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## Report

### *6<sup>th</sup> TAF TSI IMPLEMENTATION STATUS REPORT OF THE EUROPEAN UNION AGENCY FOR RAILWAYS – 1<sup>st</sup> HALF 2017*

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**Abbreviations**

<b>Abbreviation</b>	<b>Definition</b>
CEF	Connecting Europe Facility
CER	Community of European Railway and Infrastructure Companies
CI	Common Interface
CRD	Central Reference Database
DI	Degree of Implementation
EC	European Commission
ECM	Entity in Charge of Maintenance
EIM	European Rail Infrastructure Managers
EPTO	European Passenger Transport Operators
ERA	European Union Agency for Railways (also referred to as Agency)
ERFA	European Rail Freight Association
ESC	European Shippers' Council
ETA	Estimated Time of Arrival
GCU	General Contract for Use of Wagons
GIS	Geographical Information System
ICG	Implementation Cooperation Group
IM	Infrastructure Manager
INEA	Innovation and Networks Executive Agency
JSG	Joint Sector Group
NCP	National Contact Point
PCS	Path Coordination System by RNE
PM <sup>2</sup>	Official Project Management Methodology of the European Commission
RailData	International organisation of European cargo Railway Undertakings. It is established as special group of the International Union of Railways (UIC)
RISC	Rail Interoperability and Safety Committee
RNE	Rail Net Europe
RSRD	Rolling Stock Reference Database
RSRD <sup>2</sup>	Rolling Stock Reference Database implementation made by UIP members
RU	Railway Undertaking
TAF	Telematics Applications for Freight

<b>Abbreviation</b>	<b>Definition</b>
CEF	Connecting Europe Facility
TIS	Train Information System developed by RNE
TSI	Technical Specification for Interoperability
UIC	Union Internationale des Chemins de fer
UIRR	International Union for Road-Rail Combined Transport
UIP	International Union of Wagon Keepers
UITP	International Organisation for Public Transport
UNIFE	Association of the European Rail Industry
WIMO	Wagon and Intermodal Unit Operational Database

## Reference documents

Ref. N°	Title	Reference	Version
(1)	TAF-TSI Master Plan	TAF Master Plan – v4.0	17.01.2013
(2)	NOTE TO ERA EXECUTIVE DIRECTOR: Assessment of TAF TSI implementation by the European Railway Agency	Ref. Ares(2014)1706338	26.05.2014
(3)	1 <sup>st</sup> Status Report in 2014 of the European Railway Agency for European Commission regarding the Implementation of TAF TSI.	1 <sup>st</sup> Status Report ERA-REP-114 - IMPL-2015-01	21.04.2015
(4)	2 <sup>nd</sup> Status Report in 2014 of the European Railway Agency for European Commission regarding the Implementation of TAF TSI.	2 <sup>nd</sup> Status Report ERA-REP-114 - IMPL-2015-02	27.11.2015
(5)	3 <sup>rd</sup> TAF TSI Implementation Status Report of the European Union Agency for Railways – 2 <sup>nd</sup> Half 2015	3 <sup>rd</sup> TAF TSI Implementation Status Report ERA-REP-114-IMPL-2016-01.	26.07.2016
(6)	4 <sup>th</sup> TAF TSI Implementation Status Report of the European Union Agency for Railways – 1 <sup>st</sup> Half 2015	4 <sup>th</sup> TAF TSI Implementation Status Report ERA-REP-114-IMPL-2016-02.	22.12.2016
(7)	5 <sup>th</sup> ERA TAF TSI Implementation Cooperation Group held on 22 <sup>nd</sup> and 23 <sup>rd</sup> March 2017	<a href="#">Minutes TAF Cooperation Group 20170322 23 Draft v02</a>	27.03.2017

## Reference legislation

Ref. N°	Document Reference	Title	Last Issue
[1]	Directive 2008/57/EC	Interoperability of the rail system	17.06.2008
[1]	Directive (EU) <a href="#">2016/797</a>	Directive of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union	11.05.2016
[2]	TAF TSI Regulation No 1305/2014	Commission Regulation (EU) No 1305/2014 of 11 December 2014 on the technical specification for interoperability relating to the telematics applications for freight subsystem of the rail system in the European Union and repealing the Regulation (EC) No 62/2006	11.12.2014

Ref. N°	Document Reference	Title	Last Issue
[3]	Corridor Regulation N° 913/2010	Regulation (EU) No 913/2010 of the European Parliament and of the Council of 22 September 2010 concerning a European rail network for competitive freight	22.09.2010
[4]	CEF Regulation	Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010	11.12.2013

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## 1. Executive summary

This report contains the data provided to report the status of the implementation by **30.06.2017** of the following TAF TSI [2] functions:

- Reference Files Function:
  - Company Codes
  - Primary Location Codes
- Common Interface Function
- Rolling Stock Reference Database (RSRD)
- Train Running Information Function
- Wagon and Intermodal Unit Operational Database (WIMO)
- Train Composition Message
- Consignment Note Data

This sixth report, compared to the fifth report issued in June 2017, provides a view of the implementation of these eight functions, agreed by the Agency TAF TSI Cooperation Group in March 2017. One conclusion can be drawn from the fact that number of companies reporting has significantly increased compared to the previous report, because 194 companies<sup>1</sup> responded out of potential 457 companies registered in the JSG Reporting Tool (<http://taf-jsg.info/>). Therefore the number of companies reported is close to 43% of the potential responding companies.

To better evaluate the current degree of implementation for each function, the data provided is compared to the baseline defined in the Master Plan (1)<sup>2</sup> to implement the TAF TSI [2] regulation delivered by the European Rail Sector in 2013. The TAF-TSI Master Plan (1) was submitted to the TAF-TSI Steering Committee, DG MOVE and the Agency on 15th November, 2012. A total of 58 companies, representing over 85% of the total Tonne and Track Kilometres in Europe responded with their individual plans for implementation. The target dates are based on the corresponding TAF-TSI function to be implemented and they were set when 80% or more of the respondents indicated a final implementation.

The data provided is a self-declaration made by every company about the level of implementation of the above mentioned functions. Most of the data has been collected through an entity set-up by the European Rail Sector, the so called Joint Sector Group (JSG), to technically support the implementation of the system. The members of the JSG are:

- CER<sup>3</sup>
- UIC
- EIM
- UNIFE

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<sup>1</sup> See Annex 1

<sup>2</sup> See «Reference Documents».

<sup>3</sup> See «Abbreviations» for acronyms.

- UIRR
- ESC
- UIP
- RNE
- ERFA
- RAILDATA
- UITP
- EPTO

In addition, the Agency has kept the “Degree of Implementation” for all companies, which have not delivered data for the current report, but data from preceding deliveries was available. All these companies were duly consulted before keeping their reporting values.

Regarding the function “Rolling Stock Reference Database”, the implementation data has been collected by the JSG in close cooperation with the International Union of Wagon Keepers, UIP. They have submitted to the Agency a file containing the status information of 108 companies across Europe.

The following key findings per TAF function can be highlighted:

- In general terms, with reference to the group of companies reporting in the last three implementation reports, we can observe an increase of companies having finished implementation of the earliest TAF TSI functions.
- The majority of IMs has completed the population of the Common Reference Files for locations on their network.
- Company codes are already widely used within the sector, by both IMs and RUs. Nevertheless, some difficulties still remain in the process conducting to get the Company Codes, in particular for newcomers and wagon keepers.
- The majority of RUs is still developing the common interface, while most of the IMs have already finished the implementation of the common interface.
- The deployment of the Rolling Stock Reference Database has been already launched. Although the number of Railway Undertakings reporting about this function has significantly increased, still mainly UIP members have delivered data concerning the implementation of this function. Regarding the data delivered, these Wagon Keepers companies’ members of UIP have already completed the implementation of this function. Nevertheless, the accomplishment of this function considering the whole European fleet of wagons is clearly delayed.
- The level of realisation of Train Running Information is progressing mostly in accordance with the implementation schedule quoted in the TAF TSI Master plan by 2017, in particular for the Infrastructure Managers, meanwhile the evolution for the Railway Undertakings has significantly improved meeting the milestones quoted in the TAF TSI Master Plan (1).
- The level of fulfilment of the Wagon and Intermodal Unit Operational Database is improving in comparison with the realisation milestones committed on the TAF TSI Master Plan (1). Indeed, the actual value is however slightly behind the expected implementation value by 2017, when half of

Railway Undertakings respondents committed to deploy this function by 2016. Nevertheless, the whole implementation is expected by 2018.

- Concerning the level of implementation of the Train Composition Message, the actual implementation status is significantly below the expectations reported by the companies on the TAF TSI Master Plan (1).

Furthermore, the report identifies the TAF TSI functions where the sector shall allocate more resources to meet the target implementation date quoted in the TAF TSI Master Plan (1), in particular the Rolling Stock Reference Database, the Wagon and Intermodal Unit Operational Database and the Train Composition Message. These functions are either already delayed or on the way to miss the implementation deadlines quoted on the TAF TSI Master Plan (1).

In particular, this report shows that the implementation of the Rolling Stock Reference Database (RSRD) by 1<sup>st</sup> half of 2017 is in average for the overall European rail sector delayed compared to the declared target implementation date in the Master Plan, 2015. The implementation data used in this report allows us to conclude that the RUs have already started delivering information about the implementation of the TAF TSI [2] compliant RSRD database.

## 2. Introduction

This 6<sup>th</sup> Status Report is delivered in accordance with the legal frame provided by the Commission Regulation (EU) No 1305/2014 of 11 December 2014 on the Technical Specification for Interoperability relating to the Telematics Applications for Freight subsystem of the rail system in the European Union and repealing the Regulation (EC) No 62/2006 in force, TAF TSI [2].

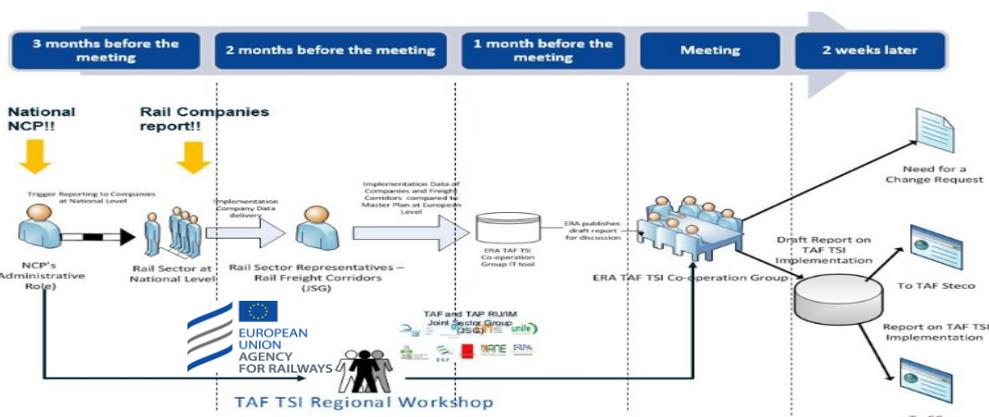
In particular, Article 5 of the Regulation [2] attributes to the European Union Agency for Railways, named the Agency along the report, the task to assess and oversee the implementation of the Regulation to determine whether the agreed objectives and deadlines have been achieved and to provide an assessment report to the TAF steering committee. Furthermore, the European Commission (EC) issued a letter on 26.05.2014 (2) describing the tasks expected to be carried out by the Agency for the Assessment of TAF TSI [2] implementation. In addition, since June 2016 the Agency becomes a system authority for Telematics. This new role prescribed on article 23 of Regulation (EU) 2016/796 requires the Agency to assist the Commission in the monitoring of deployment of specifications for telematics applications in accordance with relevant TSIs.

