

STRATEGIC EUROPEAN DEPLOYMENT PLAN FOR THE EUROPEAN-WIDE IMPLEMENTATION OF THE TECHNICAL SPECIFICATION FOR INTEROPERABILITY TELEMATIC APPLICATIONS FOR FREIGHT (TAF TSI)



PROJECT No: 2005-EU-93008-S

Deliverable 5 – Strategic European Deployment Plan





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1 Executive Summary

This fifth deliverable of Project 93008 is the consolidated Strategic European Deployment Plan for the implementation of the Telematics Applications for Freight TSI across the EU (together with some EFTA & CEEC members). Over 80% of the industry (measured by tonnes-km & track-km) have approved individual plans, which are contained in Deliverable 3. These individual plans have been synchronised and form a comprehensive Strategic European Deployment Plan for the TAF TSI.

The European rail freight industry has individually and collectively approved plans which will achieve the full implementation of TAF TSI functionality over the SEDP plan period – i.e. up to the end of 2013.

The majority of the combined responses by TAF TSI function show a progressive implementation timeline, while other higher-risk functions show a more gradual timeline in order to reduce the overall risk for a successful implementation. The end result shows a harmonised SEDP over 5 years.

European Rail Freight Industry TAF TSI Strategic European Deployment Plan

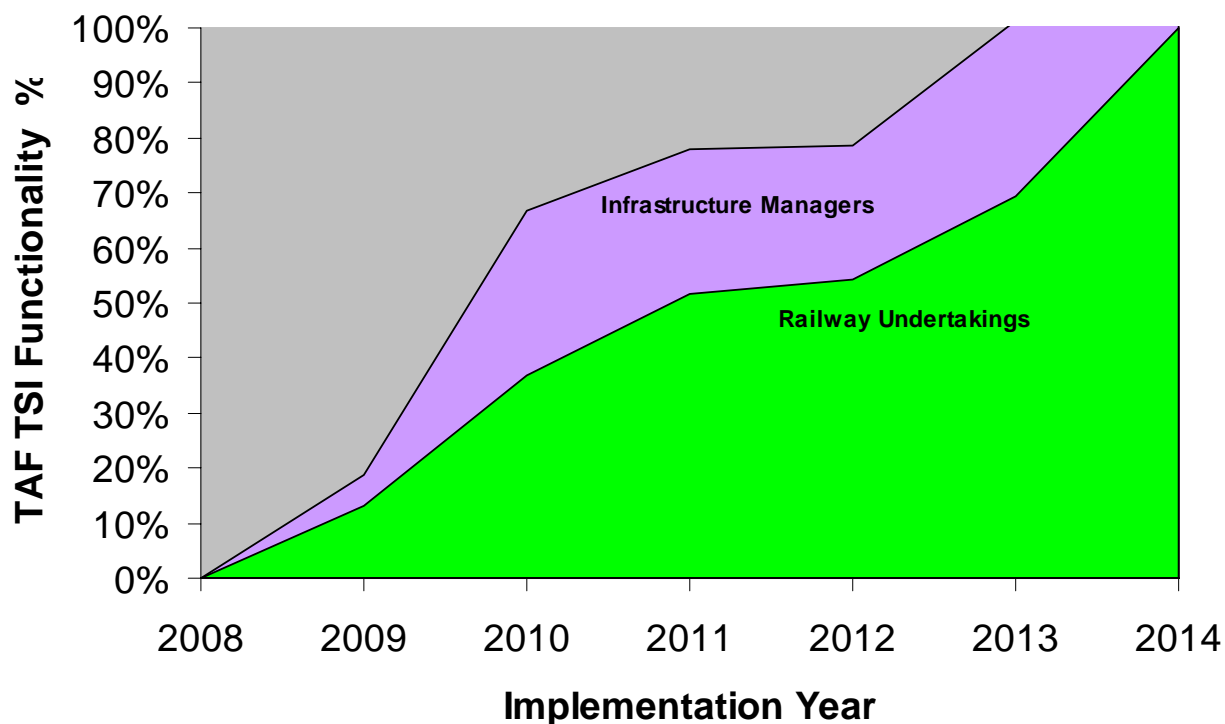


Figure 1 – The Strategic European Deployment Plan approved by the Industry



2 Strategic European Deployment Plan

This Deliverable and the related deliverables (section 2.5) address the requirements of the Regulation for the content of the Strategic European Deployment Plan:

- Functional requirements of the TAF TSI, (Deliverable 2)
- Performance requirements of the TAF TSI, (Deliverable 3)
- Implementation strategy and its underpinning rationale, (Deliverable 3 – confidential individual plans, Deliverable 5 – public co-ordinated plan)
- Roll-out programme and support investment plan, (Deliverable 3 – confidential individual plans, Deliverable 5 – public co-ordinated plan)
- Governance structure. (Deliverable 3).

2.1 Background

For a meaningful strategic choice to exist in Europe between freight networks, rail must reduce its costs and deliver high quality customer service. The rail freight sector has the potential for fulfilling a central role in supporting the Lisbon Strategy for growth and jobs, but must carry on its effort to rapidly achieve the changes necessary to compete in an open market. In recent years, in Western Europe, the modal split between rail and over modes has stabilised at around 16% (measured in ton-km and excluding short-sea shipping). This marks the end of an era where the market share of rail freight had declined from a level of 35% in 1970 in a context of a 3% yearly expansion of the overall freight market.¹

In all types of businesses, the management of information flows is an integral part of the services offered to customers and a key driver of success. Information management in rail freight services is no exception. The European railways are constantly working to improve their information systems. In the United States of America and already in some parts of Europe, some railways have successfully implemented new IT strategies and systems. In these countries, this has contributed to substantially increase rail market share and profitability.

The European Union, as part of its intention to promote the use of rail, has produced a legal framework on data exchange for rail freight services and is financially supporting its implementation through the Trans European Network budget. The Strategic European Deployment Plan shows how the railways are integrating this new TAF TSI legislation in their own efforts to better their management of information.

2.1.1 The challenge of data exchange in rail freight

Increased cooperation and efficient data exchange are important for a successful turn-around, both being significant factors supporting management changes and efficiency improvements otherwise carried out by individual companies.

The European Commission has considered these changes vital for the sector since before the publication of the 2001 White Paper and has sought to accelerate change through the introduction of uniform technical standards in parallel with open-market policies. One of these technical

¹ Market share of rail freight: the percentages here are based on all transport, including local distribution by trucks, which is not accessible to other modes. In Europe, unlike the United States of America, no statistical data is available on “intercity services”, which are equally relevant and accessible to all modes. When taking into account only the intercity transport (i.e. the only market relevant to rail), the share of rail freight would then be 27% (instead of 16% when the base is “all transports”).



standards, the “Technical Specification for Interoperability regarding Telematics Applications for Freight (TAF TSI)”, addresses the open-market data-exchange required in a modern rail network.

2.1.2 What is the TAF TSI?

The commercial operation of trains, wagons and Intermodal units throughout the European rail network requires efficient interchange of information between the different Infrastructure Managers, Railway Undertakings and other service providers. Performance levels, quality of service and cost depend on this data interchange capability. Data interoperability also has an impact on the conditions of use of rail transport by infrastructure managers, railway undertakings and all other service providers such as wagon companies, Intermodal operators and actual customers. The benefit of interoperability of the rail system can also bring about the conditions for greater interoperability between modes of transport, in particular between rail transport and combined rail/road/air/waterborne transport.

The purpose of the TAF TSI is to ensure that efficient interchange of information is adapted to user requirements so that the transport process may become as economically viable as possible and that freight transport on rail can more efficiently address the intense competition it has to face.

The conventional rail Telematic Applications for Freight TSI also interfaces to another TSI, currently developed, the Rail Operations & Traffic Management TSI. The Operation and Traffic Management TSI covers the procedures and related equipment enabling a coherent operation of train driving, traffic planning and traffic management, which are the operational processes of the railways.

The TAF TSI covers the applications required for the interoperability of information regarding freight services and the management of connections with other modes of transport. It concentrates on the transport services of Railway Undertakings in addition to the pure operation of trains. Safety aspects are only included as far as the existence of data elements may have an impact on the safety operation of a train (but not through the implementation of this TSI).

2.1.3 Geographical Scope

The geographical scope of the TAF TSI is the Trans-European conventional rail system as described in Annex I to the Directive 2001/16/EC. The Trans-European conventional rail system is a set of railway lines covering around one quarter of the whole European rail network which the European Union considers as a European backbone for future investments and actions. Although the TAF TSI is normally only applicable to this core network, it may also be applied to the complete rail freight network of the member states., The requirements of this TSI are not mandatory for freight transport arriving from or going to a non-EU country, but the countries of the Western Balkans and the Russian Federation as well as Switzerland and Norway are considering adopting the TAF TSI or linking their systems to it to include services from and to the European Union.

2.1.4 Architecture of the TAF TSI

The architecture of the TAF TSI is straightforward - it is a common interface to the internal systems of the railways allowing to exchange of messages using the internet.

2.1.5 Why is the TAF TSI a Regulation?

The TAF TSI is a European Regulation because the European Commission requires that the European railway industry develops and implements common standards to increase the interoperability of information, i.e. to facilitate the exchange of information between companies



regarding rail freight services, notably as far as cross-border services are concerned. The political intention behind the Regulation is to boost the quality and productivity of rail freight in Europe, in the context of an increasing road competition.

