TAP Phase One

Masterplan Report

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1. Document history

1.1 Document location

1.1.1 This document will be uploaded to the member's area of the TAP TSI project extranet.

1.2 Revision history

1.2.1 This document was revised as follows:

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

1.3.1 The approval for this document is as follows:

Name	Title	Approval	Issue date	Version
Project Team	Project Manager, Work Stream Leaders, Project Assistant	Done	11 May 2012	V0.9
TAP Steering Committee	Chairs, members and alternates		15 May 2012	1.0

1.4 Distribution

1.4.1 This document is distributed to:

Name	Remark	Issue date	Version
DG MOVE, ERA	Official recipients of the TAP Phase One deliverables	13 May 2012	1.0
TAP Steering Committee	Chairs, members and alternates	13 May 2012	1.0
Project Team; UIC and Ticket Vendor project coordinators	All members of the Project Team and the coordinators involved in the Grant Agreement between DG MOVE and UIC	13 May 2012	1.0
Interested public	On http:\\tap-tsi.uic.org following TAP Steering Committee approval	tbd	

1.5 Document maintenance

1.5.1 This document is maintained by the TAP Phase One Project Team.

1.5.2 Any reader detecting errors or needing clarification should contact the author.

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3. List of abbreviations

3.1.1 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
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 62/2006 on the technical specifications for interoperability - Telematics Applications for Freight
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

4. Introduction

4.1 Project deliverables for Masterplan

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

4.1.2 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.

4.1.3 The detailed requirements for the governance entity formation project and the common services are in the Governance and Architecture parts of the project deliverables. The masterplan provides the plan for forming the governance entity and for procuring the regulatory services, based on those requirements. They will not be duplicated here.

4.1.4 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 computer-based regulatory services can be found in the Architecture section of the project deliverables.

4.1.5 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. 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

4.1.6 The best estimate of individual stakeholder plans is in the section on Individual RU and IM implementation plans.

4.1.7 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 the section Phase Two transition.

4.1.8 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.

4.1.9 Operational plans are in the section on governance entity operation.

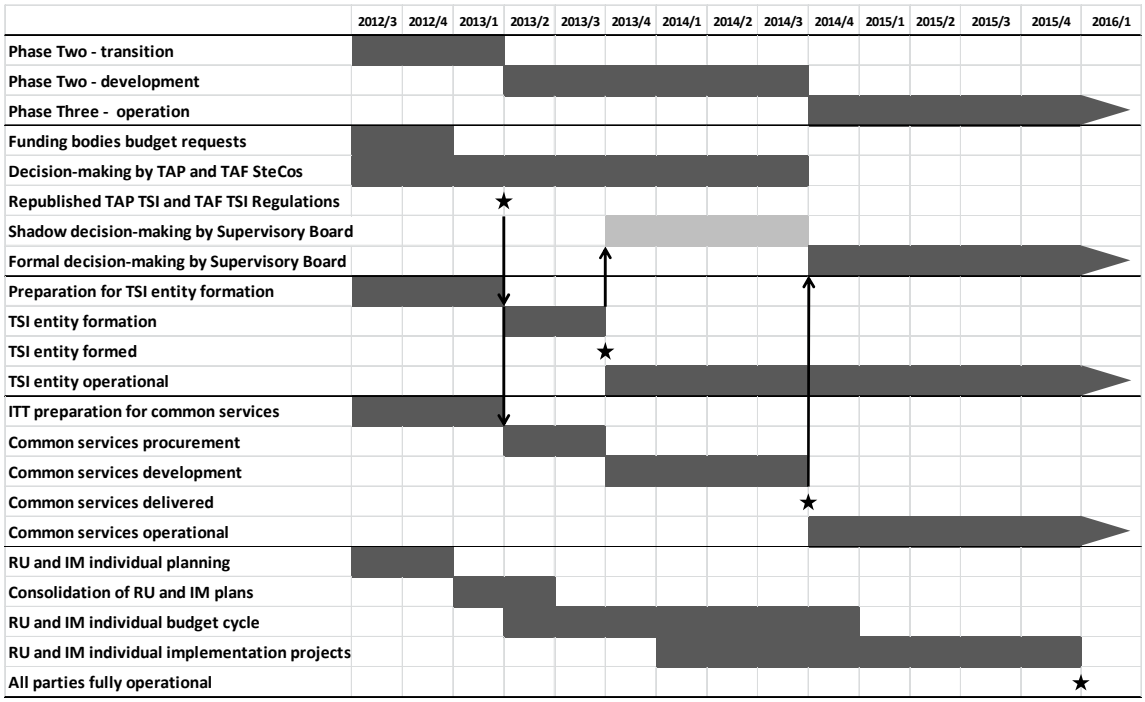
4.1.10 The consolidation of cost estimates is in the section on development and operations funding.