Beyond this, this activity meets the 4<sup>th</sup> Strategic Priority of the Agency work programmes 2017 and 2018, “Simplified Access for Customers”. On this basis, the Agency launched in October 2014 the Co-operation Group for the Implementation of Telematics Applications for Freight. The Co-operation Group performs the following tasks:

- To assess the reports from the sector (companies, NCPs and RBs) about the TAF TSI [2] implementation.
- To compare the data received with the content of the TAF TSI Master Plan (1) and assess the progress of implementation to determine whether the objectives pursued and deadlines have been achieved.
- To use Key Performance Indicators (KPIs) previously agreed between the Agency and the Rail Sector to assess the evolution of the deployment of the system and report twice per year to the European Commission and to the TAF Steering Committee.
- To perform a dissemination campaign to NCPs and assist them to follow-up the TAF TSI [2] implementation at national level.

All these activities are performed in close cooperation with the different stakeholders, who will provide implementation reports. The Figure below shows the process allowing the Agency to perform the above listed activities:

Figure 1: Agency TAF TSI Implementation Cooperation Group process.



The Agency has to inform the EC about the results of this monitoring and has to advise the EC about the possible changes needed. In a multimodal context, the Agency has to guarantee that any of the actions taken do not create additional obstacles for multimodal environment.

In addition, the effort made by the European rail sector to deploy the TAF TSI [2] system is also supported by the Connecting Europe Facility (CEF) [4] programme launched by the European Commission and managed by the INEA Executive Agency.

The CEF<sup>4</sup> [4] will better mobilise private and public financing and allow for innovative financial instruments such as guarantees and project bonds to gain maximum leverage from this EU funding injection at it's a financial tool at disposal of all the companies implementing TAF TSI [2] regulation.

### 3. Context

The final version of the TAF-TSI Master Plan (1), establishing the implementation timeline for the Regulation, was submitted to the TAF-TSI Steering Committee, DG MOVE and the Agency on 15<sup>th</sup> November 2012.

A total of 58 companies, representing over 85% of the total Tonnes and Track Kilometres in Europe responded with their individual plans for implementation. Target dates were set when 80% or more of the respondents indicated a final implementation. The target dates are based on the corresponding TAF-TSI function to be implemented.

An analysis, based on Corridor Regulation N° 913/2010 [3], was also incorporated into this Master Plan (1). As the Corridor Regulation specifically addresses Short Term Path Requests and Train Running Information, these were the only functions included. It should be noted that the TAF-TSI is a supporting tool – and not a prerequisite – for the implementation of Regulation N° 913/2010. Therefore the later date of implementation of the TAF-TSI should have no impact on the implementation of 913/2010.

In order to collect the data and to boost the involvement of the higher possible number of companies, the European Union Agency for Railways has closely worked with the European Rail Sector to set-up the appropriate mechanism to collect the data concerning the deployment of the above mentioned functions. Indeed, the European Rail Sector grouped through the entity Joint Sector Group (JSG) and the Agency has set-up two IT tools to collect and visualize the data submitted by the European rail companies, Infrastructure Managers, Railway Undertakings and Wagon Keepers. For this purpose the companies submit their information to the JSG IT tool through a Web service available for all the companies registered. For the time being the **number of registered companies is 457 thanks to the information delivered by the National Contact Points (NCPs)**. Once the data is collected, the raw data is delivered to the Agency, who incorporates this information in the Agency IT tool for TAF TSI [2] monitoring. This IT tool comprises a database to store the data and a GIS tool to visualize on maps the progress of the implementation. There are three groups of maps:

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<sup>4</sup><https://ec.europa.eu/inea/en/connecting-europe-facility/2016-cef-synergy-call>

- Maps to report about common functions. These maps show the degree of implementation of the Reference Files (Company Codes and Primary Location Codes) and the Common Interface functions at European level.
- Maps to report about RU-IM Communication functions. These maps show the degree of implementation at country level of the RU-IM Communication functions. Thereby, the maps used in this report represent the progress of the implementation at country level and at corridor level of the following functions :
  - Short Term Path Request,
  - Train Running Information,
  - Train Preparation,
  - Service Disruption and
  - Unique Train Identifiers.
- Maps to report about Railway Undertaking's functions. These maps show the degree of implementation at country level of the functions to exchange data amongst Railway Undertakings and Wagon Keepers:
  - Consignment Note Data Function,
  - Wagon and Intermodal Unit Operational Database (WIMO) Function,
  - Wagon Movement Function,
  - Shipment ETA Function and
  - Rolling Stock Reference Database
  - Train Composition Function.

The scope of the present 6<sup>th</sup> report is to inform about the deployment of the functions scheduled to be implemented by 1<sup>st</sup> half 2017 in the Master Plan (1) delivered by the sector for the implementation of the TAF TSI [2] system. This temporary scope was agreed by the members of the Co-operation Group for the Implementation of Telematics Applications for Freight in the 5<sup>th</sup> meeting (7) held in March 2017, this report provides information about the implementation of the following functions:

- Reference Files Function:
  - Company Codes
  - Primary Location Codes
- Common Interface Function
- Consignment Data Function
- Rolling Stock Reference Database
- Train Running Information Function
- Wagon and Intermodal Unit Operational Database
- Train Composition Function

To have a common approach for all companies' contributors submitting implementation information, **an optional common criterion has been agreed with the representatives of the rail sector to assess the degree of deployment of TAF TSI functions.** This criterion is based on the standard division in project phases of IT projects defined in the methodology for project management in use at the European Commission (PM<sup>2</sup>). Assuming that project phases are divisions within a project where extra control is needed to effectively manage the completion of a major deliverable, then it may be ideally assimilated with each of the 12 TAF TSI functions identified in the TAF TSI Master Plan (1) to an individual IT reference implementation project.

Within every individual IT reference implementation project, we use percentages of completion as early indicators to track the progress made each period of one year (n-3, n-2, and n-1, n) over a 4-year time span. This allows detecting delays in the implementation of a particular function.

Therefore, taking into account the above mentioned assumptions, every function implementation may be considered as an individual project to be split in the following reference phases:

- **Initiating Phase:** This phase may comprise those processes performed to define a new project or a new phase of an existing project by obtaining authorization to start the project or phase. This phase includes typically the following activities:
  - Feasibility Study
  - Business Case
  - Gathering of Technical and Functional Requirements

These activities may correspond in an “optional” reference implementation to a Degree of Implementation (DI) between 0% and 25% for a particular function. If the DI is achieved at the beginning of the timeframe for the deployment of such a function, ideally deadline minus three years (deadline-3), the implementation of this function can be deemed on time.

- **Planning Phase:** this phase includes typically those activities required to establish the scope of the project, refine the objectives, and define the course of action required to attain the objectives that the project was undertaken to achieve:
  - Resource Planning
  - Project Work Planning (Working Break Down Structure)
  - Migration Planning
  - Outsourcing Plan
  - Risk Management Planning

These activities may correspond in an “optional” reference implementation to a Degree of Implementation (DI) between 25% and 50% for a particular function. If the DI is achieved ideally within the deadline minus two years (deadline-2) period, the implementation of this function could be deemed to be on time.

- **Executing Phase:** this phase may comprise those processes performed to complete the work defined in the project management plan to satisfy the project specifications. This phase includes activities such as:
  - Procurement
  - Executing
  - Testing (User Acceptance and system Integration)

- Training and Education

These activities may correspond in an “optional” reference implementation to a Degree of Implementation (DI) between 50% and 100% for a particular function. If the DI is achieved ideally within the deadline minus one year (deadline-1) period, the implementation of this function could be deemed to be on time.

- **Closing & Production:** this phase may comprise those processes performed to finalise all activities across all phases to formally close the project. Therefore, it may include the delivery of the product/service, in the context of the TAF TSI [2] deployment, the delivery of the IT system implementing a particular TAF TSI [2] function moving to production environment. These activities correspond in an “optional” reference implementation to a Degree of Implementation (DI) of 100% for a particular function. If the DI is achieved within the deadline minus ideally one year (deadline-1) period, the implementation of this function could be deemed to be on time. This level of implementation means that the company is capable to use the system in production or is using already the system in production for a particular TAF TSI function.

The above explained phases are summarised in the following Figure explaining the expected commitment of resources made for every phase of the project.

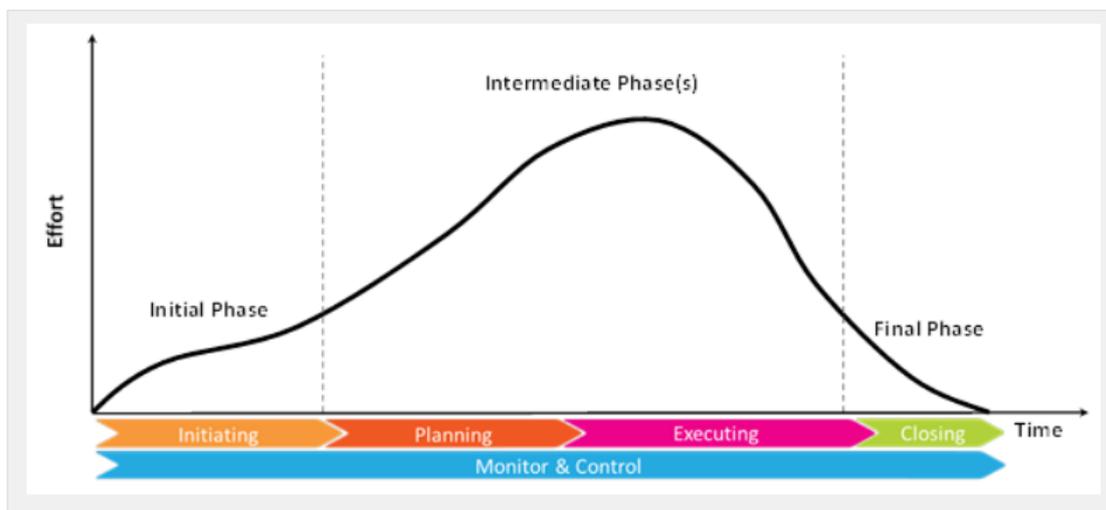


Figure 2: PM<sup>2</sup> project lifecycle.

