there can be a general reluctance to finally committing to the contents of such complex proposals, but sector investments cannot be justified and authorised without certainty of the regulatory requirements.

It is likely that RUs who have been closely involved in the Phase One activities will be able to achieve the masterplan timetable if they wish to in respect of their retail obligations, assuming that funds can be made available against other demands. However, this cannot be guaranteed. In addition, there are many railways who have had no involvement in Phase One and who are unlikely to adhere to the plan unless obliged by their Member State. The Phase Two Transition and Development teams will not have powers to demand participation. These risks and mitigations that are possible are described in more detail later in the document.

## Milestone plan

As noted in the chart above, and subject to the caveats above, there are four key milestones:

2013 Q2 – TAP TSI Regulation republished

2013 Q4 – TAP TSI governance entity formed

2014 Q3 – TAP TSI regulatory services operational – Phase Three starts

2016 Q1 – RUs meet their retail regulatory obligations.

# Phase two transition

## Plan

Phase Two Transition is defined as the period that starts with the approval of the TAP Phase One Project delivery and that finishes with the re-publication of the TAP TSI Regulation. It is followed by Phase Two Development, as set out above, which finishes once the governance entity exists and the regulatory services are operational. At this point Phase Three starts and continues without termination.

The re-published Regulation will have a replaced Chapter 7. The new chapter will contain the key findings from the project including the architecture, the method of governance and most importantly the overall implementation plan described in this masterplan document.

The purpose of the Phase Two transition project is to get prepared for the re-publication date, so that the tasks set out in the revised Chapter 7 of the Regulation can start promptly, minimising any mobilisation delay.



## Tasks

The Phase Two Transition tasks to be carried out by the Phase Two Transition team are as follows. Governance and decision-making remains with the existing TAP TSI Steering Committee.

* Create a Phase Two Preparation project team. The team does all the work in autumn 2012 through to the first quarter 2013, depending on the re-publication date of the Regulation

Run the 25 September 2012 (or whatever date) Masterplan meeting

Request and collect individual passenger RU and (updated) IM implementation plans

Prepare the consolidated implementation plan for the retail Basic Parameters – the existing TAF TSI master plan will be extended to prepare a consolidated implementation plan including passenger RU requirements

Review the requirements documents for the regulatory services and prepare the tender documents

Choose from the options for the governance entity in terms of legal structure and country of registration

Update cash-flow estimates for the entity

Update source of working capital for the entity

Review the governance rules and restructure them so that they can form the entity’s articles of association (or whatever term applies in the country where the entity is formed)

Determine how many seats there will be for each stakeholder group in the Supervisory Board and the Service Management Groups

Determine the process definition for the way stakeholder groups propose and change their nominees

Draft the contracts for the General Manager and the chairs of the Service Management Groups and the Working Groups

Make initial proposals for the number and subjects of Working Groups and draft their responsibilities and terms of reference

Canvass stakeholders for possible names for the General Manager and the chairs of the Service Management Groups and the Working Groups

Submit all CRs detected during the Phase One which by agreement have not been covered in earlier ERA TAP TSI Change Control Management (CCM) working party meetings.

## Resources

The details of the resource calculations can be found in Chapter 1414.

Some assumptions have been used to generate the person-days for each of the Phase Two tasks.

|  |  |
| --- | --- |
| **Phase Two Transition task name** | **Resource assumption** |
| Phase Two transition Project management | 10% of direct project person-days |
| Request individual RU and IM plans, support RUs and IMs, prepare consolidated RU and IM plans | About one FTE half time – based on TAF masterplan experience |
| Select a governance legal option | Assume some learning is possible from CCG discussions, but four-person weeks assumed plus €10,000 preliminary legal fees |
| Review cash-flow estimates, review source of working capital | Limited activity |
| Review governance rules | Limited activity to check how rules can fit into selected legal option |
| Determine nomination rules for SB, determine stakeholder nominee process | Limited activity following an agreement by TAF and TAP stakeholders that a combined governance is required |
| Confirm proposal for Working Groups | Limited activity, but including drafting the standard terms of reference |
| Project management of continuing RU/IM works | Person-days based on outputs from RU/IM Phase One project Work Stream |
| Project management of continuing Full Service Model (FSM) works | Person-days based on outputs from FSM Phase One project Work Stream |
| Submit all remaining Phase One CRs | Limited activity |
| Prepare service tenders (not contracts/SLAs) | An average of five days per tender is assumed. The work excludes contract and SLA work but includes the preparation of the requirements specifications documents, instructions to tenderers, etc |
| Start discussions with potential suppliers | Limited activity |
| Set up Phase Two implementation team | Limited activity |