4.1.11 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 16.

5. Masterplan summary

5.1 Plan overview

5.1.1 The overview of the TAP TSI masterplan is shown in the following chart[1]:



5.1.2 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.

5.1.3 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.

5.1.4 Each of these components is described in the following sections.

5.1.5 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

[1] The spreadsheets from which the charts in this report are derived may be found in the project extranet.

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.

5.1.6 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. It is assumed that the transition project team will be staffed with personnel already involved in the Phase One project, subject to their availability and Steering Committee endorsement. This 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 project team which will carry out the procurements. Decisions needed for the Phase Two transition team will be made by the current TAP TSI Steering Committee.

5.1.7 Upon re-publication, the Phase Two team will be formed. Decision-making for the project team will initially remain with the current TAP TSI Steering Committee, integrated with the TAF TSI Steering Committee if this can be agreed.

5.1.8 The first procurement 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 start to monitor the work of the Phase Two team. 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 project team.

5.1.9 During the six months of entity formation, the tenders for the regulatory services will be issued and bidders assessed. Authority to enter into development contracts will be given by the Steering Committee, but with the express agreement of each stakeholder represented in the Supervisory Board. In this way it can be assured that the Supervisory Board will agree to accept the delivered service provision contracts.

5.1.10 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 14, 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.

5.1.11 Once the development contracts are signed, development will start under the supervision of the Phase Two team and run, according to the plan, until the last quarter of 2014. The Phase Two 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 Implementation Guides 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.

5.1.12 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 follow the plan prepared by the TAF implementation team

5.1.13 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 an unambiguously approved TAP Phase One Project delivery. 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.

5.1.14 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 and are testing the results. In summary, therefore, it is expected that RUs should be able to meet their regulatory obligations from the beginning of calendar 2016, except where already planned major upgrades or renewals prevents them from doing so.

5.1.15 It is clear this is an ambitious timetable. First of all it depends on the proper approval by DG MOVE 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.

5.1.16 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, 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 team will not have powers to demand participation. These risks and mitigations that are possible are described in more detail later in the document.

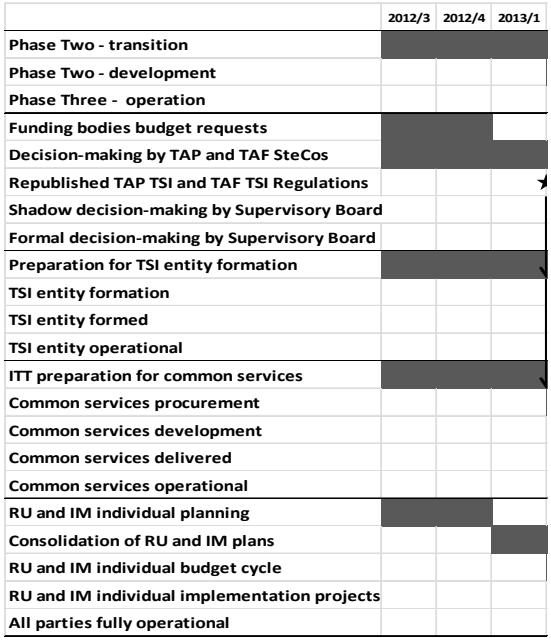
6. Phase two transition

6.1 Plan

6.1.1 Phase Two transition is defined as the period that starts with the formal approval by DG MOVE of the TAP Phase One Project delivery and that finishes with the re-publication of the TAP TSI Regulation.

6.1.2 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.

6.1.3 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.



6.2 Tasks

6.2.1 Phase two transition tasks are:

- Create a Phase Two Preparation project team, based on the Phase One 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 RU/IM work 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 the June ERA TAP TSI Change Control Management (CCM) working party meeting.