Nevertheless, the different activities to be developed in the framework of a project to implement a particular TAF TSI [2] function should be adapted to the particular situation in every company. Therefore, every project may be assimilated, on a voluntary basis, to the addition of the four phases aforementioned (Initiating, Planning, Executing and Closing) establishing an optional comparable reference implementation to assess the progress of the implementation per company.

In conclusion, in the context of the Co-operation Group for TAF TSI Implementation there are two ways to report about the implementation of a particular TAF TSI function compared to the TAF TSI Master Plan (1):

- on one hand, companies may declare the final delivery of a particular TAF TSI function within the deadline set out in the TAF TSI Master Plan (1); in this case the implementation of this function will be deemed to be on time, and thus DI = 100% -> Dark Green colour on the map;

- on the other hand, companies may declare the Degree of Implementation (DI) for every function using the optional methodology aforementioned with different phases for the execution of the project. In this case, the declared Degree of Implementation will be colour-coded and displayed as follows:
  - Project not launched: No data -> Blue colour on the map.
  - Initiating Phase accomplished: 0% =< DI < 25% -> Red colour on the map.
  - Planning Phase accomplished: 25% =< DI < 50% -> Orange colour on the map.
  - Executing Phase accomplished: 50% =< DI < 75% -> Green colour on the map.
  - Closing & Production accomplished: DI = 100% -> Dark Green colour on the map.

#### 4. Participation in the 6<sup>th</sup> reporting session survey

##### 4.1 Responses to the survey

The number of project managers invited to report about the implementation of the TAF TSI and TAP TSI is shown in Figure 3 together with the number of responses received thereof. Starting from the first report, invitations and responses have grown in all aspects. After stagnating, responses have grown again from the 5<sup>th</sup> to the 6<sup>th</sup> reporting session.

The 6<sup>th</sup> report includes 66 WKs submitted by UIP using RSRD<sup>2</sup>.

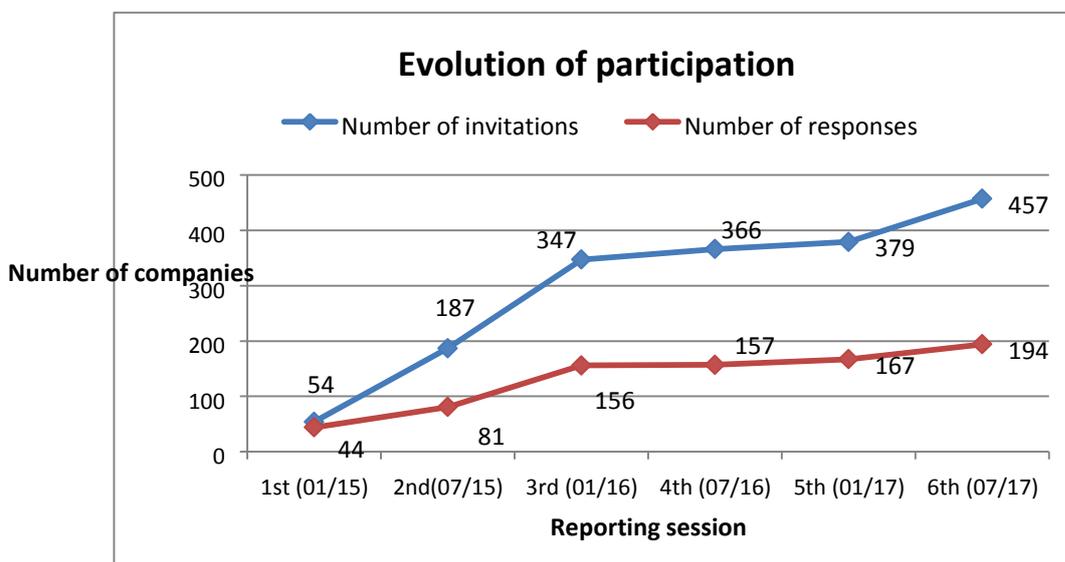


Figure 3: Evolution of participation over time

The response rate however, calculated as number of responses in relation to number of invitations, is quite stable oscillating between 42 % and 45 % since the 2<sup>nd</sup> reporting session (see Figure 4).

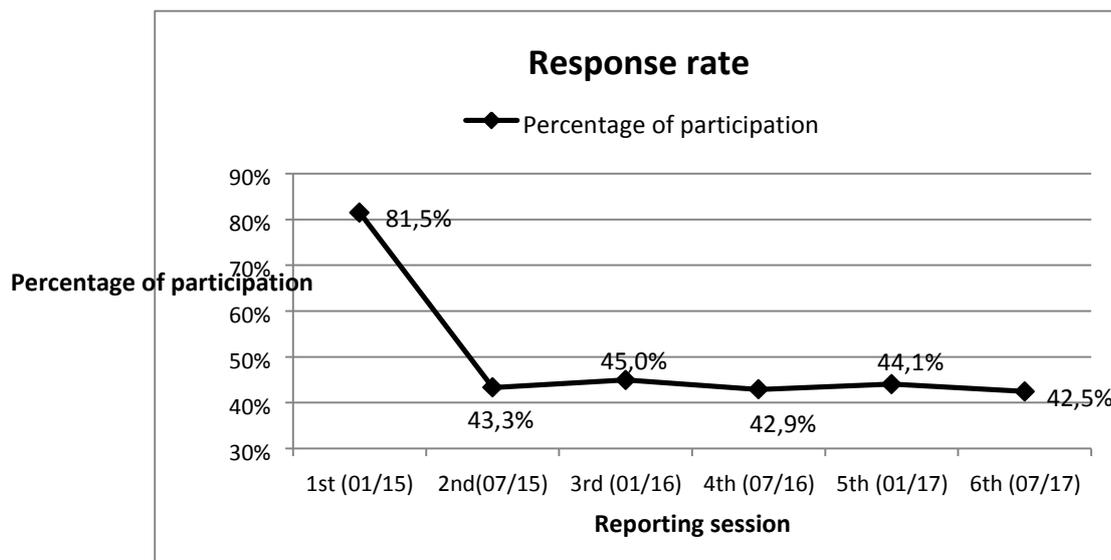


Figure 4: Evolution of response rate over time

Responses from IMs again increased compared to the previous survey. RUs-F gave slightly additional feedback this time, while the activity of Wks was similar compared to the 5<sup>th</sup> survey. Participation of ABs remains negligible.

Figure 5 indicates the distribution of total responses per country. The feedback comprises twenty-three EU Member States plus Norway, Switzerland and Turkey. The average number of answers per country is 7.

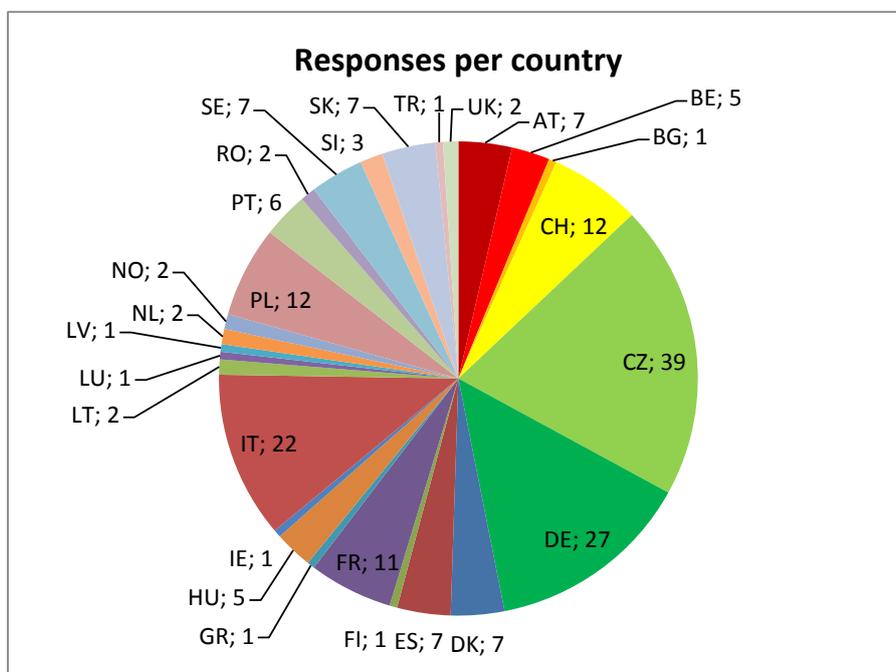


Figure 5: Number of responses per country

Figure 6 shows the distribution and the development of responses per country.

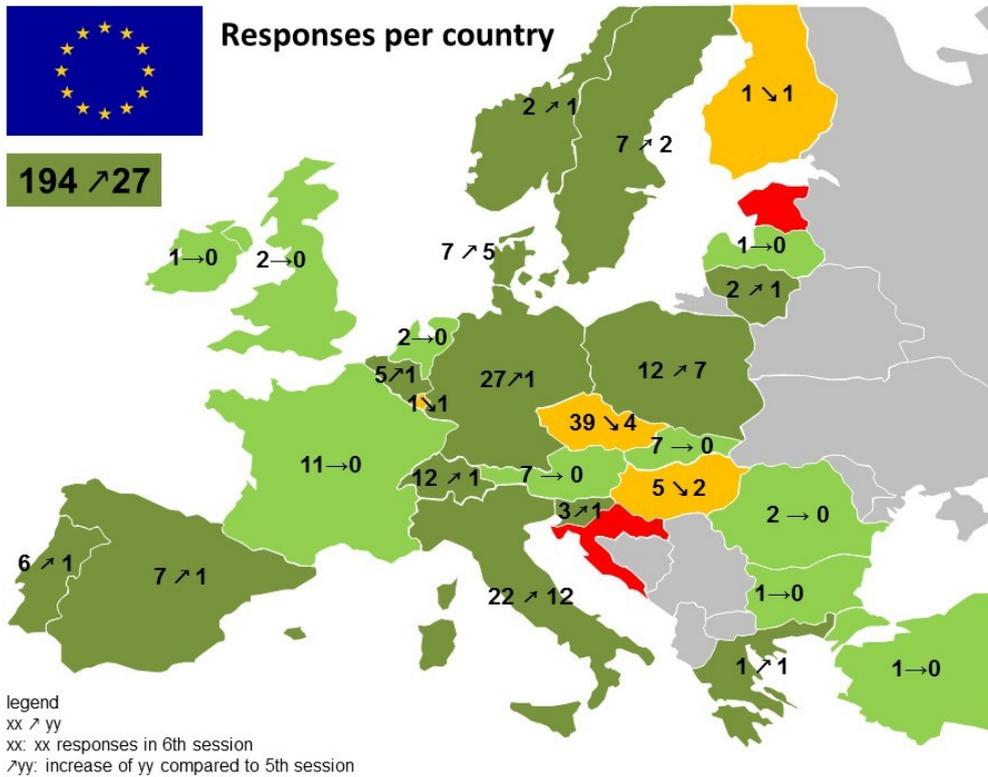


Figure 6: Evolution of responses per country

#### 4.2 Participation per company type

The total number of responses displayed in Figure 3 (194 companies) is lower than the total number of company types shown in Figure 7 hereafter (244 companies). The difference is due to the fact, that some answers affect multiple roles of companies, such as RU and WK at the same time. Nearly all of the growth in participation of 47 types of companies is caused by passenger railway undertakings participating for the first time.