|  |  |
| --- | --- |
| **Phase Two Development task name** | **Resource assumption** |
| Phase Two Implementation Project Management | 10% of direct project person-days |
| Create governance entity | Four person-weeks to supervise a €50,000 legal contract to create the entity |
| Project management of continuing RU/IM works | Person-days based on outputs from RU/IM Phase One project Work Stream |
| Organise nominations for Supervisory Board (SB) and Service Management Groups (SMGs) | Limited activity |
| Draft service contracts and Service Level Agreements (SLAs) | An average of five days per service is assumed. The draft contract and SLA will be developed from an existing stakeholder version |
| Procure and supervise the delivery of the regulatory services | Varies between 20 and 50 person-days per service over an 18 month period to cover procurement, provider selection, contract signing, supervision and acceptance |
| Bring regulatory services into operation, pass control to entity | Limited activity to cover project team to governance entity handover |

The completion of above plan and tasks will be assessed by the European Railway Agency (ERA) and documented in a progress monitoring report. This report will be sent by ERA to the European Commission at least twice per year.

# Governance entity formation

## Plan

The formation of the entity can start once the Regulation is re-published and there is certainty as to the legal requirements. In the chart below this is assumed to be at the beginning of 2013 quarter 2.

Given the preparatory work in Phase Two transition, including lessons learned from TAF TSI and the Common Components Group (CCG), it is assumed that the legal work can be carried out in six months and that the entity will therefore exist at the beginning of 2013 quarter 4.

Details of the planning once the entity exists can be found in chapter 13.



## Tasks

The formation of the entity will be undertaken by the Phase Two Development team and requires the following tasks:

Formalise the governance rules as a set of articles of association (or whatever term applies in the country where the entity is formed)

Instruct lawyers to create the entity using the legal structure and country of registration as determined in the Phase Two transition project

Organise nominations for the Supervisory Board and the Service Management Groups on the basis of the allocations agreed in the Phase Two transition project

Shortlist suitable candidates for the General Manager (either as a secondee from a stakeholder or as a direct contractor) and Service Management Group chairs so that appointments can be made immediately upon entity formation.

## Resources

The details of the resource calculations can be found in Chapter 14. The legal costs of entity formation are included in the Phase Two implementation project costs.

The completion of above plan and tasks will be assessed by the European Railway Agency (ERA) and documented in a progress monitoring report. This report will be sent by ERA to the European Commission at least twice per year.

# Computer services procurement

## Plan

The tender documents for the operational computer services will be prepared in the Phase Two transition project. The contracts and SLAs will be drafted in the Phase Two implementation project, once re-publication has taken place.

Contracts are needed for the following services:

Membership administrative service

Reference data service

Notification/registry service

Data quality service.

Once the Regulation has been re-published, and there is certainty as to the legal architecture and requirements, the procurement of the operational computer services can start. The procurement will be carried out by the Phase Two Development team. It will run over six months in parallel to the formation of the governance entity.

Once the governance entity exists, and sufficient funds have been guaranteed by stakeholders (see paragraph 5.1.11), all the operational computer service contracts can be signed by one of the nominated signatories of the entity. The development work then starts, supervised by the Phase Two Development team. It is assumed that the development work will take 12 months. Decision making for the entity will start with the current Steering Committee and pass to the Supervisory Board during the 12 months, at a date agreed together.

In parallel, as the operational computer SMG is formed and starts working, it will monitor the development projects through reports from the Phase Two Development team. Each operational service will require final sign-off by both the Phase Two Development team and the operational computer SMG, primarily to ensure that the SMG takes responsibility for services it has approved.