The use of a Regulation, by the European Commission, applicable directly to the stakeholders in the rail freight industry (and not simply to Member States) is unusual, but the requirement that the implementation of the TAF TSI is consistent across all member states, both in terms of services covered and in timing is paramount. To assist in the achievement of this outcome, the Regulation itself defines at a high-level, how the implementation planning must be undertaken by the Industry, using the mechanism of a Strategic European Deployment Plan. The regulation does not require the replacing of existing IT systems of IMs and RUs. It essentially requires that the interfaces between individual IT systems use a common language and follow certain specifications.

2.1.6 How has the TAF TSI Implementation (the Strategic European Deployment Plan) been planned?

To achieve the implementation of the TAF TSI, the regulation also requires that the “European Rail Representative Bodies²” deliver a Strategic European Deployment Plan (SEDP) by 18 January 2007 to the European Commission. This plan must describe how the European rail freight undertakings and infrastructure managers plan to organize the migration from the existing situation to the situation where a common language and uniform standards can be applied. In practical terms, this means that each rail freight undertaking and each infrastructure manager is required to have its own migration plan ready by 18 January 2007 and that all the plans must be coordinated and synchronized together in a way that saves time and cost for the industry as a whole.

The development of the Strategic European Deployment Plan has taken 18 months of coordination between the European Railways, Infrastructure Managers and Wagon Keepers.

² as defined in Art. 3.2 of Regulation 881/2004/EC



2.2 European SEDP Coverage

Submissions from Railway Undertakings, Infrastructure Managers and other parties such as Wagon Keepers have been received by the SEDP Team. It is expected that the Keeper realisation plans will be appended to the plan once the architecture and functionality of the National Vehicle Registers have been defined.

The plan responses represent over 80% of the Tonne-km and Track-km capacity in Europe. All of the EU members were taken into account as well as the EFTA and CEEC countries. The maps below illustrate the countries from which companies have provided an official response.

Approved plans from Freight Railway Undertakings
representing > 80% of tonne-km



Approved plans from Infrastructure Managers
representing > 80% of track-km

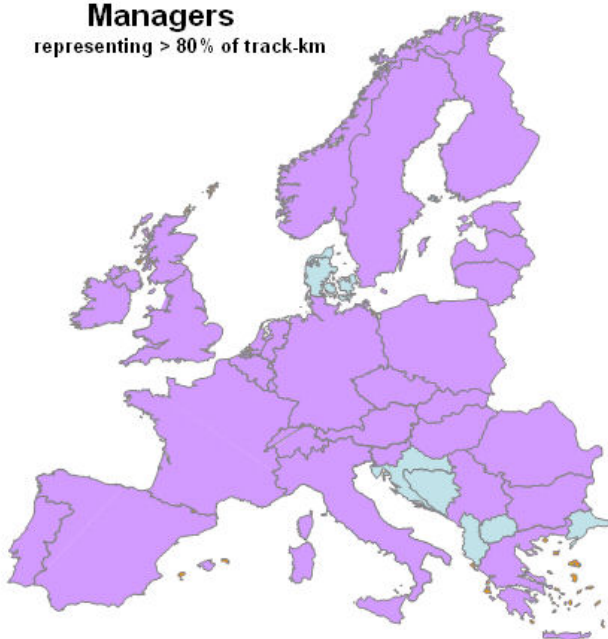


Figure 2 – European coverage of Approved Plans for TAF TSI Implementation

The Table below lists the companies from which an official SEDP response is recorded in Deliverable 3:

Type	Company
IM	ADIF
RU	Astoc
IM	Banverket
RU	B-Cargo
RU	BLS Cargo
RU	BDZ
IM	NRIC (Bulgaria)
IM+RU	CD
IM+RU	CER (Hungary)
IM+RU	CFL
IM	CFR Infrastructure
RU	CFR Marfa
RU	CP

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	DB Holding (incl. DB-Netz, Railion Germany, - Denmark, - Netherland, - Italy, MEG and RAG)
IM+RU	MEG and RAG)
IM+RU	EVR
RU	EWS
RU	Green Cargo
IM+RU	Gysev
IM	Infrabel
IM+RU	Irish Rail
IM+RU	LDZ
IM	JBV (Norway)
IM+RU	Litrail
RU	MAV Cargo
IM	MAV IM
IM	Network Rail
IM	ÖBB infra (incl. ÖBB – Betrieb)
IM+RU	OSE
RU	PKP Cargo
IM	ProRail
IM+RU	Rail Polska
RU	RCA
RU	Renfe
IM	RFF (incl. SNCF Infra)
IM	RFI
IM	RHK
RU	SBB Cargo
IM	SBB infra
IM+RU	Serbian Railway
IM+RU	SZ (Slovenia)
RU	SNCF Fret
RU	Trenitalia
RU	Veolia
RU	VR
RU	ZRS
IM	ZSR
RU	ZSSR
IM	REFER

2.3 Consolidated SEDP

2.3.1 Scope

This deliverable 5 provides the ‘public’ Strategic European Deployment Plan only – the detail confidential plans are contained in Deliverable 3. Other related Deliverables are shown at the beginning of this section.

This document includes the aggregation of a set of project milestones that is conducive to intermediate and verifiable tangible results for each actor in the European rail freight industry. The synchronisation has been underpinned by an analysis of its major perceived risks – viz. business, financial, technical/operational - in order to ascertain its ultimate robustness. The industry’s responses to the material risks are also enclosed in the document. Also included is the governance structure and a proposed sequencing of the realisation project.



2.3.2 Methodology

This deliverable is based on individual stakeholder responses to the proposed Framework Plan as originally submitted to the industry at the beginning of the project. The Framework Plan was also supplemented with the Functional Requirements Specifications (SEDP Deliverable 2) so that the Stakeholders could properly assess the effort required for each SEDP Function and estimate the corresponding implementation dates.

Given the divergent capabilities of the European railway industry, a 'Cluster' approach was adopted in order to group stakeholders with like implementation priorities and timelines. This was a useful approach while the stakeholders were evaluating their individual SEDP plans, however, given the synchronised results of the responses, the 'Cluster' approach was not necessary in the finalised SEDP.

SEDP Functionality Realisation (All functions, Infrastructure Managers)

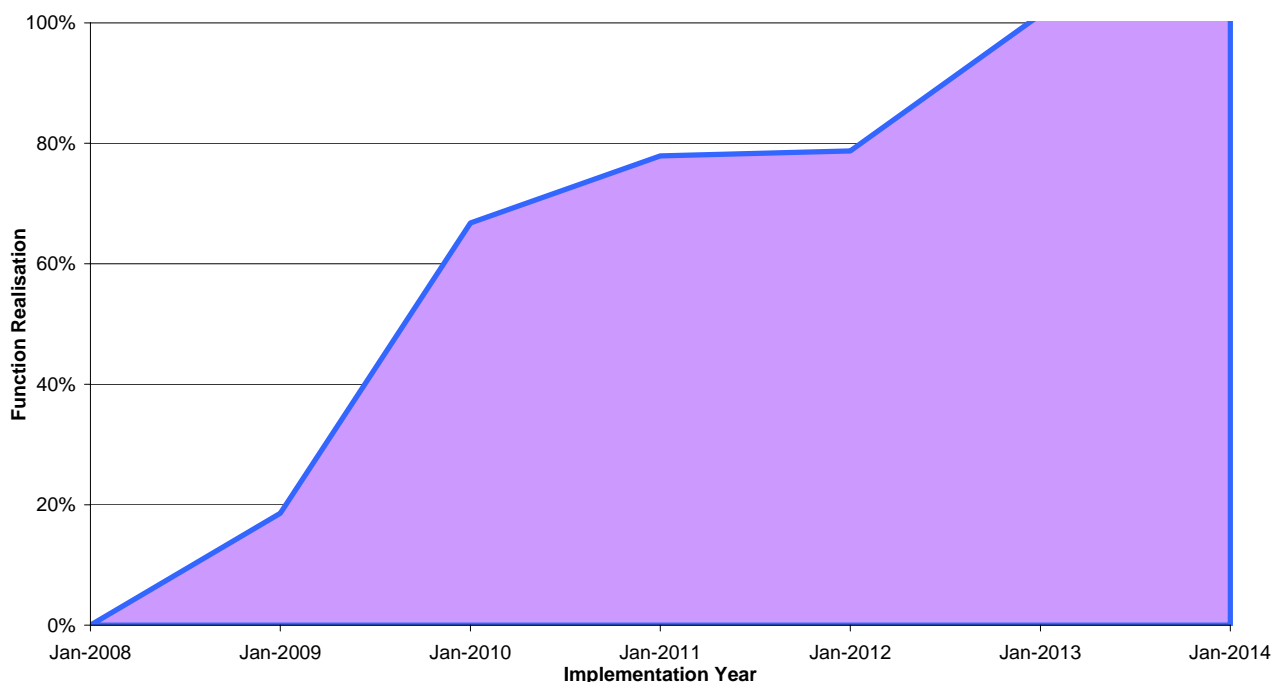


Figure 3 –Approved SEDP Realisation for Infrastructure Managers

From figure 3 and 4 it can be seen that the Infrastructure Managers plan a slightly earlier realisation of TAF TSI functionality than the other players. This is exactly what is logically expected due to a combination of advanced existing IM projects like Europtirails and the need to realise the data interface with RUs as a priority.