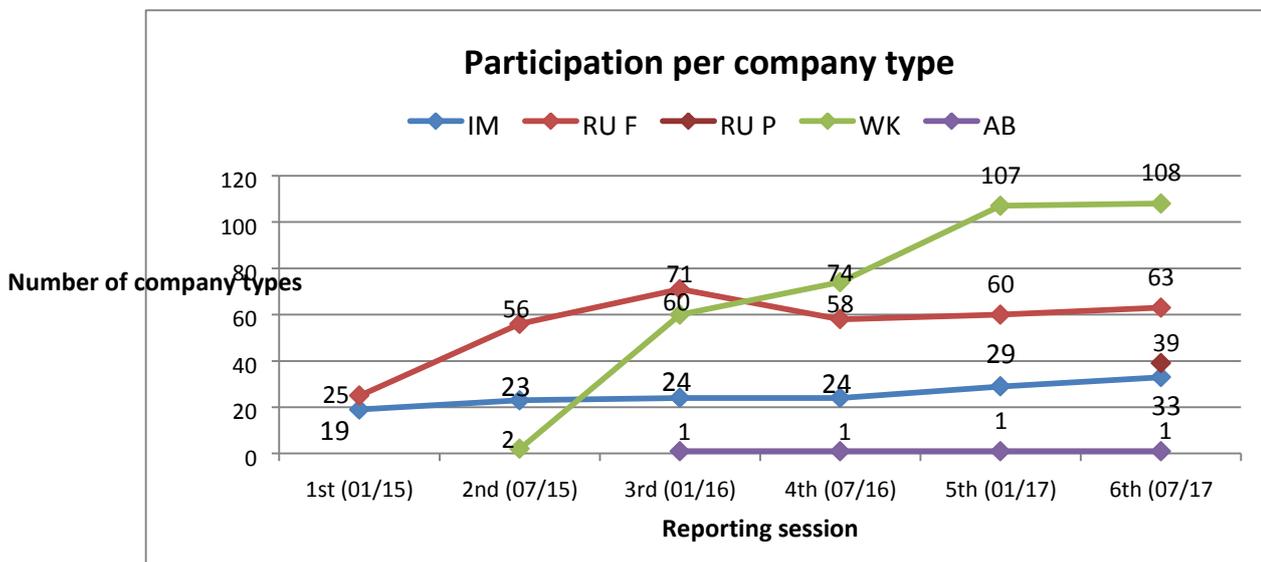


Figure 7: Evolution of participating per company type over time

**5. Implementation monitoring of TAF TSI functions**

**5.1 Common Reference Files – Primary Location Codes (IMs)**

The Target Implementation Milestone for realisation of the Primary Location Code Function (PLC) according to the TAF TSI Masterplan was 2013. This activity corresponds to Primary Location Codes, which have to be defined by IMs. Consequently, the following Figure only refers to IMs. Responses refer to initial upload of primary location codes, but update and maintenance process and use of codes is a different issue and not yet taken into account.

Figure 7 indicates, that the majority of IMs reported to have completed the Common Reference Files for locations on their network. However, complete population of PLC is not yet reached.

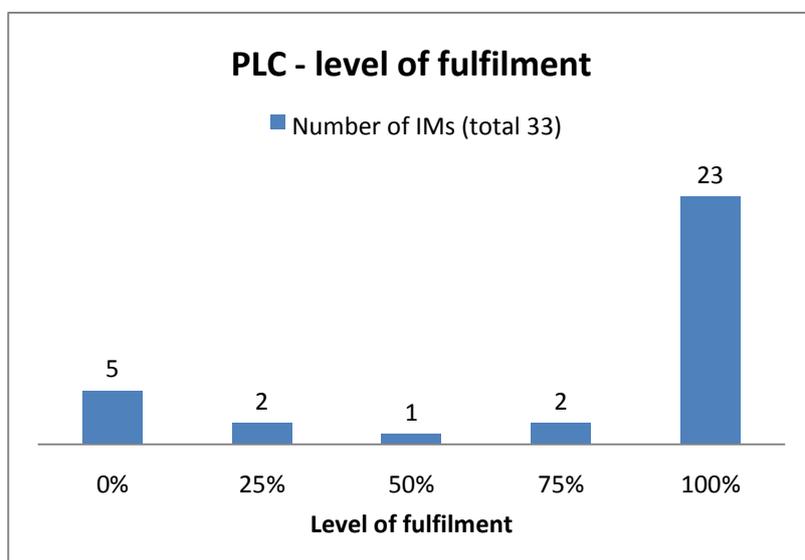


Figure 8: Common Reference Files - Primary Location Codes (PLC)

Regarding the evolution of PLC implementation, Figure 7 shows 23 IMs with complete implementation out of 33 IMs in the survey. The number of participating IMs has grown more than the ones with complete implementation, which leads to a decline to 70% of degree of implementation (see Figure 24).

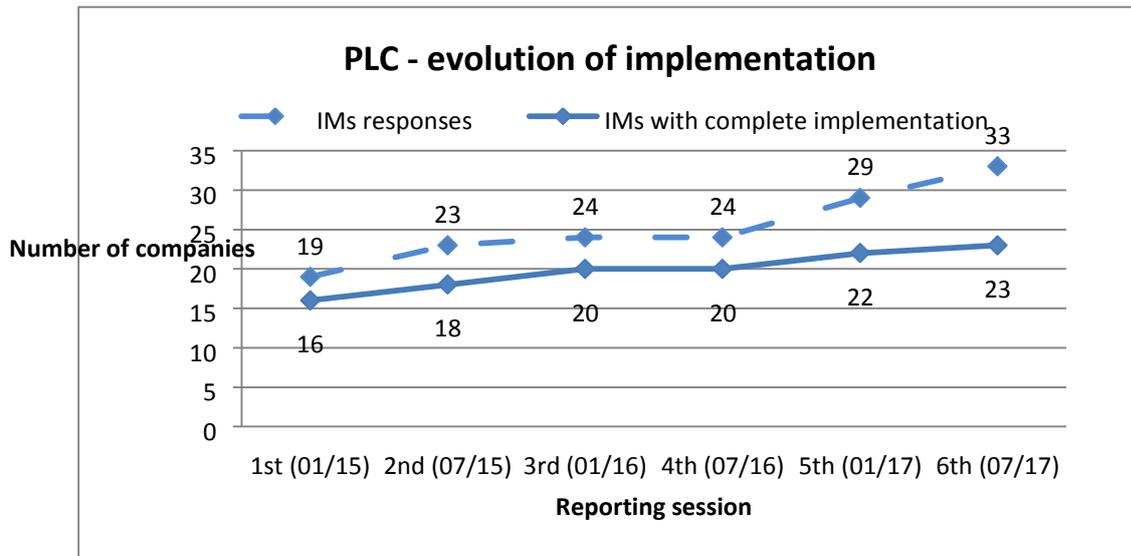
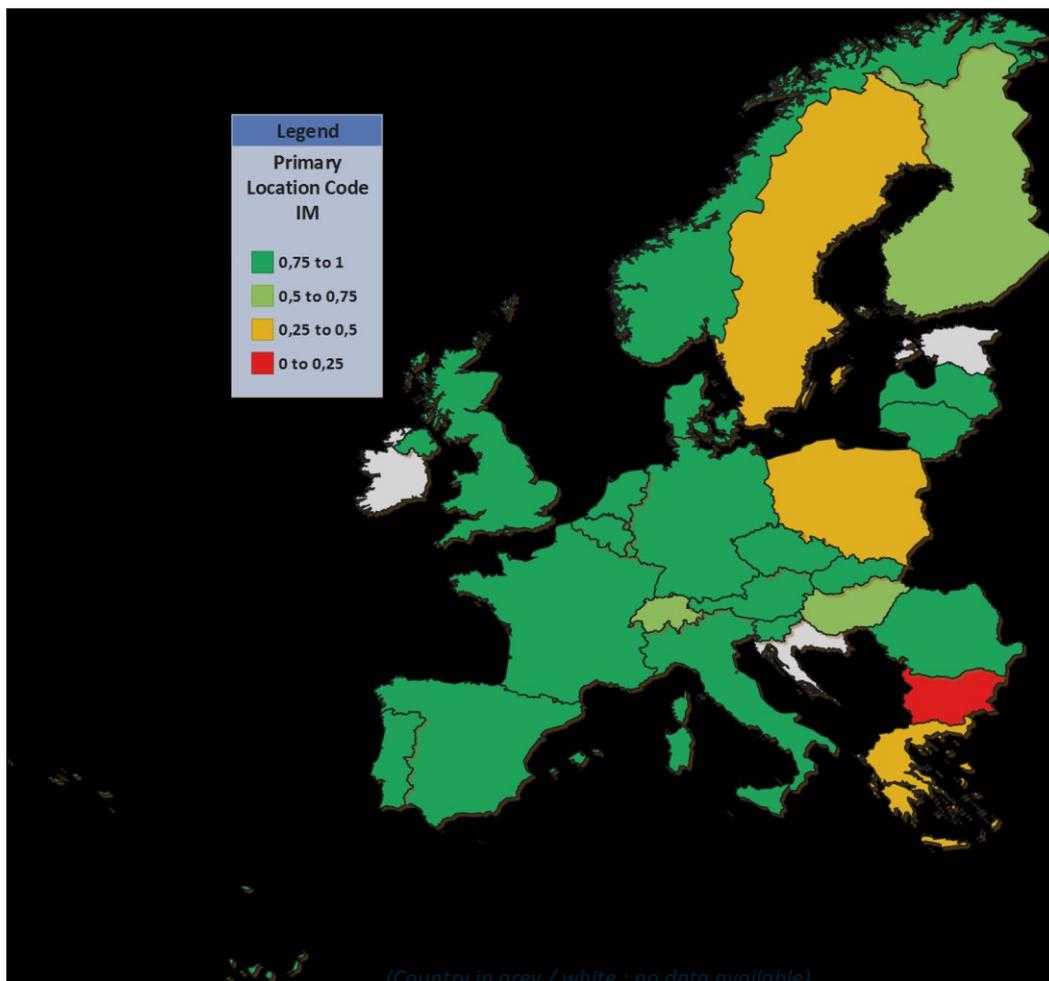


Figure 9: Evolution of PLC implementation

The Degree of Implementation (DI) of this function for 1st half 2017 per country on a map is expressed as follows:



Map 1. Primary Location Codes (IMs)

### 5.2 Common Reference Files - Company Code (all companies)

The Target Implementation Milestone for realisation of the Company Code Function (CC) according to the TAF TSI Masterplan was 2013.