The operational computer services should all be ready by quarter 4 2104 and individual RUs, IMs and others can start using the services from then on. As they will need to run tests before going live it can be expected that quarter 1 2015 will be the earliest that any live use will happen.



## Tasks

The procurement of the regulatory services will be undertaken by the Phase Two Development team and requires the following tasks:

Procure the regulatory services needed by the governance entity using tender documents from Phase Two Transition

Prepare the contracts and SLAs for the regulatory services for the governance entity nominees to sign

Supervise the service provision contracts and align it with the retail technical services and RU/IM technical services contracts (see 8.2.1 and **Error! Reference source not found.**)

Oversee bringing contracts into operation, including testing and the start of the service management activity

Pass control of (the now operational) regulatory services across to Service Management Group chairs.

## Resources

The details of the resource calculations can be found in Chapter 14.

The governance entity will have the minimum capital needed when it is formed to meet its obligations. In order to minimise the requirement for stakeholder funding it is assumed that the development funds needed in all service contracts will be provided by the service provider.

A funding charge of 20% has therefore been applied, assuming 7% funds cost being paid by the service provider over a five year duration. A further 20% has been added as contingency.

The Supervisory Board may change this approach if it can obtain access to capital sums on more attractive terms than those passed on through the service provision contracts.

Service costs comprise the annual repayment of the development cost, the cost to run the computer service and the cost of service management and customer support.

The completion of above plan and tasks will be assessed by the European Railway Agency (ERA) and documented in a progress monitoring report. This report will be sent by ERA to the European Commission at least twice per year.

# Retail technical services procurement

## Plan

Once the Regulation has been re-published, and there is certainty as to the legal architecture and requirements, the procurement of the retail technical service can start. The procurement will be carried out by the Phase Two Development team. It will run over six months in parallel to the formation of the governance entity.

Once the governance entity exists, and sufficient funds have been guaranteed by stakeholders (see paragraph 5.1.115.1.10), the retail technical service contract can be signed by one of the nominated signatories of the entity. The (limited) development work then starts, supervised by the Phase Two Development team. It is assumed that the development work will take a maximum of 12 months, in line with the operational computer services. Decision making for the entity will start with the current Steering Committee and pass to the Supervisory Board during the 12 months, at a date agreed together.

In parallel, as the retail technical SMG is formed and starts working, it will monitor the work of the service provider through reports from the Phase Two Development team. The service will require sign-off by both the Phase Two Development team and the retail technical SMG, primarily to ensure that the SMG takes responsibility for service it has approved.



## Tasks

The procurement of the regulatory services will be undertaken by the Phase Two Development team and requires the following tasks:

Procure the retail technical service needed by the governance entity using tender documents from Phase Two Transition

Prepare the contract and SLA for the service for the governance entity nominees to sign

Supervise the service provision contract and align it with the operational computer services contract (see 8.2.1)

## 

## 

1414. A small annual sum has been included for a document management system.

The completion of above plan and tasks will be assessed by the European Railway Agency (ERA) and documented in a progress monitoring report. This report will be sent by ERA to the European Commission at least twice per year.

# RU/IM technical services procurement

## Plan

Once the Regulation has been re-published, and there is certainty as to the legal architecture and requirements, the procurement of the RU/IM technical service can start. The procurement will be carried out by the Phase Two Development team. It will run over six months in parallel to the formation of the governance entity.

Once the governance entity exists, and sufficient funds have been guaranteed by stakeholders (see paragraph 5.1.115.1.10), the RU/IM technical service contract can be signed by one of the nominated signatories of the entity. The (limited) development work then starts, supervised by the Phase Two Development team. It is assumed that the development work will take a maximum of 12 months, in line with the operational computer services. Decision making for the entity will start with the current Steering Committee and pass to the Supervisory Board during the 12 months, at a date agreed together.

In parallel, as the RU/IM technical SMG is formed and starts working, it will monitor the work of the service provider through reports from the Phase Two Development team. The service will require sign-off by both the Phase Two Development team and the RU/IM technical SMG, primarily to ensure that the SMG takes responsibility for service it has approved.