SEDP Functionality Realisation (All functions, Railway Undertakings)

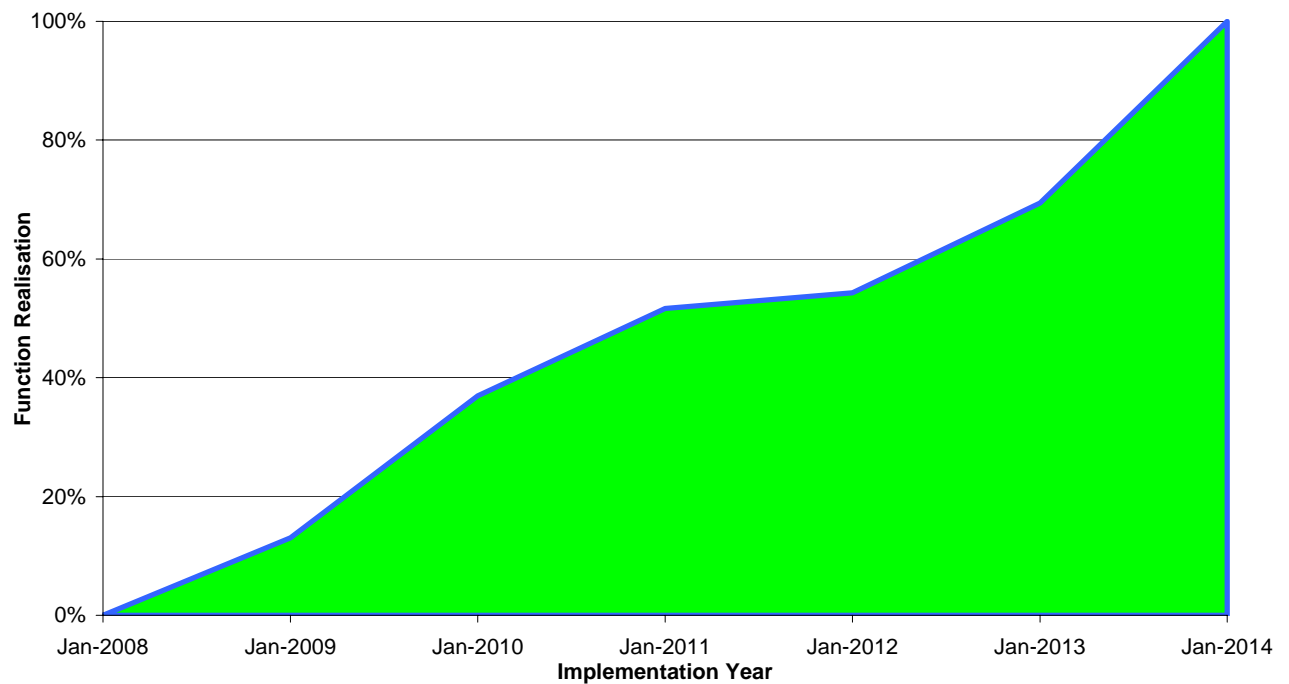


Figure 4 –Approved SEDP Realisation for Railway Undertakings

2.4 SEDP Functionality Rollout

This section provides the aggregation of plan responses by TAF TSI function. Each function is weighted according to the realisation effort as supported by the ECORYS cost study done for the TAF-TSI.

2.4.1 Realisation of the joint IM – RU Functions

These nine functions are jointly realised by both Infrastructure Managers and Railway Undertakings :

- Common Interface
- Reference Files
- Train Running Information
- Train Forecast
- Service Disruption
- Train Enquiries
- Train Preparation
- Infrastructure Restriction Notice
- Adhoc Path Request



2.4.1.1 Realisation of the Common Interface Function (Milestone)

The Common Interface function is a Common Component requirement mandated by the TAF TSI and must be realised by both IMs and RUs. It represents the first milestone for the SEDP. The Common Interface provides the ability for all stakeholders to exchange information, and must be put into place prior to the realisation of any other function. This is a common priority with a rapid deployment timeline.

Realisation of TAF TSI Common Interface by all participants

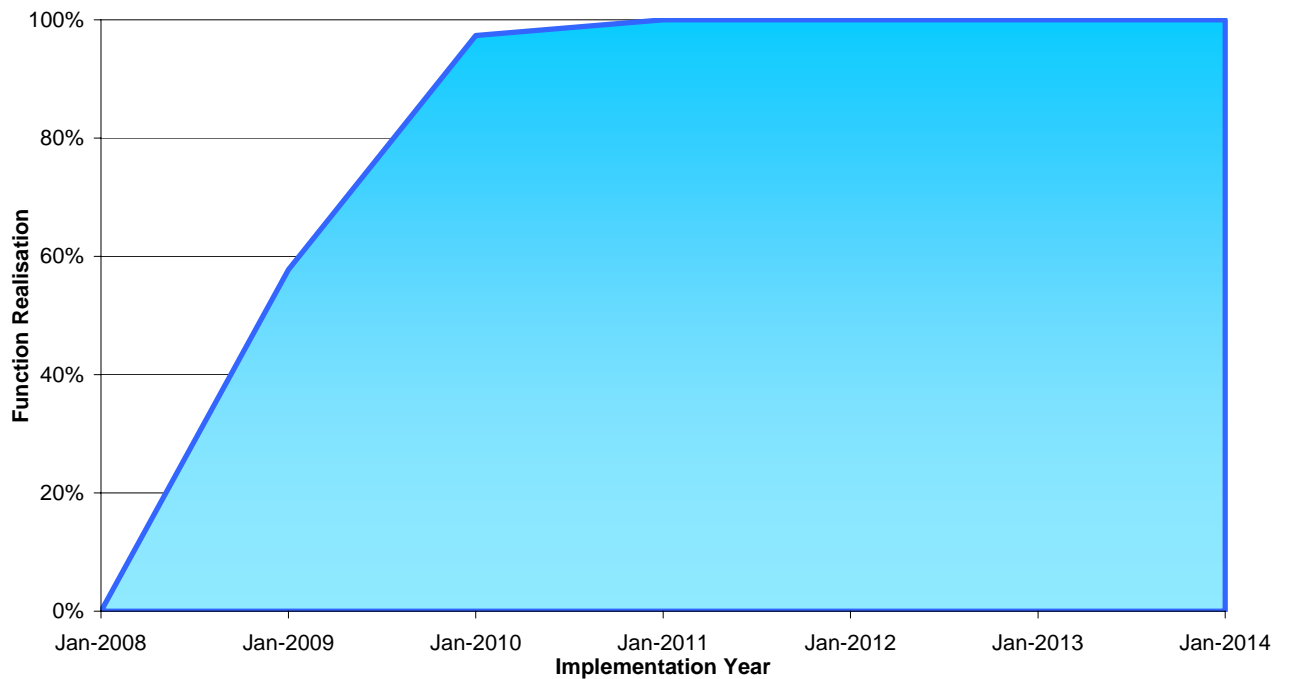


Figure 5 – TAF TSI Common Interface Realisation



2.4.1.2 Realisation of the Reference File Function (Milestone)

Much like the Common Interface, the Reference Files for LocationIdent and PartnerIdent provide the necessary building blocks for quality data exchange and are a Common Component requirement of the TAF TSI. This is also a common priority for both IMs and RUs and should be the Second Milestone.