The bar chart below (Figure 10) is indicating the existence and use of company codes as part of the Common Reference Files for IMs, RUs-F and Wks. For CCs only two predefined percentage steps exist, because either a company does have an own CC or not. The vast majority of companies having replied to the query possess a CC.

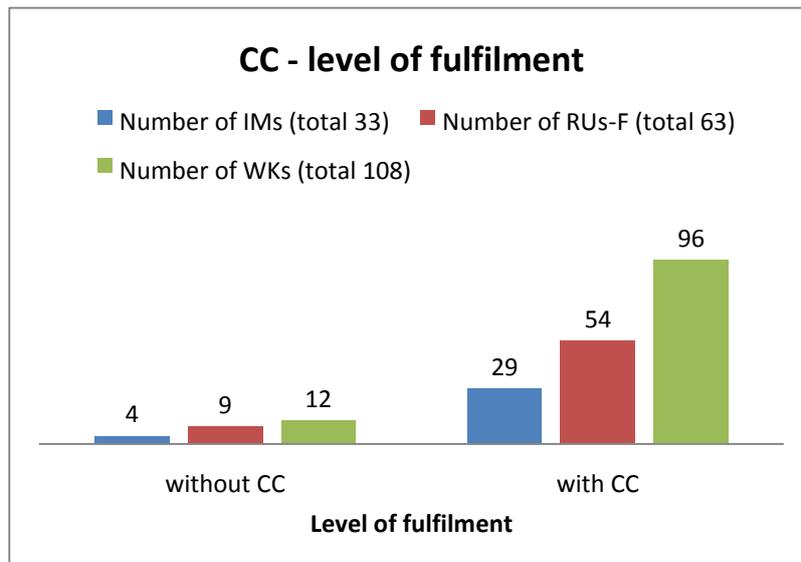


Figure 10: Common Reference Files - Company Codes (CC)

According to Figure 11, the number of companies with CCs grew slightly for all types. The degree of implementation is close to 90% for all of them.

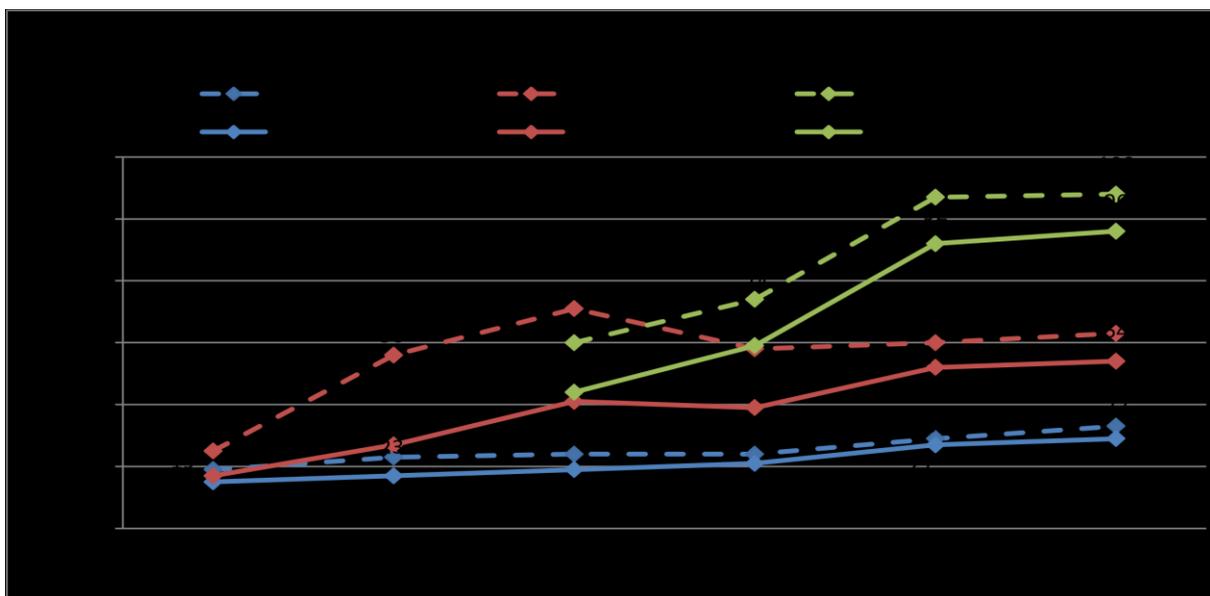
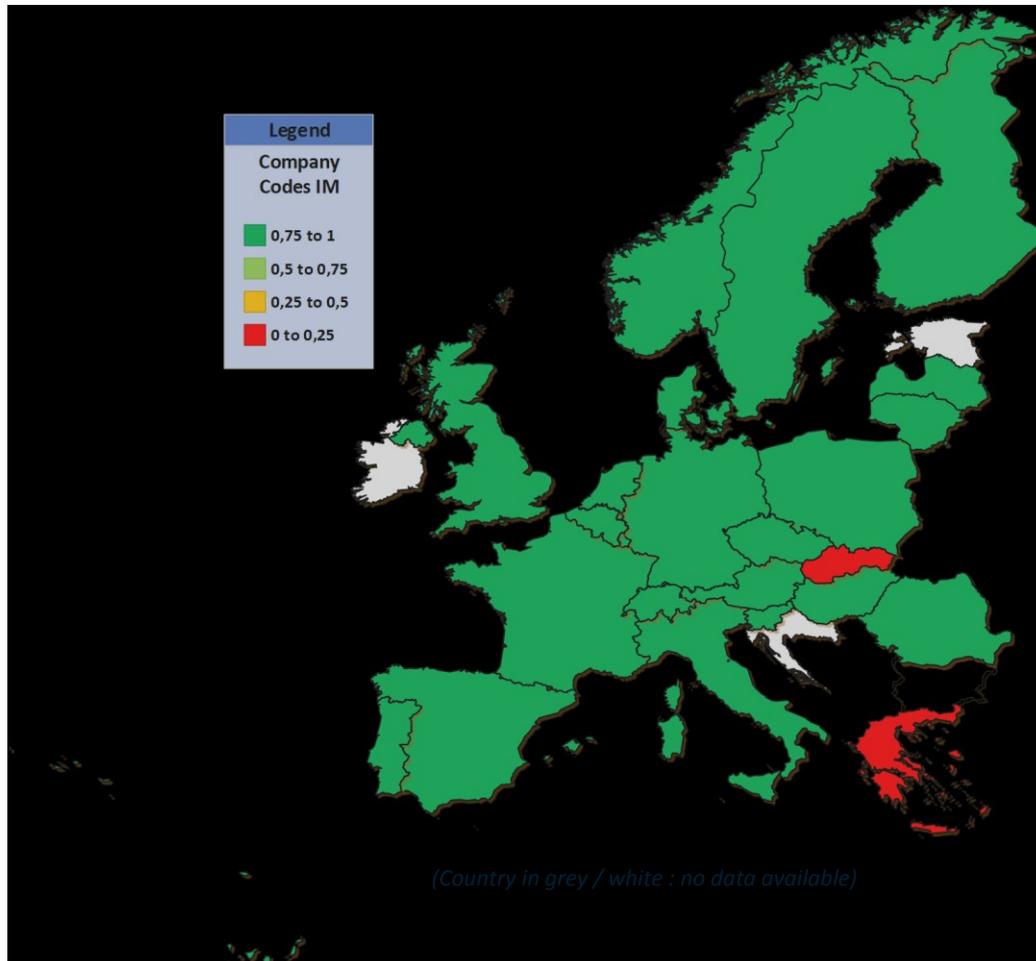


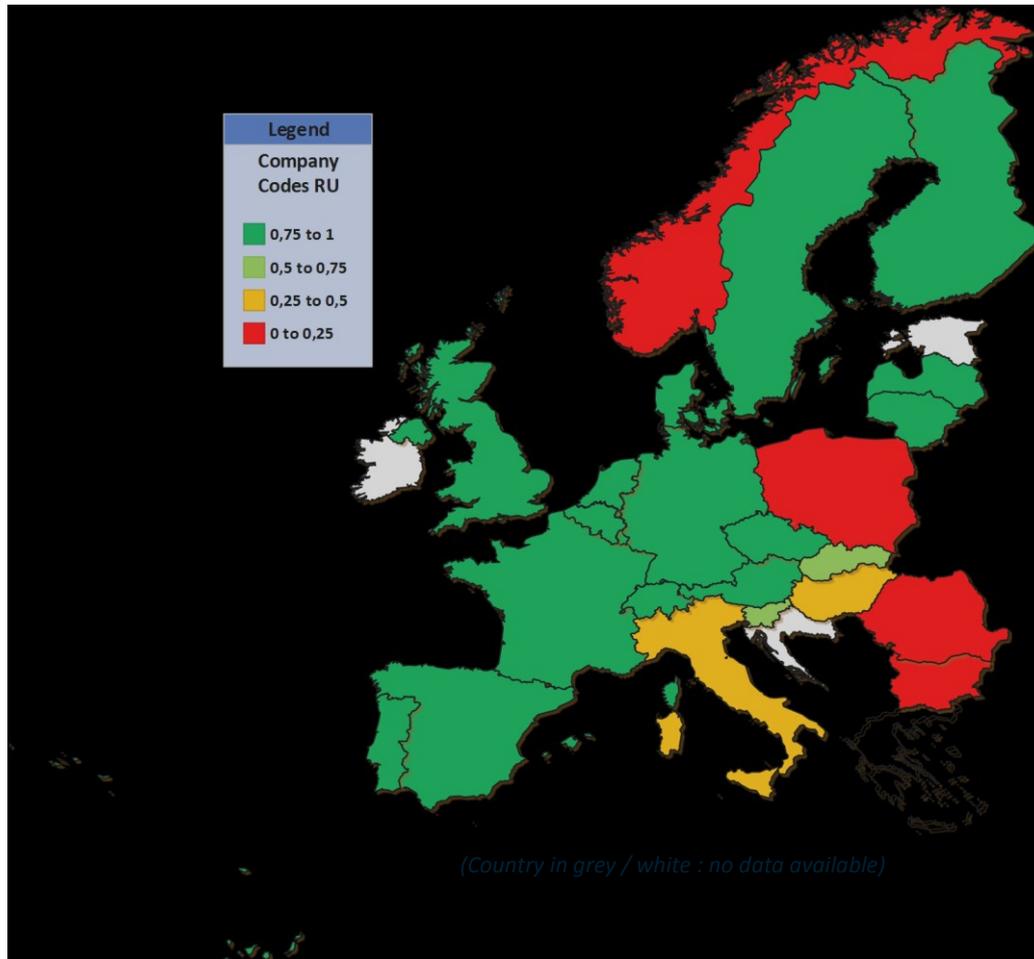
Figure 11: Evolution of implementation for Company Codes

The Degree of Implementation (DI) of this function for 1st half 2017 per country on a map is expressed as follows:



**Map 1. Company Codes (IMs)**

The Degree of Implementation (DI) of this function for 1st half 2017 per country on a map is expressed as follows:



**Map 2. Company Codes (RUs)**

### 5.3 Common Interface Implementation (all companies)

The Target Implementation Milestone for realisation of the Common Interface Function (CI) according to the TAF TSI Masterplan was 2013.