6.3 Resources

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

6.3.2 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

Phase Two transition Task name	Resource assumption
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 Implementation Task name	
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

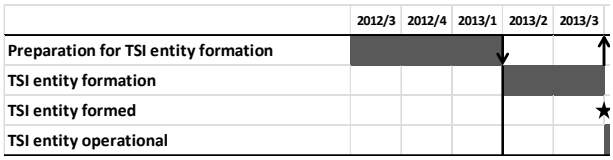
7. Governance entity formation

7.1 Plan

7.1.1 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.

7.1.2 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.

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



7.2 Tasks

7.2.1 The formation of the entity 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.

7.3 Resources

7.3.1 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.

8. Computer services procurement

8.1 Plan

8.1.1 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.

8.1.2 Contracts are needed for the following services:

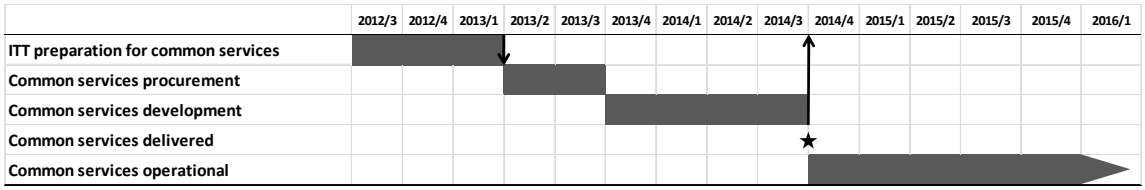
- Membership administrative service
- Reference data service
- Notification/registry service
- Data quality service.

8.1.3 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 project team. It will run over six months in parallel to the formation of the governance entity.

8.1.4 Once the governance entity exists, and sufficient funds have been guaranteed by stakeholders (see paragraph 5.1.10), 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 project 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.

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

8.1.6 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.



8.2 Tasks

8.2.1 Main tasks are:

- 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

- 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.

8.3 Resources

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

8.3.2 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.

8.3.3 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.

8.3.4 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.

8.3.5 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.

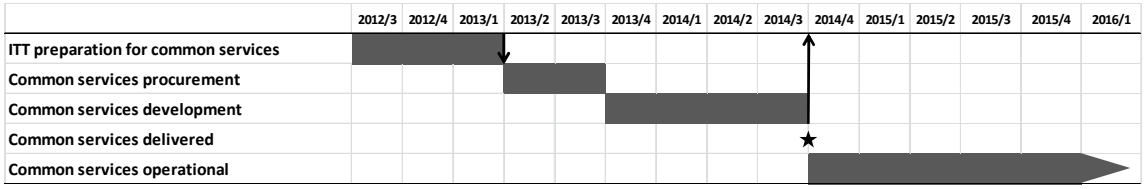
9. Retail technical services procurement

9.1 Plan

9.1.1 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 project team. It will run over six months in parallel to the formation of the governance entity.

9.1.2 Once the governance entity exists, and sufficient funds have been guaranteed by stakeholders (see paragraph 5.1.10), 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 project 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.

9.1.3 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 project team. The service will require sign-off both by the Phase Two project team and the operational computer SMG, primarily to ensure that the SMG takes responsibility for service it has approved.



9.2 Tasks

9.2.1 Main tasks are:

- 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
- Oversee bringing the contract into operation, including the start of the service management activity
- Pass control of (the now operational) regulatory service across to the Service Management Group chair.

9.3 Resources

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

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

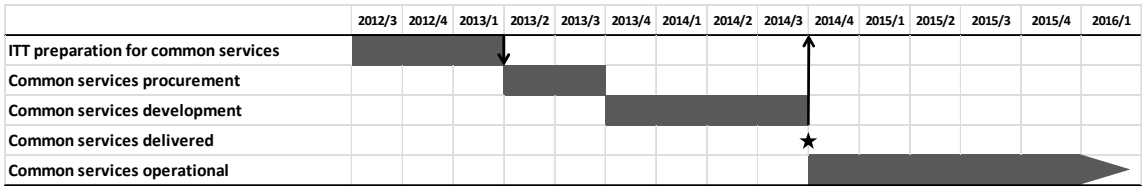
10. RU/IM technical services procurement

10.1 Plan

10.1.1 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 project team. It will run over six months in parallel to the formation of the governance entity.

10.1.2 Once the governance entity exists, and sufficient funds have been guaranteed by stakeholders (see paragraph 5.1.10), 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 project 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.