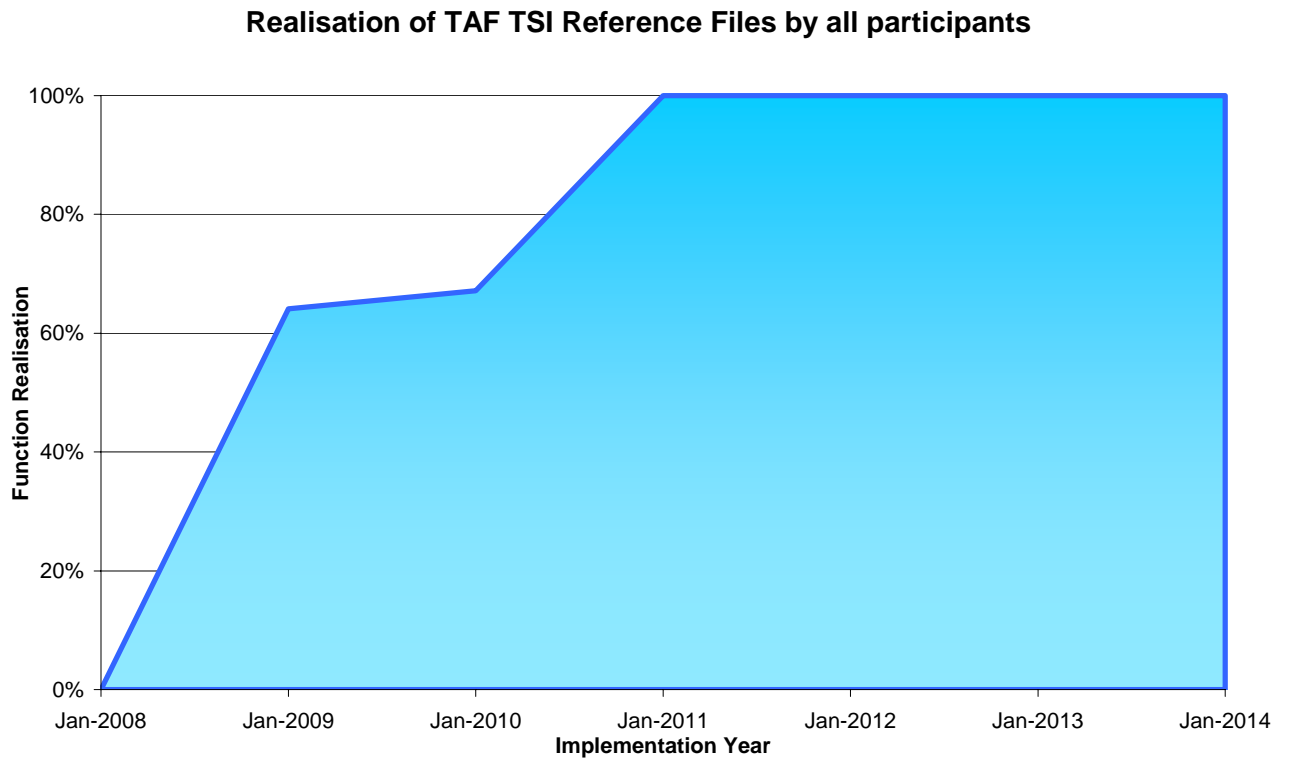


Figure 6 – TAF TSI Reference File Realisation



2.4.1.3 Realisation of the Train Running Information Function

TAF TSI requirement :

RUs need the possibility to get information about train location

- IM must be able to respond to RU/IM train enquiries at any time
 - The running of the train (last recorded location, delays, delay reasons)
 - a train's performance (delays, delay reasons, delay locations),
 - train forecast at a specified location,
- The access to this information must be independent from the communication relation RU / IM during the train running

The Train Running Information Function is a push message coming from the IM to the RU. This function is either already existing in a majority of the IM systems or can be realised fairly quickly. The RU risk is decreased by spreading the deployment of this functionality over a longer period of time. However, over 60% of the industry will be prepared to utilise this function by 2010.

Realisation of Train Running Information Function (RUs & IMs)

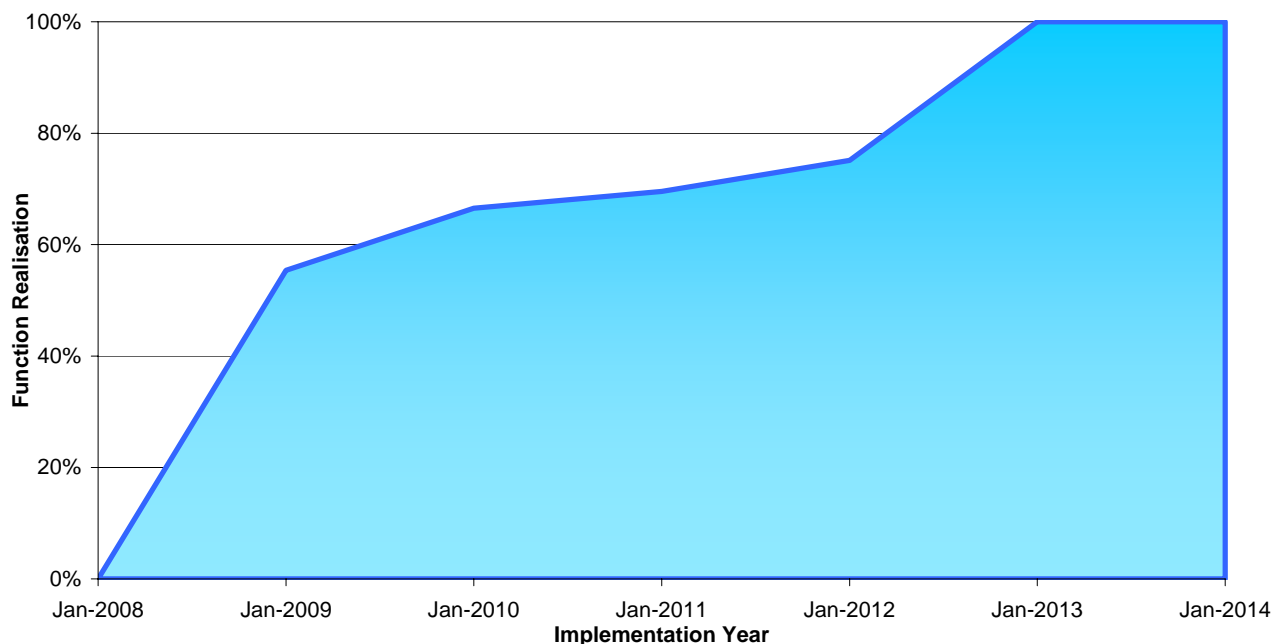


Figure 7 – TAF TSI Train Running Information Realisation



2.4.1.4 Realisation of the Train Forecast Function

TAF TSI requirement :

Messages that must be exchanged between IM and RU are:

- Train Running Forecast
 - for handover- and other reporting points
- Train Running Information
 - Departure, arrival at destination
 - Arrival and departure at handover points
 - interchange points and at agreed reporting points

The Train Forecast Function is a push message coming from the IM to the RU. This function is either already existing in a majority of the IM systems or can be realised fairly quickly. The RU risk is decreased by spreading the deployment of this functionality over a longer period of time. However, 70% of the industry will be prepared to utilise this function by 2010.

Realisation of Train Forecast Function (RUs & IMs)

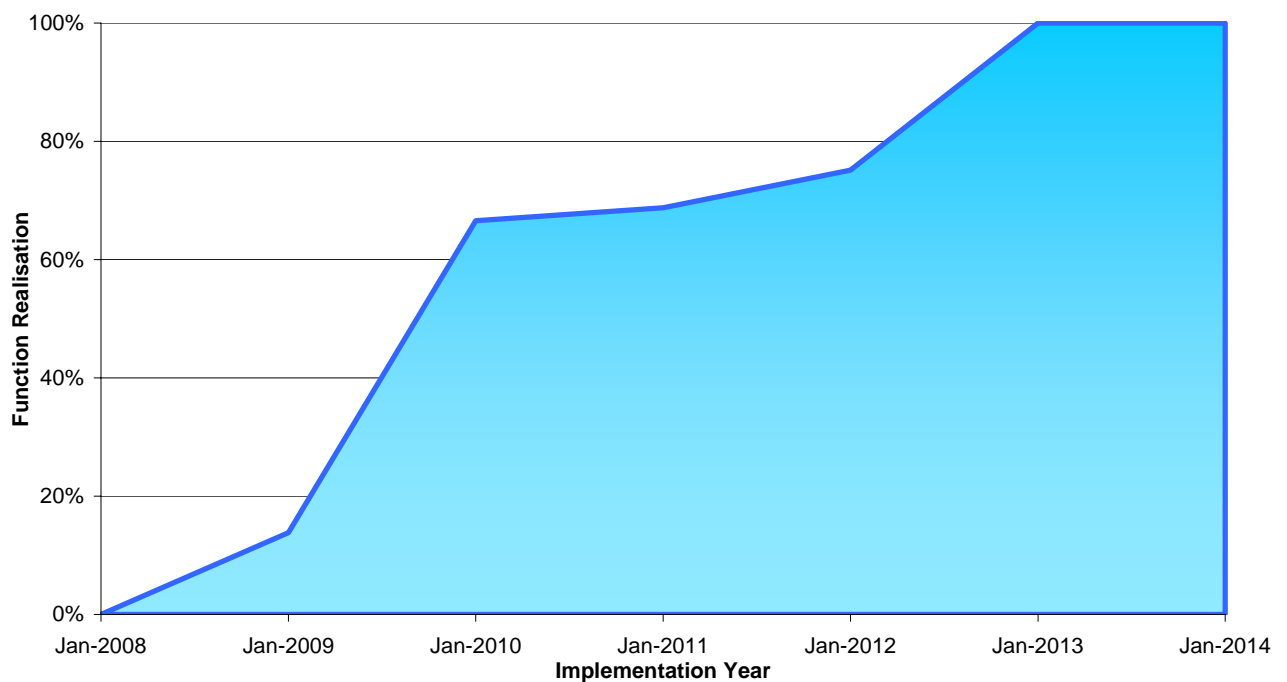


Figure 8 – TAF TSI Train Forecast Realisation



2.4.1.5 Realisation of the Service Disruption Function

TAF TSI requirement :

If RU is responsible for the disruption:

- RU must inform IM immediately (no IT message, e.g orally by the driver)

If IM is responsible for the disruption:

- IM must send the RU a train running forecast message relating to the next reporting point

The Service Disruption Function is a push message coming from the IM to the RU. This function is either already existing in a majority of the IM systems or can be realised fairly quickly. The RU risk is decreased by spreading the deployment of this functionality over a longer period of time. However, over 60% of the industry will be prepared to utilise this function by 2010.