Figure 12 summarises the feedback related to the availability of CI and shows a difference in level of fulfilment between IMs, RUs-F and Wks. The CI is completely implemented by 19 IMs, 9 RUs-F and 4 Wks.

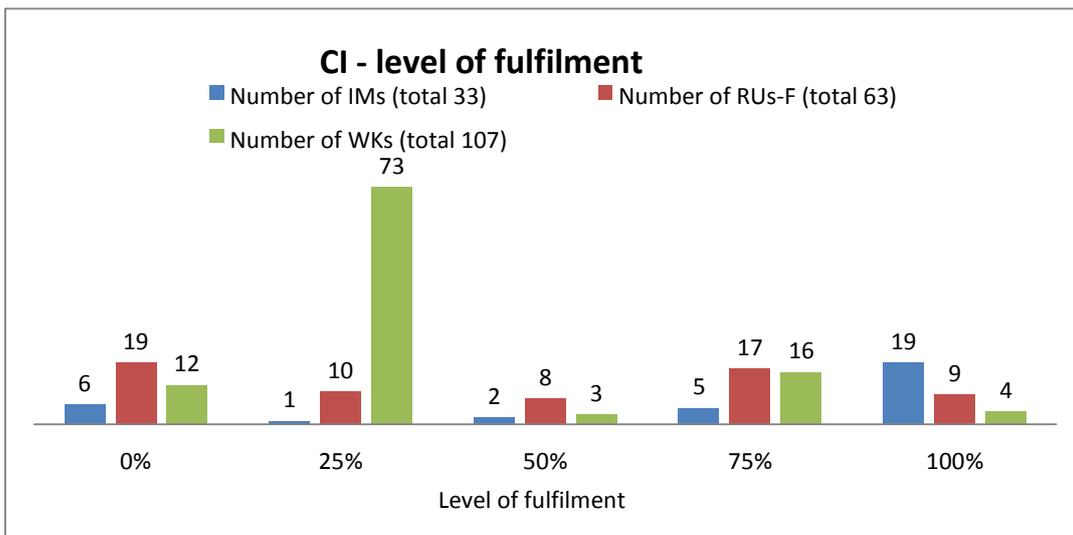


Figure 12: Common Reference Files – Common Interface (CI)

The development of complete implementation of the CI over time according to Figure 13 shows again the relation to the number of responses per company type. 60% of IMs have already finished the implementation of the CI. However, with completion being at between 10% and 15% of responding companies, the majority of RUs-F is still developing. For Wks completion is below 5%, projects have not started yet or are at initiating phase. RSRD<sup>2</sup> has yet not implemented the CI. Wks using RSRD<sup>2</sup> therefore form part of the 25% level.

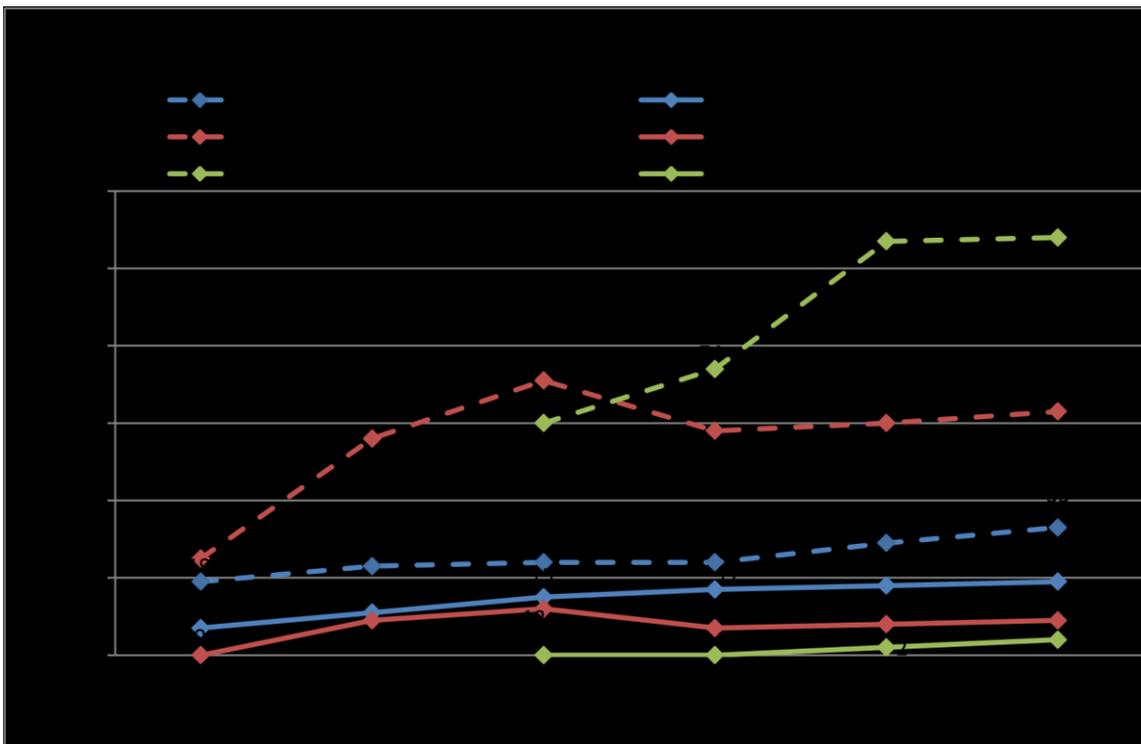
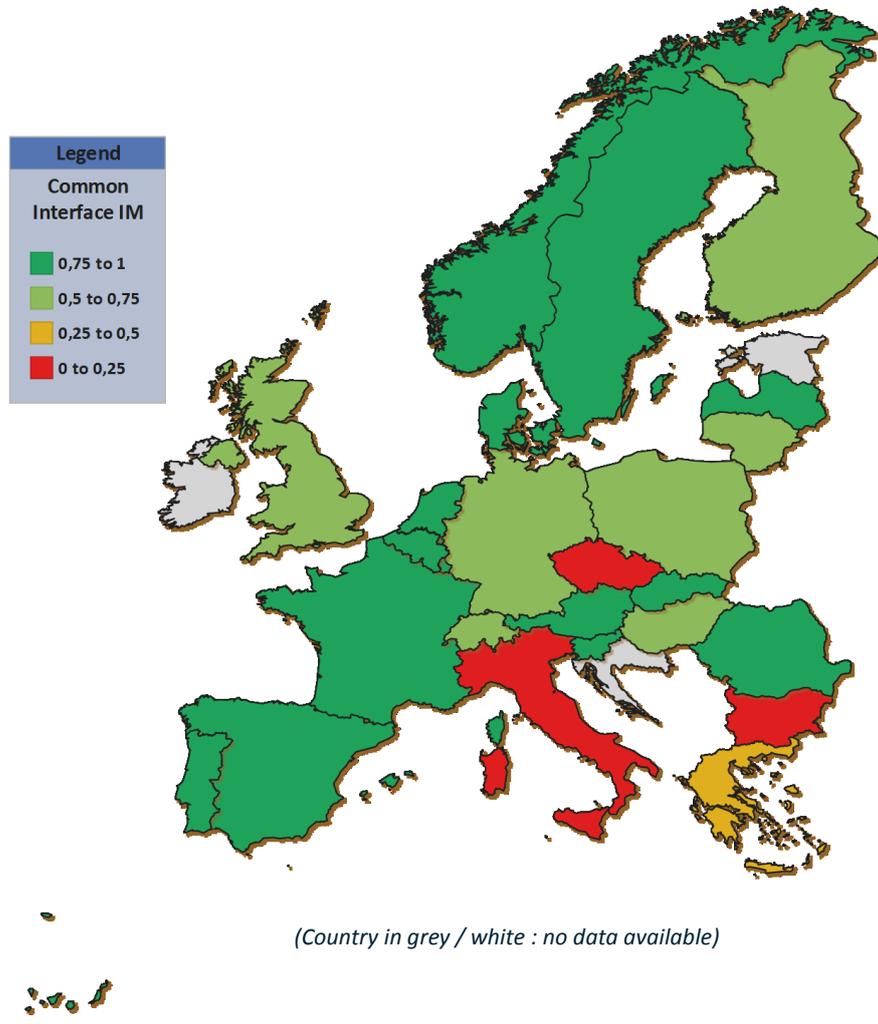


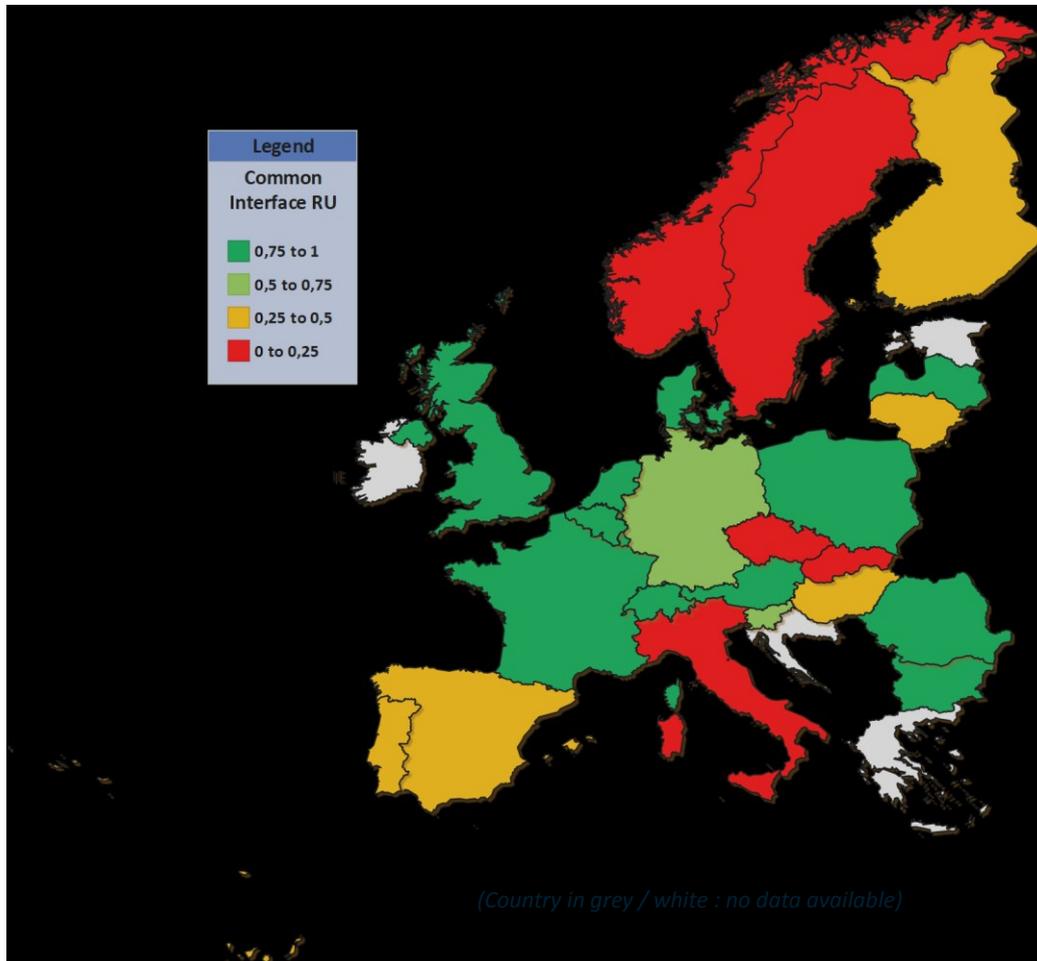
Figure 13: Evolution of implementation for Common Interface