## Tasks

The procurement of the regulatory services will be undertaken by the Phase Two Development team and requires the following tasks:

Procure the RU/IM technical service needed by the governance entity using tender documents from Phase Two Transition

Prepare the contract and SLA for the service for the governance entity nominees to sign

Supervise the service provision contract and align it with the operational computer services contract (see 8.2.1)

## 

14

## 

14. A small annual sum has been included for a document management system.

The completion of above plan and tasks will be assessed by the European Railway Agency (ERA) and documented in a progress monitoring report. This report will be sent by ERA to the European Commission at least twice per year.

# Administrative services procurement

## Plan

Once the Regulation has been re-published, and there is certainty as to the legal architecture and requirements, the procurement of the administrative services can start. The procurement will be carried out by the Phase Two Development team. It will run over six months in parallel to the formation of the governance entity.

Once the governance entity exists, and sufficient funds have been guaranteed by stakeholders (see paragraph 5.1.115.1.10), the administrative service provision contract can be signed by one of the nominated signatories of the entity. The (limited) development work then starts, supervised by the entity’s General Manager. It is assumed that the development work will take a maximum of 12 months, in line with the operational computer services. Decision making for the entity will start with the current Steering Committee and pass to the Supervisory Board during the 12 months, at a date agreed together.



## Tasks

The procurement of the regulatory services will be undertaken by the GM and requires the following tasks:

Procure the administrative services needed by the governance entity using tender documents from Phase Two Transition

Prepare the contract and SLA for the service for the governance entity nominees to sign

Supervise the service provision contract

Oversee bringing the contract into operation, including the start of the service management activity.

## Resources

The details of the resource calculations can be found in Chapter 1414.

An allowance is noted in the resource calculations for the costs of providing meeting rooms for the Supervisory Board, SMGs and Working Groups (WGs), the travel expenses of SMF members in addition to the chair, plus occasional room rental for the General Manager.

The completion of above plan and tasks will be assessed by the European Railway Agency (ERA) and documented in a progress monitoring report. This report will be sent by ERA to the European Commission at least twice per year.

# Individual RU and IM implementations

## Plan

This document provides an expectation of RU and IM implementation plans, based on Project Team knowledge and experience. Once the European Commission has approved the TAP TSI Phase One Implementation project, and there a stable text that will become the revised TAP TSI Regulation, individual RUs and IMs will be able to start preparing their own implementation plans.

On the assumption of a stable text, work will start after the summer 2012 break with a TAP TSI Masterplan meeting, the complement to the TAF TSI meeting held in Brussels on 26 January 2012. The Phase Two Transition team will present the project and request individual RUs and IMs to execute their own implementation study projects and provide a summary report to the project team in a common template. Individual RUs and IMs will provide their own migration plan that describes how they will meet each of the obligations that apply to them, as defined in the Basic Parameters of the Regulation.

Note that the project team will have no powers to direct individual RUs and IMs. The project team will provide some support to RUs and IMs while their projects take place and will integrate the results into a consolidated plan in the first quarter of 2013, again following the model set by TAF TSI. If the Phase Two Transition project does not receive any input from an RU or IM, it will advise the relevant Member State. It will be the responsibility of the Member State to force the RU or IM to carry out its implementation plan project.

The plan to meet the retail obligations will need to be developed by RUs. For the RU/IM planning the individual passenger RUs and IMs will be asked to check the TAF TSI plan and build upon that existing RU/IM timeline, rather than doing something independently.

Once the consolidated plan exists, individual RUs and IMs will be requested to adapt their plans to match the consolidated plan and to make requests to their managements for implementation project funds. The timing for this process is determined by their normal company budget cycles. Requests for funds are expected to happen during in 2013 but mainly in 2014, depending on individual circumstances. As a result, the earliest any implementation projects will take place is in 2014 but the bulk can be expected in 2015.