Realisation of Train Service Disruption Function (RUs & IMs)

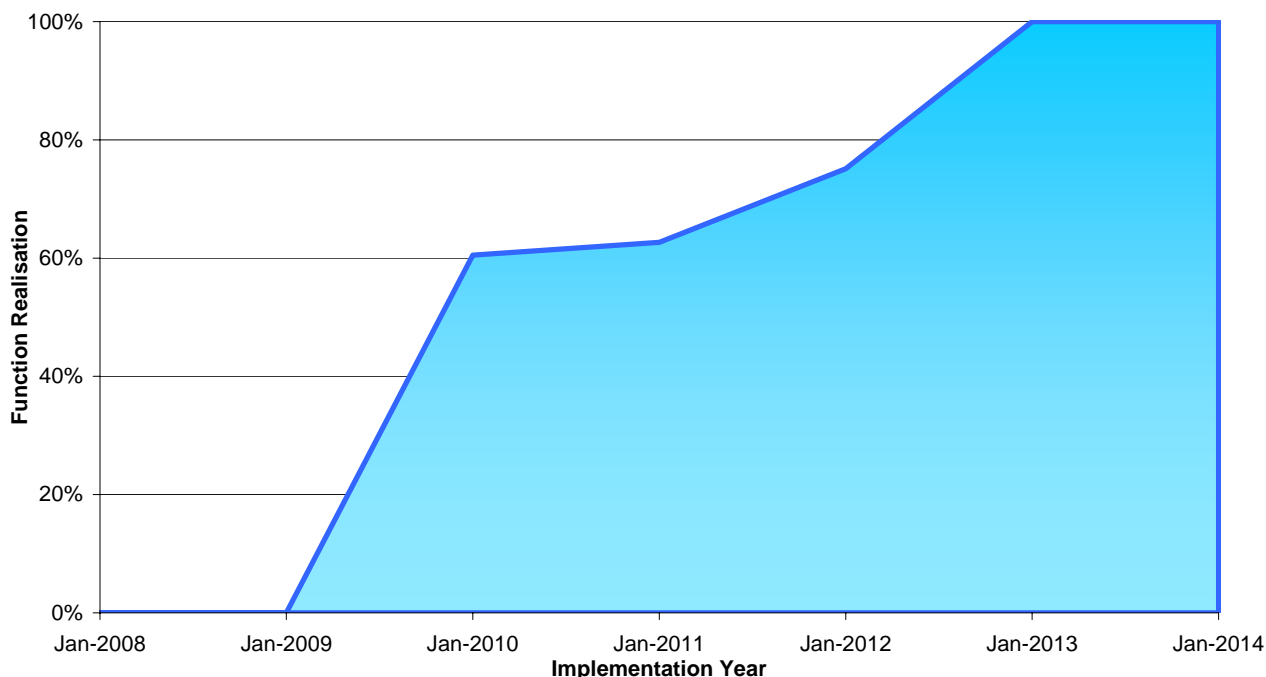


Figure 9 – TAF TSI Train Service Disruption Realisation



2.4.1.6 Realisation of the Train Enquiries Function

TAF TSI requirement : The RU must be able to enquire upon its trains.

The Train Enquiries Function is an interactive application for message exchange between the IM to the RU. This function has a rapid deployment, illustrating the overall effort required on the parts of both the IMs and RUs. The Train Running and Forecast Functions must be in place prior to the final realisation of this function. Over 60% of the industry will be prepared to utilise this function by 2011.

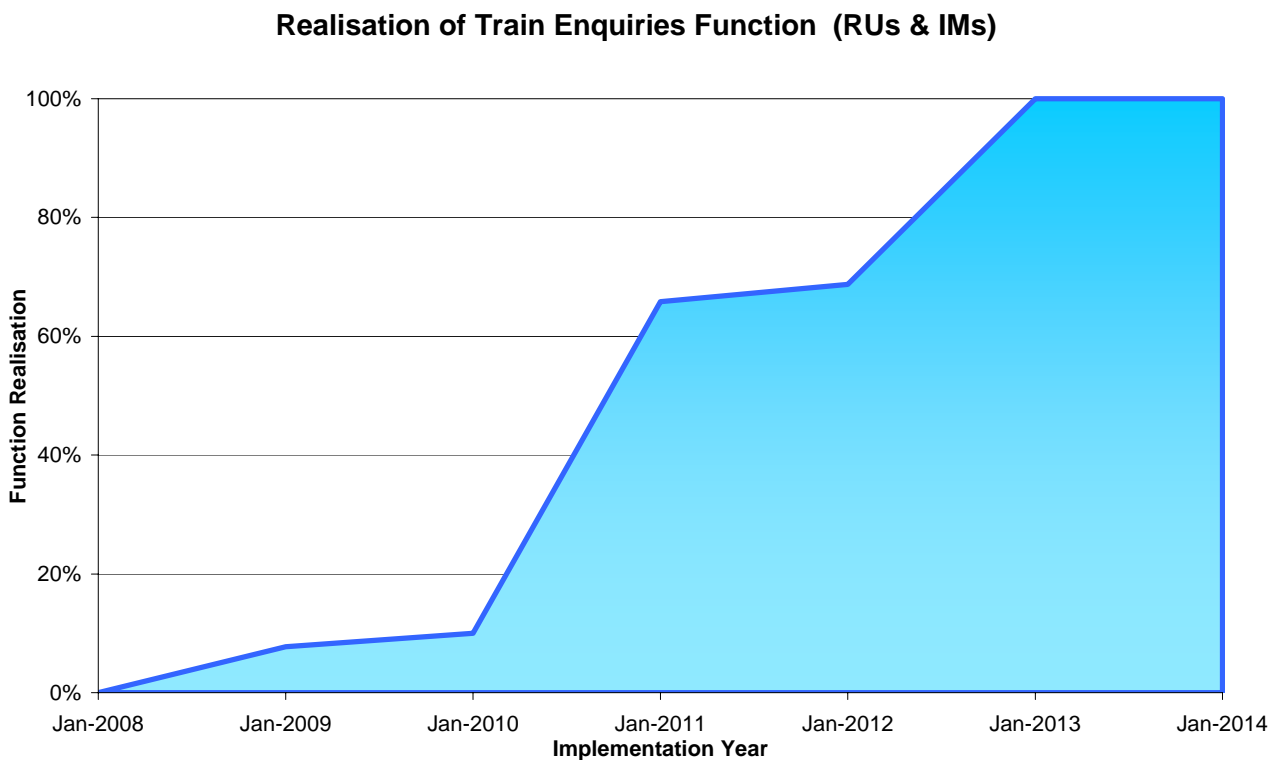


Figure 10 – TAF TSI Train Enquiries Realisation



2.4.1.7 Realisation of the Train Preparation Function

TAF TSI requirement :

For Train Preparation, RU must have access to:

- the infrastructure restriction notices
- the technical wagon data (Rolling Stock Reference Databases)
- the dangerous goods reference file
- the current, updated information status on the wagons
- (Wagon and Intermodal Unit Operational Database)

The Train Composition must be send to the next RUs.

When requested the Train composition must be sent to the IMs

The Train Preparation Function comprises the data exchange between IMs and RUs. This function relies on the realisation of prior functions such as the Common Interface, Reference Files and Rolling Stock. This is why there is a rapid realisation starting in 2009.

Realisation of Train Preparation Function (RUs & IMs)

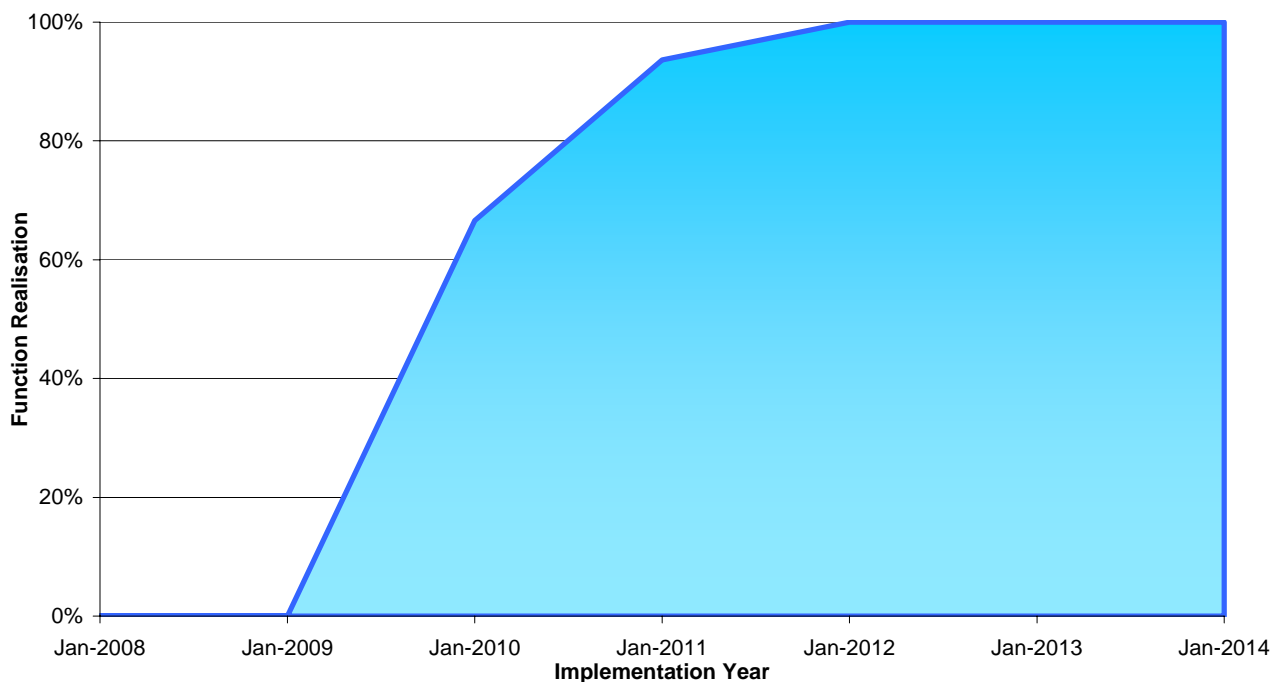


Figure 11 – TAF TSI Train Preparation Realisation



2.4.1.8 Realisation of the Infrastructure Restriction Notice Function

TAF TSI requirement : The RU must be able to enquire about infrastructure restrictions which may affect the composition of its train.