10.1.3 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 project team. The service will require sign-off both by the Phase Two project team and the operational computer SMG, primarily to ensure that the SMG takes responsibility for service it has approved.



10.2 Tasks

10.2.1 Main tasks are:

- 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
- Oversee bringing the contract into operation, including the start of the service management activity
- Pass control of (the now operational) regulatory service across to the Service Management Group chair.

10.3 Resources

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

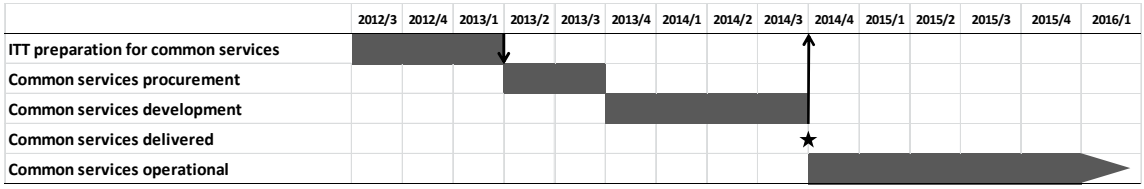
10.3.2 A small annual sum has been included for a document management system.

11. Administrative services procurement

11.1 Plan

11.1.1 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 project team. It will run over six months in parallel to the formation of the governance entity.

11.1.2 Once the governance entity exists, and sufficient funds have been guaranteed by stakeholders (see paragraph 5.1.10), 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.



11.2 Tasks

11.2.1 Main tasks are:

- 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
- Pass control of (the now operational) regulatory service to the General Manager.

11.3 Resources

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

11.3.2 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.

12. Individual RU and IM implementations

12.1 Plan

12.1.1 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.

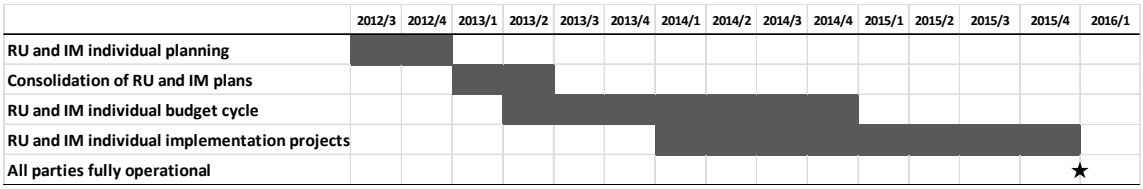
12.1.2 On the assumption of a stable text, work will start after the summer 2012 break with a TAP TSI Masterplan meeting, the complement to the TAF TSI meeting held in Brussels on 26 January 2012. The Phase Two transition project team will present the project and request individual RUs and IMs to execute 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.

12.1.3 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.

12.1.4 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.

12.1.5 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.

12.1.6 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.



12.1.7 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.

12.2 Tasks

12.2.1 Summary of tasks:

- 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.

12.2.2 The Phase Two project team will disband once the regulatory services are available for use. The governance entity will provide support for the testing and bringing into use of its services by members.

12.2.3 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).

12.2.4 In each of these cases, the Phase Two transition project 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.

12.2.5 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.

12.3 Resources

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

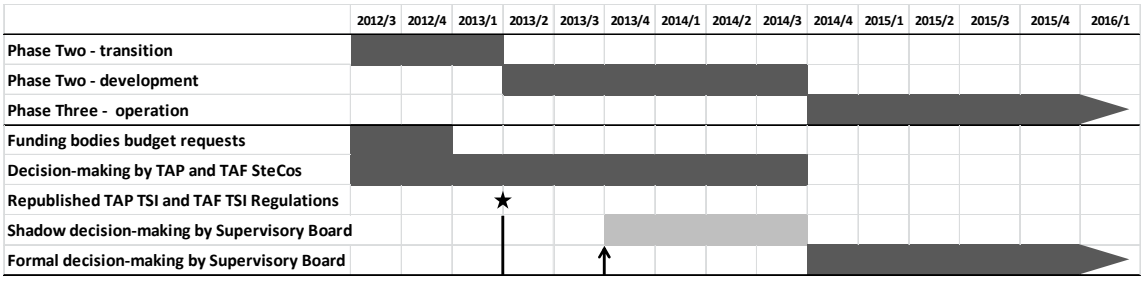
13. Governance entity operation

13.1 Plan

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

13.1.2 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.