For this reason, if the whole plan can be executed to schedule, RUs can be expected to meet their retail regulatory obligations from 2016 onwards. This is dependent on the Regulation being re-published on time in early 2013. Delays to this will lead to significant masterplan delays as RUs will miss any chance to apply for implementation project funds in the budget planning for 2014.



The plan expects all parties to be compliant by the beginning of 2016. There are significant risks to the plan, including those from a delayed re-publishing of the Regulation. These risks are all noted in chapter 15.

## Tasks

The tasks needed for individual planning are as follows and will be carried out by the relevant Phase Two project team:

Masterplan meeting on 25 September 2012 plus follow-up

Member State direction of individual RUs and IMs

Communication and support for individual RUs and IMs

Production of the consolidated retail BP implementation plan

Communication and support during regulatory service development

Provision of test and training facilities – these are obligations that need to be written into the functional requirements for service providers.

The preparation of the consolidated plan will assume that Member States will use their regulatory powers to oblige all RUs and IMs to prepare a plan and to adhere to the consolidated plan. Despite this, there is a risk that the Phase Two Transition team may not receive plans from all implicated companies. For example, there are under-financed UIC members (will not do anything as they have no money), non-UIC members (consider the Regulation does not apply to them), PSO contractors (who execute rather than determine the service they provide) and small railways (who consider they are too small to worry about).

In each of these cases, the Phase Two Transition team will plan on the basis of proposed mitigations and actions that ensure those companies meet their obligations according to the masterplan consolidated timetable. In the general case, the mitigation is expected to be to request the Member State to oblige the RU to act in a timely manner.

The Phase Two Development

During their implementation projects there will be no external financial support for RUs and IMs. This adds another risk to the overall masterplan where the RU or IM is not able or willing to use its own funds for this purpose.

## Resources

The details of the resource calculations can be found in Chapter 14.

The completion of above plan and tasks will be assessed by the European Railway Agency (ERA) and documented in a progress monitoring report. This report will be sent by ERA to the European Commission at least twice per year.

# Governance entity operation

## Plan

The governance entity is scheduled to be operational in quarter 4 2013.

During the following months, members of the Supervisory Board and the SMGs will be nominated. Decision making will be passed to the Supervisory Board from the Steering Committee at a date agreed by all parties. This is shown in the light grey bar in the following chart.

The General Manager of the entity is appointed immediately on formation.



## Tasks

The responsibilities of the General Manager are defined in the Governance report. An early task will be to prepare for the business and first meetings of the Supervisory Board, the SMGs and the WGs. S/he will procure the administrative services and monitor the procurement of the other services by the Phase Two Development team.

S/he will be responsible for bringing the operational service contracts and the regulatory resources into the control of the entity once delivered by the Phase Two Development team.

## Resources

The details of the resource calculations can be found in Chapter 1414.

The General Manager, plus the chairs of the SMGs and WGs, correspond to about 4.0 Full Time Equivalents. This is made up of a large set of part time chairs. This ensures that the chairs are experts in the subject area of the SMG or WG, rather than simply being administrative experts.

The Phase One Project Team considers that the use of expert WG chairs is essential in order to provide the required technical leadership to the unpaid experts participating in WG meetings.

The completion of above plan and tasks will be assessed by the European Railway Agency (ERA) and documented in a progress monitoring report. This report will be sent by ERA to the European Commission at least twice per year.

# Development and operations funding

## Phase Two and Governance overview

Phase Two runs until the regulatory services exist. This will be late 2014 and for reasons of comprehension the presentation of figures in this document assumes the TSI is operational from the start of 2015.

The overview of Phase Two and governance costs is given in the following chart. Three years of operation have been shown; although the costs have assumed that the service provision contracts will continue for a further two years at the same annual cost. It is also assumed that system renewal and updating for the computer services will mean that their annual charge will not change significantly in the following years.

Phase Three

Phase Two



The cost of all the Phase Two project work is about €950K in round terms. Approximately one third of this are costs associated with RU/IM activities and the rest is retail activities.

Source of funds for service capital expenditure – assumed to be the service provider to avoid a capex call.