The Degree of Implementation (DI) of this function for 1st half 2017 per country on a map is expressed as follows:



**Map 3. Common Interface (IMs)**

The Degree of Implementation (DI) of this function for 1st half 2017 per country on a map is expressed as follows:



**Map 4. Common Interface (RUs)**

### 5.4 Train Running Information (IMs and RUs-F)

The Target Implementation Milestone for realisation of the Train Running Information message (TRI) according to the TAF TSI Masterplan is end of 2017. This monitoring concerns only one aspect of the TAF TSI basic parameter ‘Train running forecast’, the Train Running Information message. The Train Information System (TIS) is a common sector tool managed by RNE. Messages sent by IMs to TIS or messages received by RUs from TIS through traditional interfaces are considered as 75 % complete fulfilment and TAF messages sent or received by Common Interface are counted as 100 % fulfilment.

Figure 14 indicates 15 IMs and 12 RUs-F with 100 % level of fulfilment. This leads to a degree of implementation for IMs and RUs-F having reported to the JSG Reporting Tool of about 40% for IMs and 20% for RUs-F.

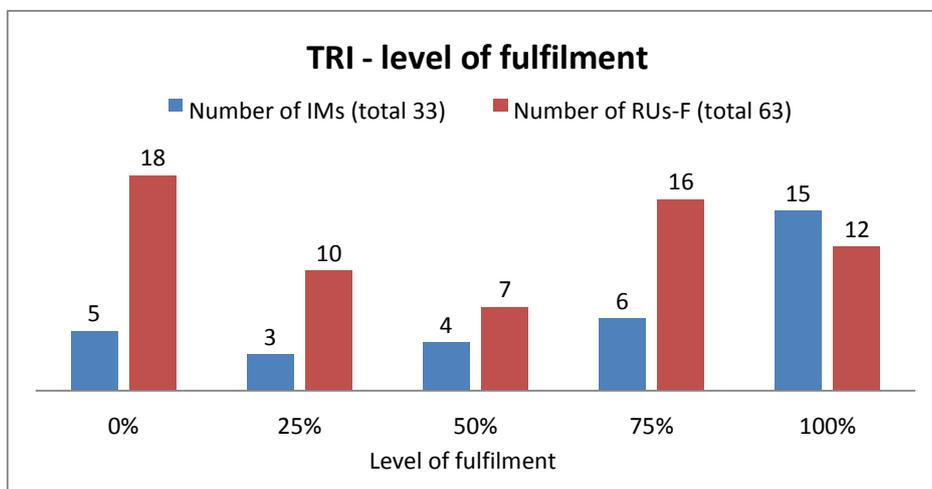


Figure 14: Train Running Information (TRI)

Regarding Figure 15, both the number of IMs and RUs-F having implemented the TRI and the degree of completion slightly increased in comparison to the 5<sup>th</sup> reporting session.

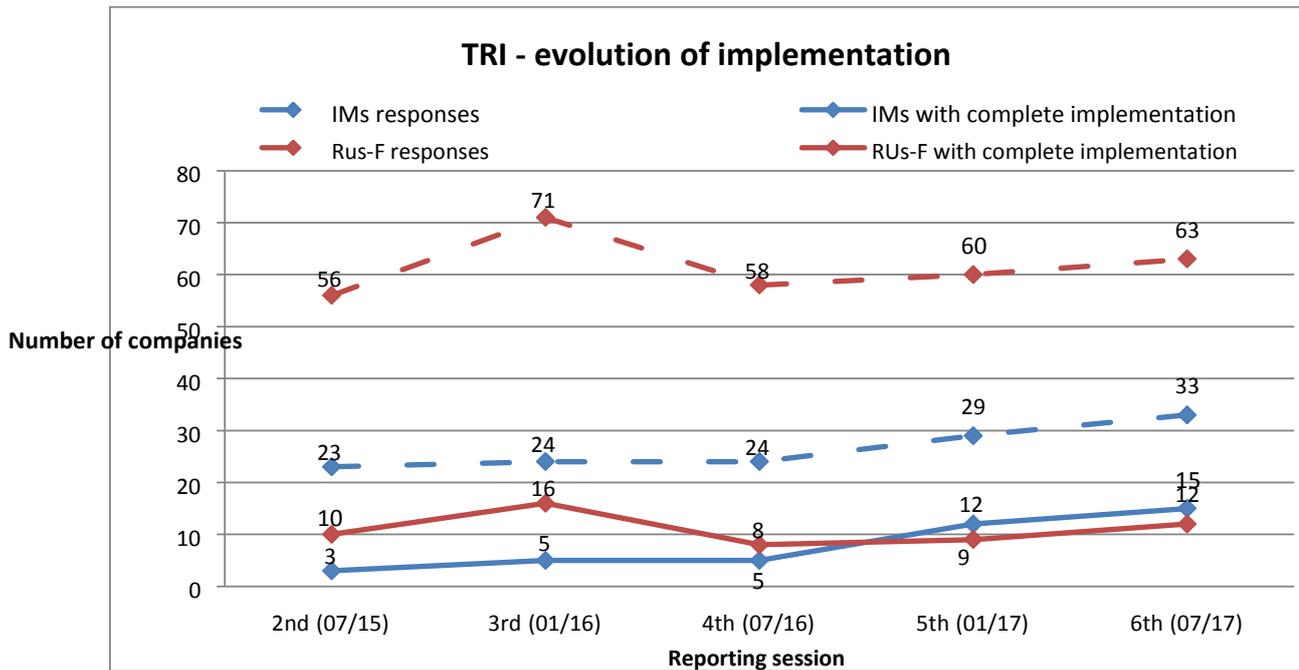
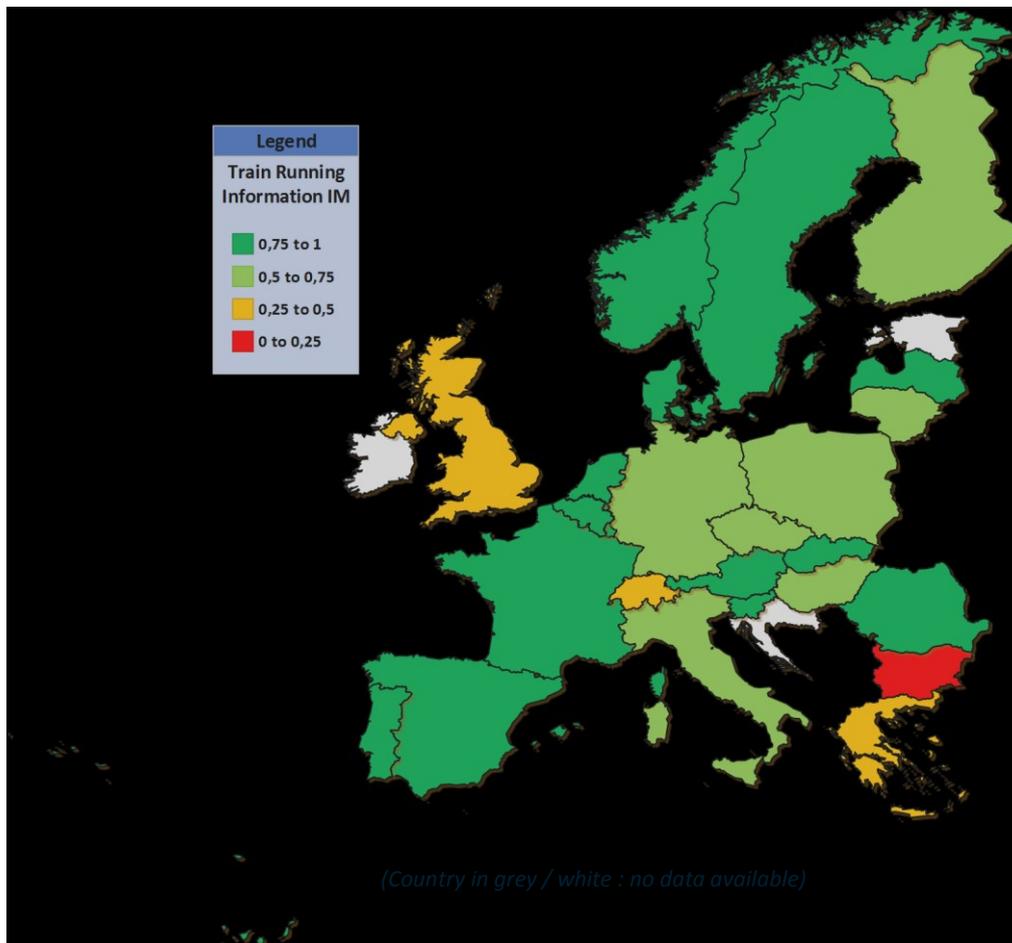