The Infrastructure Restriction Notice Function is realised only by the IMs, however the databases and information is made available to the RUs. Although there is a rapid early deployment, given the priority of this function, it is recommended that this realisation be moved back to the end of the SEDP. This may allow a more gradual implementation, allowing more coordination between the IMs and the RU users. Such a gradual implementation will reduce the overall risks to the industry.

Realisation of Infrastructure Restriction Notice Function (RUs & IMs)

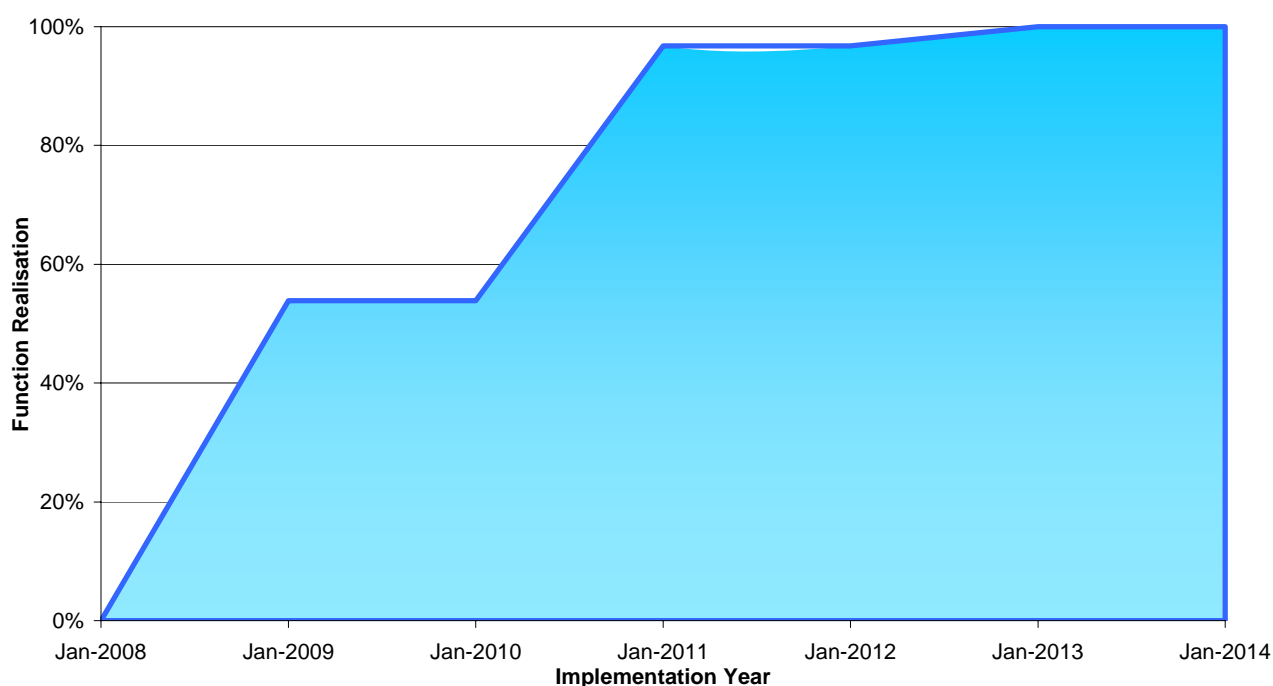


Figure 12 – TAF TSI Infrastructure Restriction Notice Realisation



2.4.1.9 Realisation of the Path Request Function

TAF TSI requirement:

RUs must have the possibility to get an ad hoc path

- exceptions during the train running
- Transport demands on a short time basis

The Path agreement for a train movement at short notice is based on

- dialogue between all RUs and IMs involved in moving the train

The following messages used for Path request must be sent

- Path Request RU to IM
- Path Details IM to RU
- Path Confirmed RU to IM
- Path Details Refused RU to IM

The Path Request Function as defined in the TAF-TSI is to accommodate short-term path requests outside of the long-term planning phase. This is a priority function for both the IMs and the RUs, although it will require profound process and IT system modifications. This function can be split into two distinct areas: 1) The realisation effort on the part of the RUs to organise the international path request and 2) the effort to coordinate and deliver a short-term path amongst the involved IMs. The realisation graph as shown below illustrates the RU community realisation plans early, with a synchronised rapid deployment by the IM and RU communities starting in 2012.

Realisation of Path Request Function (RUs & IMs)

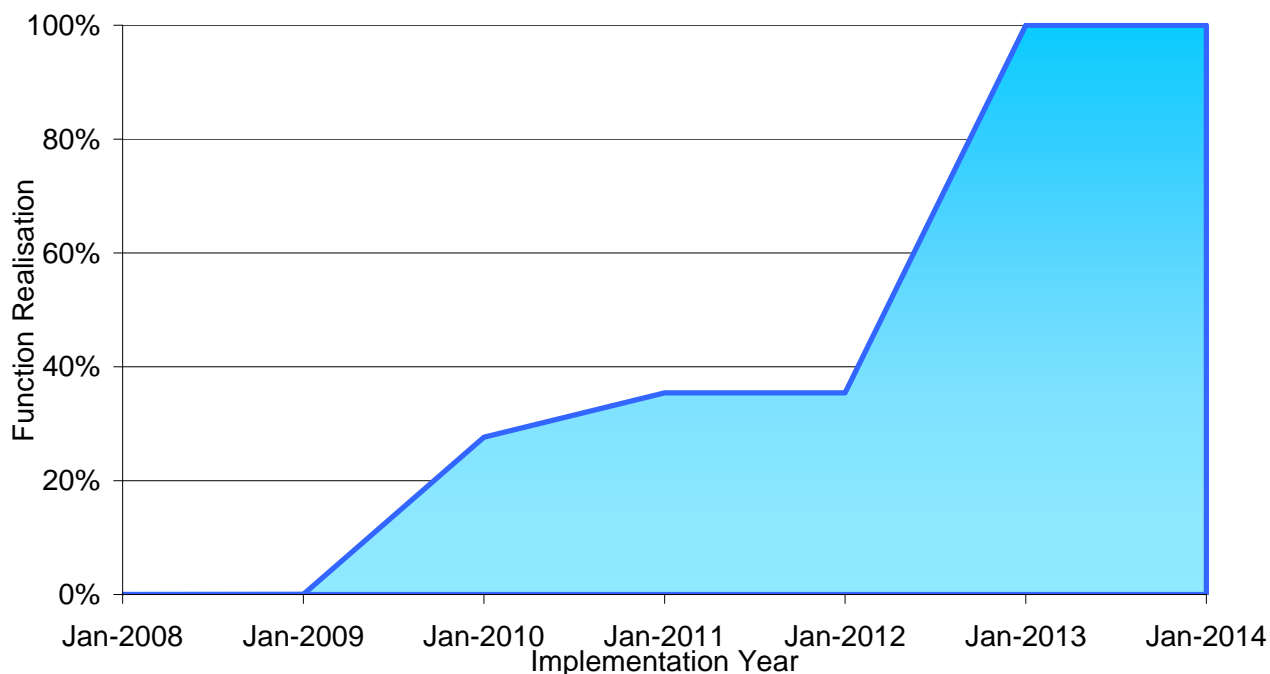


Figure 13 – TAF TSI Path Request Realisation



2.4.2 Realisation of the RU-only Functions

The following three functions are realised only by the RU community:

- Consignment Note Data
- Wagon & Intermodal Operating Unit Data (WIMO)
- Wagon Movement
- Shipment ETA

2.4.2.1 Realisation of the Consignment Data Function (Milestone)

TAF TSI requirement :

Consignment Note Data:

- has to be sent by the Customer to the Lead RU
- must contain all information needed to carry a consignment from A to B
- selected data must be accessible for all partners
 - e.g. load weight, dangerous goods information

Wagon Order:

- subset of the Consignment Note information
 - must be forwarded to the RUs involved in the transport chain
 - must contain information for an RU during its responsibility
- content dependent on the role to be performed by the RU:
 - Origin-, Transit- or Delivery RU

Many RUs have existing capabilities to meet the requirements of this function, explaining the coherent deployment timeline between 2010 and 2011.