The Phase Two work requires the pre-funding of 2012 activity from 2013 budgets. This introduces a significant cash flow issue as the €180K (and more) will have to be financed by stakeholders in anticipation of contracts becoming effective in early 2013. This constitutes a risk to the transition work.

Similarly, the governance entity will require about €550K (half a year’s expenditure) at the beginning of 2015 so that it can finance its business while participation fees are being received. In paragraph 5.1.115.1.10 it was noted that 30 stakeholders would need to agree to pay €20K each before the service provision contracts could be signed.

These sums will need to be invoiced by the governance entity in 2014 in order to have the sufficient capital to operate from 2015. In consequence, those 30 stakeholders will have paid several months in advance of receiving services. The entity will need to develop a method to recompense these stakeholders for the early payment.

Stakeholders who have regulatory obligations will have to pay the participation fee from the latest of 2015 or the date they become subject to the Regulation, irrespective of when they actually meet their regulatory obligations. This is needed to avoid encouraging members to delay meeting their regulatory obligations.

## Phase Two costs

The cost breakdown for Phase Two is shown in the following chart.



The assumptions behind the proposed task days can be found in section 6.36.3.

## Governance entity staff costs

The cost breakdown for the governance entity staff costs is shown in the following chart.



There are three sections in the staff costs chart. The first section shows the direct costs to the governance entity of the various WG and SMG chairs, plus the cost of the GM. The daily rates for the chairs reflects the fact that these people will be experts and valued by their companies, who will therefore require a market rate for making them available. The rate for expenses reflects the experience of the expert group meetings in the TAP TSI Phase One project. The GM expenses rate is lower as proportionately less travel will be required for someone working full time.

The second section gives an estimation of the time costs of the experts and others in the SMGs and WGs, together with the costs of the members of the Supervisory Board. All this will be provided free by stakeholders, as is the case today in CEN, the UIC and similar standards-making organisations. Only the chairs are paid, for reasons explained in the text.

The final section makes an estimate of costs that are currently paid by stakeholders directly but which will now be paid by the governance entity. This includes, for example, the chairs of the UIC Technical Group sub-groups such as TAP-MD and TAG.

## Operational computer service costs

The cost breakdown for the computer service costs is shown in the following chart.



The chart above is in two parts. The first makes the estimate of the total development cost for the service provider(s) of the operational computer systems. This adds up to €490,000.

In order to minimise the need for the governance entity to have capital, it has been assumed that all service providers will have to fund the capex needed to develop the operational computer services. In order to estimate the cost of capital for the service providers, it has been assumed a funding cost of sale of 20% must be added, calculated for a five year repayment at an interest rate of 7%. This adds €98,000, making a total cost of development of €588,000. As this will be charged to the governance entity as five annual payments, the cost per annum for the developed services is €117,600 per annum.

Each year of operation, the entity must pay the operational costs of the developed systems, plus the costs of personnel providing service management such as reporting, help desk, incident management, etc. This is in addition to the annualised charge for system development. The entity will not be responsible for any costs relating to protocol conversion or the Common Interface software development.

The reference data services are separated into the three parts covering retail only, RU/IM only, and common reference data.

## Retail and RU/IM technical service costs

The service is described in chapter 9 of the Governance report. The cost breakdown for the both the retail and RU/IM technical service costs is shown in the following chart.



All staff costs, for example the costs of the SMG and WG chairs, is covered under paragraph 14.3 above.

## Administrative service costs

The service is described in chapter 9 of the Governance report. The cost breakdown for the administrative service costs is shown in the following chart.