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



13.2 Tasks

13.2.1 The first task of the General Manager will be to prepare for the business and 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 project team.

13.2.2 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 project team.

13.3 Resources

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

13.3.2 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.

13.3.3 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.

14. Development and operations funding

14.1 Phase Two and Governance overview

14.1.1 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.

14.1.2 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.

		2012	2013	2014	2015	2016	2017
Expenditure							
Phase Two costs		180,300	564,900	189,000			
Contracted staff costs					742,500	763,125	783,750
SB, SMG and WG staff costs					1,202,400	1,234,800	1,267,200
Operational computer service					411,240	411,240	411,240
Technical service equipment costs					10,000	10,000	10,000
Administrative services costs					157,600	164,200	164,200
Total cost per year		180,300	564,900	189,000	2,523,740	2,583,365	2,636,390
Free sector supply of SB, SMG and WG members					1,202,400	1,234,800	1,267,200
Existing costs transferred to governance entity					148,500	152,625	156,750
Total net cost		180,300	564,900	189,000	1,321,340	1,348,565	1,369,190
Made up of:							
Net entity management costs					742,500	763,125	783,750
Entity service costs					578,840	585,440	585,440
			TSI operational				
					Typical membership		350
					Annual fee in €		3,900

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

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

14.1.5 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.

14.1.6 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 5.1.10 it was noted that 30 stakeholders would need to agree to pay €20K each before the service provision contracts could be signed.

14.1.7 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.

14.1.8 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.

14.2 Phase Two costs

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

		2012	2013	2014
Phase Two transition				
Project management	Days	10	10	
Request individual RU and IM plans		20		
Support RUs and IMs		15	15	
Prepare consolidated RU and IM plans			30	
Validate governance legal options		20		
Validate cash-flow estimates		5		
Validate source of working capital		5		
Validate governance rules		10		
Determine nomination rules for SB			5	
Determine stakeholder nominee process			5	
Confirm proposal for Working Groups			5	
Project management of continuing RU/IM works		50	35	
Project management of continuing FSM works		20	5	
Submit all remaining Phase One CRs		10		
Prepare service tenders			50	
Start discussions with potential suppliers			10	
Set up Phase Two implementation team			5	
Phase Two Implementation				
Project Management	Days		20	20
Project management of continuing RU/IM works			40	
Create entity			20	
Organise nominations for SB and SMGs			10	
Draft service contracts and SLAs			50	
Procure and supervise the delivery of these services				
- Membership service			10	5
- Retail reference data service			30	20
- RU/IM reference data service			30	20
- CRD repository service			10	10
- Notification/registry service			30	30
- Data quality service			20	20
- Retail technical service			20	10
- RU/IM technical service			20	10
- Administrative service			10	5
Bring services into operation				20
Pass control to entity				5
Total days per year	Days	165	495	175
Daily rate including expenses	€	850	850	900
Cost at daily rate		140,250	420,750	157,500
Legal, etc costs		10,000	50,000	0
Cost including contingency	20%	180,300	564,900	189,000
Total days Phase Two transition	340			
Total cost Phase Two transition	358,800			
Total days Phase Two implementation	495			
Total cost Phase Two implementation	575,400			
Total days overall	835			
Total cost overall	934,200			