Realisation of Consignment Data Function (RUs)

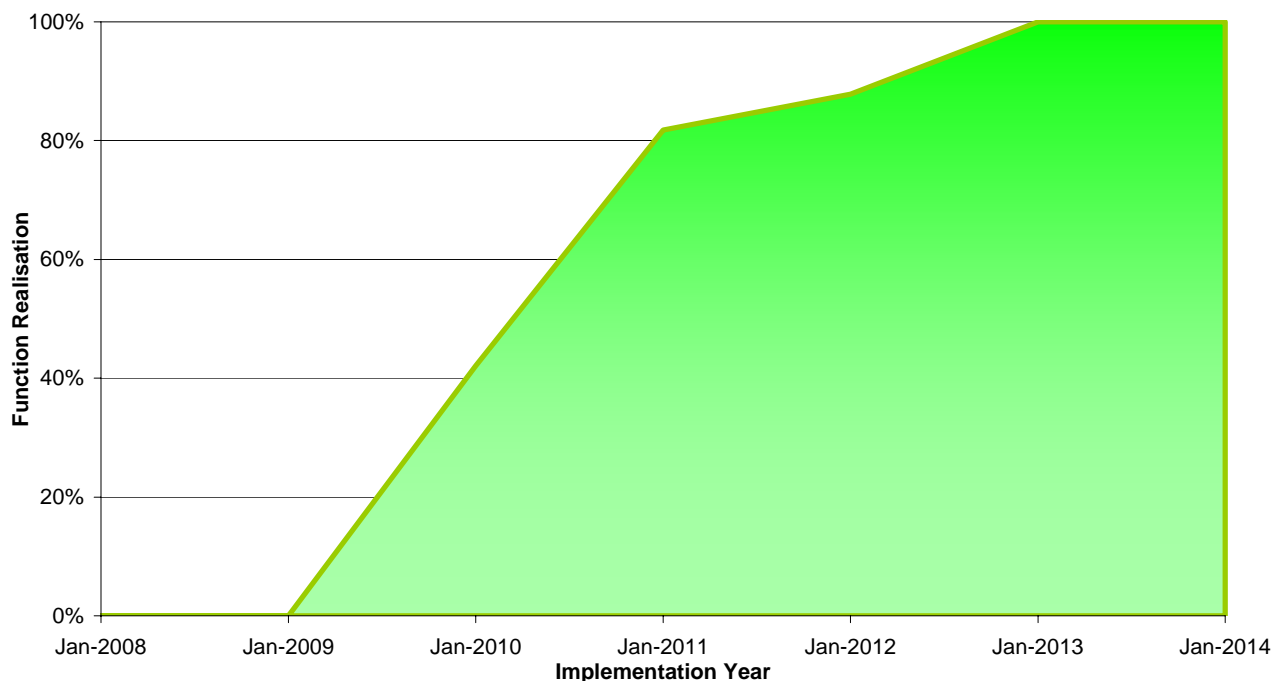


Figure 14 – TAF TSI Consignment Data Realisation



2.4.2.2 Realisation of the WIMO Function (Milestone)

TAF TSI requirement :

The following messages must be exchanged:

- Wagon Interchange Notice
- Wagon Received at Interchange,
- Wagon Refused at Interchange

These data must be stored in a Wagon and Intermodal Unit Operational Database

Many RUs have existing capabilities to meet the requirements of this function, illustrating that 40% of the RU community can comply with the requirements early in the SEDP. The coherent late deployment timeline at the end of the SEDP illustrates the integration of those without current capabilities in low-risk, phased approach.

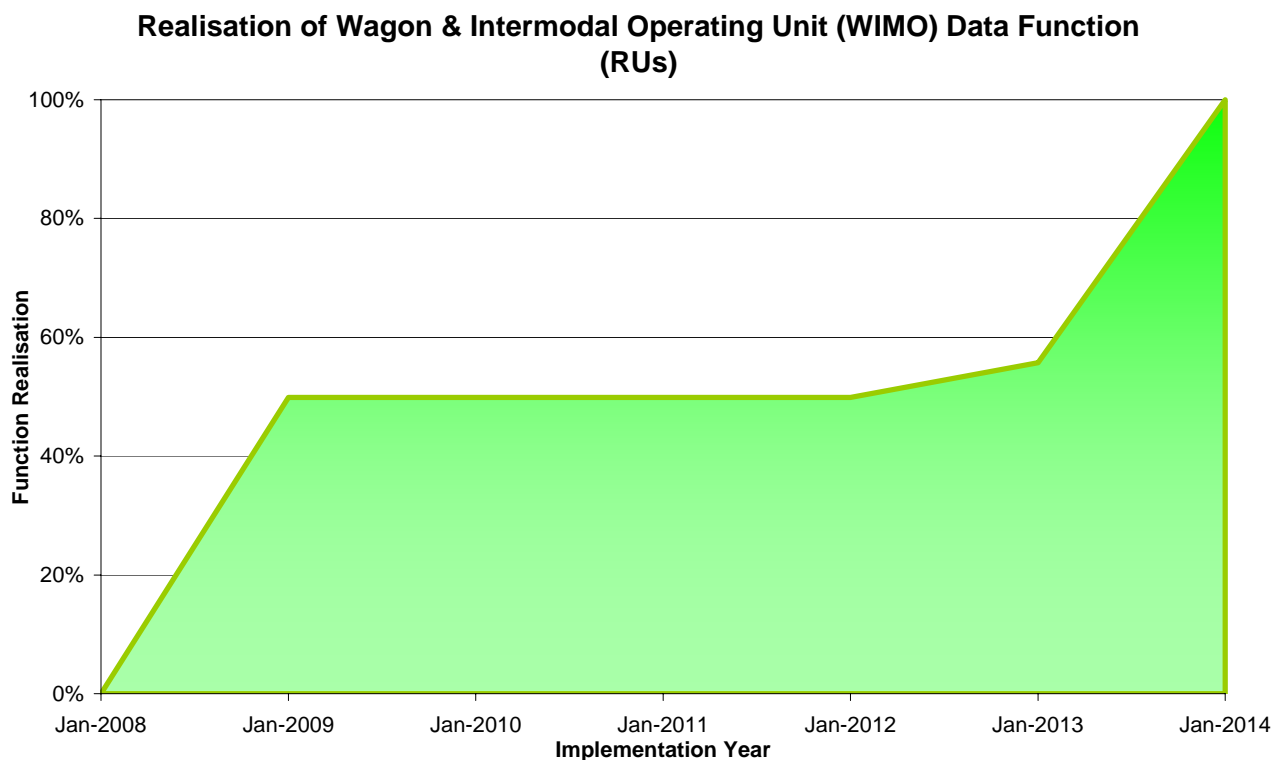


Figure 15 – TAF TSI WIMO Data Realisation



2.4.2.3 Realisation of the Wagon Movement Function (Milestone)

TAF TSI requirement:

For the reporting of the movement of a wagon, the following data must be stored and electronically accessible

- Wagon Release notice
- Wagon Departure notice
- Wagon Yard arrival
- Wagon Yard departure
- Wagon Exceptions message
- Wagon Arrival notice
- Wagon Delivery notice

There is existing functionality for the Wagon Movement function, like the WIMO Function as stated above. The graph below reflects that nearly 40% of the RU community can comply with the requirements early in the SEDP. The coherent late deployment timeline at the end of the SEDP illustrates the integration of those without current capabilities in rapid deployment approach.

Realisation of Wagon Movement Function (RU)

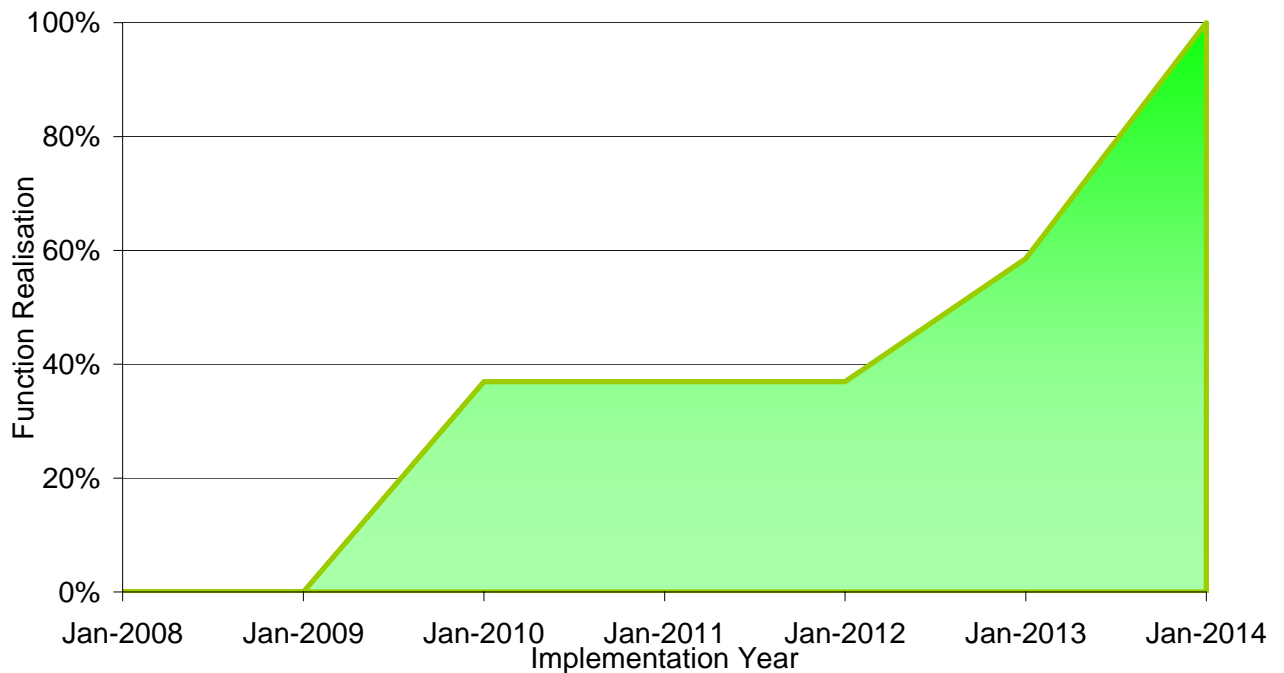


Figure 16 – TAF TSI Wagon Movement Realisation



2.4.2.4 Realisation of the Shipment ETA Function (Milestone)

TAF TSI requirement:

ETA: Estimated Time of Arrival

ETA for the shipment is the most important information for a customer
The ETA for the Wagon must be sent to the LRU.
The ETA must be electronically stored along with wagon movement
For each wagon the Lead RU must establish/update a wagon trip plan

The Shipment ETA Function reflects a coordinated and coherent implementation at the end of the SEDP. Due to the enormous effort involved in the realisation coupled with the dependence on earlier functions, this function is well-coordinated and consistent across the industry.