# Risks

## Implementation of regulatory obligations

The execution of the masterplan is subject to several risks. They have been mentioned in the text above but are summarised here together with possible mitigations.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Risk** | **Consequence** | **Mitigation** | **Impact** | **Prob-ability** |
| The TAP Phase One delivery is not approved according to the Chapter 7 timetable | Delay to re-publication of TAP TSI Regulation, uncertainty for RU and IMs as to the method for meeting their obligations and therefore no funds at all in 2013 for any TAP TSI Phase Two activity | Effective working in May and June 2012 by all parties to ensure approval is to the timetable | H | L |
| DG MOVE or ERA proposes material changes to the TAP Phase One delivery (for example as regards the architecture or governance) and the regulatory services proposed in it | Extended negotiation between DG MOVE, ERA and the stakeholders leading to uncertainty for RU and IMs as to the method for meeting their obligations and therefore no funds at all in 2013 for any TAP TSI Phase Two activity | Effective working in May and June 2012 by all parties to ensure approval is to the timetable | H | M |
| RUs in a bad financial state will not meet masterplan timetable | Incomplete roll-out of TAP TSI masterplan | DG MOVE and relevant Member State discuss funding options for affected RUs | L | H |
| RUs not involved in TAP TSI Phase One project will not meet masterplan timetable | Incomplete roll-out of TAP TSI masterplan | Member States actively ensure all implicated RUs prepare and execute their implementation plan project | L | H |
| RUs operating PSO contracts will not meet masterplan timetable | Incomplete roll-out of TAP TSI masterplan | Member States actively ensure all public authorities holding or entering into rail PSO contracts are aware of the need for their PSO RUs to prepare and execute an implementation plan project | H | H |
| RUs not involved in international business will not meet masterplan timetable | Incomplete roll-out of TAP TSI masterplan | Member States actively ensure all implicated RUs plan at least to make their timetable data available as per the Regulation | L | H |
| RUs and IMs have no funds to carry out implementation plan projects in second half of 2012 | Incomplete roll-out of TAP TSI masterplan | Member States where necessary fund RUs to prepare and execute their implementation plan project | M | M |
| RUs cannot fund Phase Two transition project to start in 2012 | Phase Two transition starts only when stakeholder funds collected in mid 2013 leading to six to nine months delay to masterplan | Phase Two Transition team to seek goodwill from RUs and IMs to self-fund work in 2012 in anticipation of eventual project payment | M | H |
| Governance entity has in-sufficient funds on formation to conduct business | Entity does not start work and TAP TSI service procurements delayed for an extended period until funds available | Phase Two Transition team to seek 30 stakeholders who will pay five years participation fees (for 2015 to 2019 incl) during 2013 so that service development contracts can be signed | H | M |
| A common proposal for governance of RU/IM matters cannot be agreed with TAF TSI stakeholders | Delay to re-publication of TAP TSI and TAF TSI Regulations, uncertainty for RU and IMs as to the method for meeting their obligations and therefore no funds at all in 2013 for any TAP TSI Phase Two activity | Effective working in May and June 2012 by all parties to ensure a common proposal can be agreed by TAP TSI and TAF TSI Steering Committees | H | H |
| Other stakeholders as defined in the governance refrain from participation in the entity | Reduced membership and hence higher annual participation fees | Proactive communication from the governance entity to potential stakeholders and third parties | H | M |

# Revised Chapter 7 text

## Summary

The Phase One Project Team suggests the following approach as the basis of the revised Chapter 7.

The first section of Chapter 7 will state that the Stakeholders shall execute the Masterplan. This section will include a definition of Stakeholders as taken from the governance proposal and the overall Masterplan stage descriptions taken from the masterplan report.

In section two, Chapter 7 will say that the stakeholders shall create a governance entity using the principles and structure taken from the governance proposal report. Chapter 7 will not include the detailed governance rules but will define the way that the governance entity may change the rules.

Section three of Chapter 7 will state that the governance entity shall provide the regulatory services. The description of these services will be taken from the overview descriptions in the governance proposal. The detailed descriptions of the services as to be used in the service procurements will not be included in Chapter 7.

The fourth section will provide an overview of the sub-system architecture. Overview descriptions will be taken from the retail architecture and RU/IM reports. The section will have an implementation overview from a stakeholder use perspective taken from the overview IT specification.

Section five will repeat the current text on TAP CCM and will explain the input to the TAP CCM (and TAF CCM unless combined) from the governance entity technical SMGs.

Other Phase One project deliverables will not referenced in the republished Regulation, although they will be provided to the governance entity for its eventual use.

1. The spreadsheets from which the charts in this report are derived may be found in the project extranet (http://tap-tsi.uic.org). [↑](#footnote-ref-2)