14.2.2 The assumptions behind the proposed task days can be found in section 6.3.

14.3 Governance entity staff costs

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

	% time		2012	2013	2014	2015	2016	2017
Contracted staff								
General Manager €800 + €100/day expenses	100%					1.00	1.00	1.00
Less travel on average than SMG and WG chairs								
SMG chairs €700 + €200/day expenses								
- Operational computer services	25%					0.25	0.25	0.25
- Retail technical services	25%					0.25	0.25	0.25
- RU/IM technical services	75%					0.75	0.75	0.75
WG chairs €700 + €200/day expenses								
- Path request	20%					0.20	0.20	0.20
- IT and reference data	20%					0.20	0.20	0.20
- Train status	20%					0.20	0.20	0.20
- Timetable	20%					0.20	0.20	0.20
- Tariffs	20%					0.20	0.20	0.20
- Reservation	30%					0.30	0.30	0.30
- Fulfilment and after-sales	20%					0.20	0.20	0.20
Total contracted FTEs						3.75	3.75	3.75
Daily rate € including €200/day expenses	220	working days per year				900	925	950
Annual rate € including expenses per FTE						198,000	203,500	209,000
Total contracted staff expenditure						742,500	763,125	783,750
Free sector supply of SB, SMG and WG members								
Supervisory Board								
Meets two times a year - 15 people - €1,200 a day including expenses						36,000	36,000	36,000
Service Management Groups								
Each SMG meets three times a year - 12 people - 1 day work a month in addition - 15 days per person per year	3					486,000	499,500	513,000
Working groups								
Each WG meets three times a year - 12 people - 0.5 day a month in addition - 9 days per person per year	7					680,400	699,300	718,200
Total free sector staff supply						1,202,400	1,234,800	1,267,200
Existing costs transferred to governance entity								
Stakeholder WG chairs now paid by TAP governance	3					0.75	0.75	0.75
Half of WG chair activity escaped by stakeholders								
Total existing costs transferred						148,500	152,625	156,750

14.3.2 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.

14.3.3 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.

14.3.4 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.

14.4 Computer service costs

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

Service development cost analysis							
Membership service		0					
Retail reference data service		100,000					
RU/IM reference data service		100,000					
CRD repository data service		0					
Notification service		200,000					
Data quality service		90,000					
Total computer services cost of development		490,000					
Cost of sale to service provider to fund the development	20%	98,000					
This assumes 7% interest on loan reducing over 5 years							
Total development cost to service providers		588,000					
Annual service provision cost committed over 5 years contract		117,600					
			2015	2016	2017	2018	2019
Annual service charges							
Membership service			20,000	20,000	20,000	20,000	20,000
Retail reference data service (contracted over 5 years)			50,000	50,000	50,000	50,000	50,000
RU/IM reference data service (contracted over 5 years)			20,000	20,000	20,000	20,000	20,000
CRD repository data service (contracted over 5 years)			50,000	50,000	50,000	50,000	50,000
Notification service (contracted over 5 years)			50,000	50,000	50,000	50,000	50,000
Data quality service (contracted over 5 years)			50,000	50,000	50,000	50,000	50,000
Protocol conversion costs			Market provision - not provided by the governance entity				
CCG Common Interface costs			CCG provision - not provided by the governance entity				
Annualised service development charge contracted over 5 years			117,600	117,600	117,600	117,600	117,600
Sub-total			357,600	357,600	357,600	357,600	357,600
Contingency	15%		53,640	53,640	53,640	53,640	53,640
Total operational computer services			411,240	411,240	411,240	411,240	411,240
Development cost figures are taken from the Architecture workstream							
Data service costs include €33,000 service provider support and service management costs per service in addition to computer system operational cost							
RU/IM support cost included in CRD repository support charge							

14.4.2 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. As the service providers will have to fund this work, 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.

14.4.3 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.

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

14.5 Technical service costs

14.5.1 The cost breakdown for the both the retail and RU/IM technical service costs is shown in the following chart.

		2012	2013	2014	2015	2016	2017
Staff costs are covered under staff costs tab							
Document management system					10,000	10,000	10,000

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

14.6 Administrative service costs

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

		2012	2013	2014	2015	2016	2017
Admin FTEs at 220 days a year	1.0						
Daily rate including expenses					330	360	360
Administrative service provision cost					72,600	79,200	79,200
SB/SMG/WG room costs - €500/meeting	50	meetings			25,000	25,000	25,000
Includes incidental room costs for GM							
Travel costs for SMG members - €600/person	100	times			60,000	60,000	60,000
11 people * 3 meetings * 3 SMGs							
Total cost					157,600	164,200	164,200

15. Issues and risks

15.1 Implementation of regulatory obligations

15.1.1 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
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
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
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
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
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
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
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
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	Seek goodwill from RUs and IMs to self-fund work in 2012 in anticipation of eventual project payment
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	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
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

Risk	Consequence	Mitigation
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

16. Revised Chapter 7 text

16.1 Summary

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

16.1.2 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.

16.1.3 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.

16.1.4 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.

16.1.5 The fourth section will provide an overview of the sub-system architecture. Overview descriptions will be taken from the architecture report. The section will have an implementation overview from a stakeholder use perspective taken from the overview implementation guide. The other implementation guides will remain as annexes to the final project delivery.

16.1.6 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.