Realisation of Estimated Time of Arrival (ETA) Function (RUs)

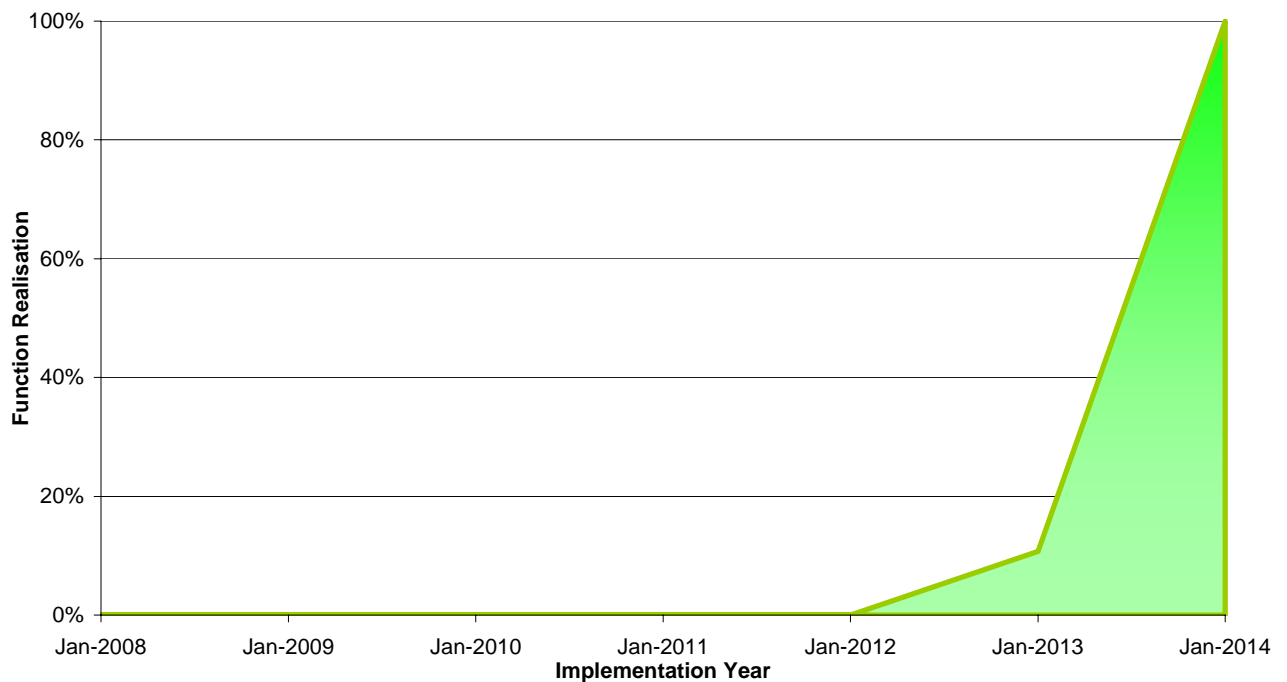


Figure 17 – TAF TSI Shipment ETA Realisation



2.5 Related Deliverables

The following Deliverables are related to this Deliverable 5.

Deliverable
Deliverable 1 - Inventory of the relevant legacy IT applications.
Deliverable 2 – Definition of the functional and performance requirements and of the associated data necessary to deliver the TAF system. Includes specifications for: <ul style="list-style-type: none"> – Wagon/ILU Trip Planning. – Wagon & Intermodal Unit Operating Data – Reference Files – Infrastructure Restriction Notice Data – Global Architecture document for the TAF TFI system. TAF TSI Data & Message Model. – Technical and interface requirements for the TAF system and its potential sub/client systems. Common Interface Specification.
Deliverable 3 - Overall TAF system development plan from concept-to-delivery. Includes: <ul style="list-style-type: none"> – TAF system architecture configurations. – Roll-out plan. – Identification of the appropriate governance structures underpinning the development of the TAF system as well as its operation throughout its lifetime. <ul style="list-style-type: none"> – Assessment of the total lifecycle costs (LCC) associated with the rollout and operation of the TAF system. – Investment plan.



2.6 TAF TSI Realisation Project

The European Commission views the rejuvenation of the Rail Freight sector as essential for the continued, sustainable growth of Europe as a trading bloc and the use of Telematics Systems to improve interoperability is a critical part of this strategy. One of the requirements laid down in Regulation 62/2006 is the identification of the appropriate governance structures to implement the Telematic Applications for Freight services, Technical Specifications for Interoperability (TAF TSI) based on the SEDP.

TAF TSI realisation is the one of the largest projects in the European Rail Freight Industry to date. It also requires high investment and a long realisation timescale (2008-2013). Experience with even smaller scale initiatives has clearly demonstrated that an appropriate Governance structure is one of the key success factors for such a project.

2.6.1 Governance & Management

The functions of TAF TSI Governance are contained in Deliverable 3.

2.6.2 Realisation Project Sequence

The project sequence assumed during the development of the Strategic European Deployment Plan is SEDP Approval; Common Components Realisation; Existing Systems Enhancement; Individual Realisation Projects; TAF TSI Operation and Project Closedown.

2.6.2.1 SEDP Approval

The first step for the realisation phase of the TAF TSI is the acceptance of an approved Strategic European Deployment Plan by the EC. It has been assumed for the purposes of preparing the SEDP that the approval phase will take place during 2007.

2.6.2.2 Common Components Realisation

The second step for TAF TSI realisation is the development of the common components of the TAF TSI. All of the individual plans of the industry are based on the availability of the Common Interface in particular, in mid-2008. Any delay during 2007 to the procurement /development of the Common Components is likely to have an immediate knock-on effect on the SEDP timescales.

2.6.2.3 Existing Systems Enhancement

The third step in the realisation programme will be the enhancement of the existing shared/common systems, both from the point of view of TAF TSI functionality and also integration with the Common Components. The exact work to be undertaken and any funding assistance will depend on the first two steps in the programme.

2.6.2.4 Individual Realisation projects



The fourth step, in parallel with the third step, will be the funding and realisation of each individual plan from industry members. The development of the SEDP assumed that confirmation of funding and resources will be undertaken during 2007, in parallel with steps 1 and 2 above.

2.6.2.5 TAF TSI Operation and Project Closedown

Once the TAF TSI Common Components are operational, the governance to manage the ongoing operation for the industry will be put in place. At the end of the SEDP Programme (anticipated in the SEDP to be the end of 2013), the realisation part of the programme will be closed down, with any further development work being handled by the TAF TSI Operational governance.



3 Risk Assessment

Several Functions from the TAF TSI have received responses from the Railway actors which differ in planned implementation by a few years. These differences or gaps need a careful analysis in order to evaluate the consequences and propose appropriate compromise solutions.

The following risks have been specifically studied during the course of preparation of this plan and addressed by the Steering Committee.

Material Risk 1: Only mandatory elements of TAF TSI are included in the SEDP.

Industry Response: Non mandatory functions related to the TAF TSI can be implemented by each actor in the European Rail Industry, therefore they are not needed in the SEDP.

Material Risk 2: A decentralised WIMO architecture requires all Actors to have large, sophisticated data bases with the capability of rapid responses to complex and varied inquiries from; RUs, Customers and Fleet Managers.

Industry Response: The European Rail Freight Industry considers for business reasons that Wagon & Intermodal Operating data must be stored in databases of their choice whether individual or shared, not one centralised database.

Material Risk 3: The impact of implementing multiple systems at the same time in RUs may cause delays.

Industry Response: The concurrent implementation of wagon movement reporting, train information, wagon & intermodal operating data and ETAs will be completed in a phased way over a period of time, avoiding the risk of delay by implementing several systems at the same time.

Material Risk 4: Adhoc Path Request may be realised in some RUs before some IMs.

Industry Response: If the Ad Hoc Path Request functionality is available early at some RUs it will be used to communicate the request to IMs using whatever current mechanism available at the IM.

Material Risk 5: RU Customer prioritisation may change during the project

Industry Response: Whether RU prioritisation changes or not during the project, the SEDP responses from RUs have taken into account the difficulties of implementing each TAF TSI function. In any event, the plan will be frequently monitored over the course of its implementation and reviewed as necessary