Figure 15: Evolution of implementation for Train Running Information

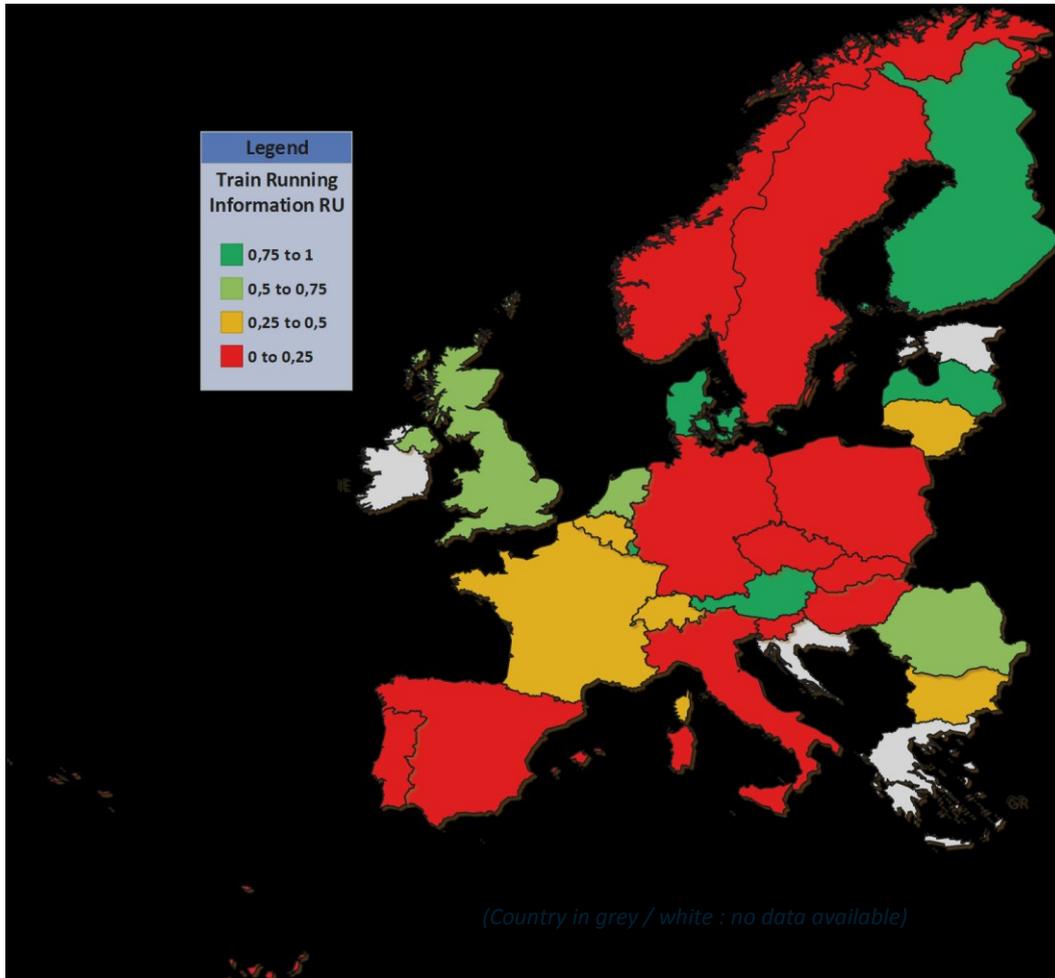
The Degree of Implementation (DI) of this function for 1st half 2017 per country on a map is expressed as follows (please note that for the calculation of the country DI a market share driven weighting factor of the individual companies is applied<sup>5</sup>):



**Map 5. Train Running Information (IMs)**

<sup>5</sup> See [https://ec.europa.eu/transport/modes/rail/market/market\\_monitoring\\_en](https://ec.europa.eu/transport/modes/rail/market/market_monitoring_en)

The Degree of Implementation (DI) of this function for 1st half 2017 per country on a map is expressed as follows (please note that for the calculation of the country DI a tonnage based market share driven weighting factor of the individual companies is applied):



**Map 6. Train Running Information (RUs)**

### 5.5 Train Composition Message (RUs-F)

The Target Implementation Milestone for realisation of the Train Composition Message (TCM) as part of the Train Preparation Function according to the TAF TSI Masterplan is end of 2018. TCM is mandatory to be sent by RUs-F. Most of them are still developing this TAF TSI function.

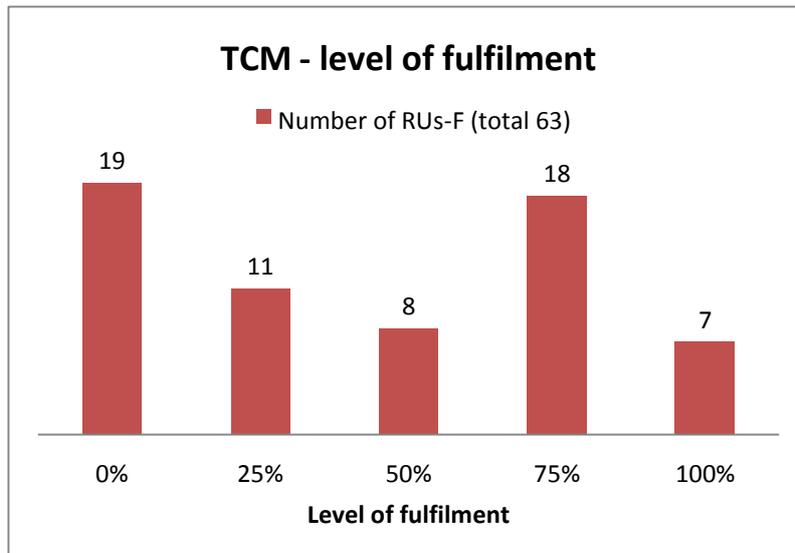


Figure 16: Train Composition Message (TCM)

Figures show a little increase in terms of complete implementation of TCM since last reporting session. 7 RUs-F out of 63 which replied to the survey have completely implemented the TCM, leading to a degree of implementation of about 10%.

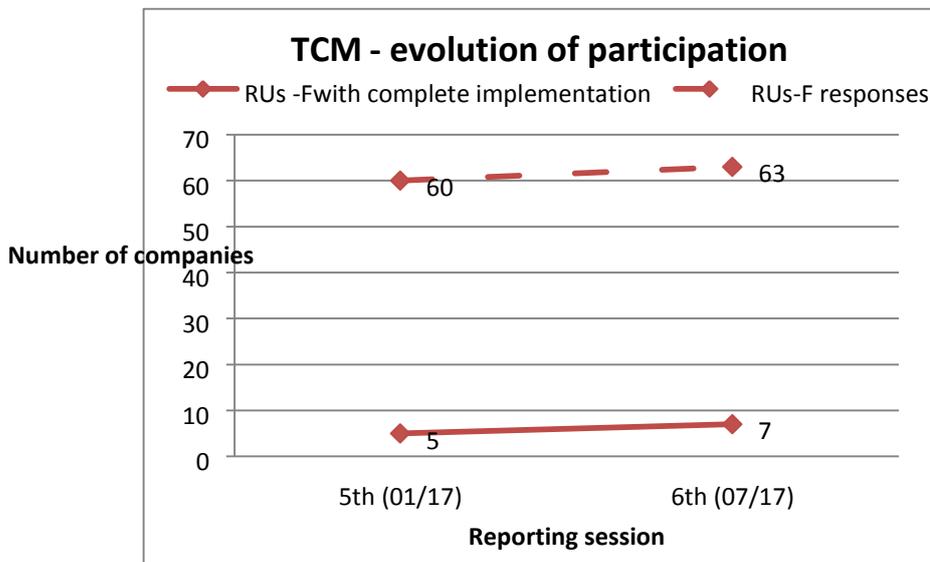
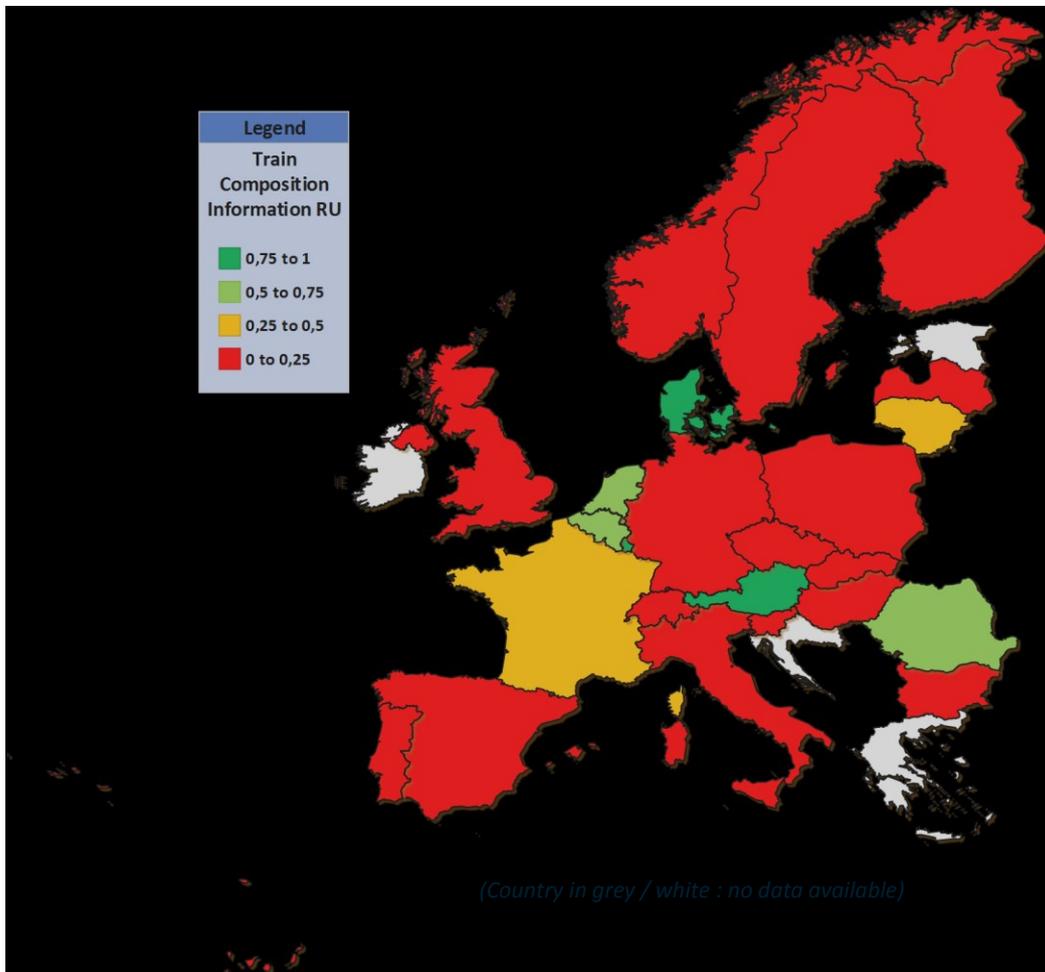


Figure 17: Evolution of implementation for Train Composition Message

The Degree of Implementation (DI) of this function for 1st half 2017 per country on a map is expressed as follows (please note that for the calculation of the country DI a tonnage based market share driven weighting factor of the individual companies is applied):



**Map 7. Train Composition Information (RUs)**

### 5.6 Consignment Note Data (RUs-F)

The Target Implementation Milestone for realisation of the Consignment Note Data function (CND) according to the TAF TSI Masterplan is end of 2017.

This function is reported for the first time in this reporting session.

To better estimate the degree of implementation, the information provided by the rail companies is compared in both cases with the milestones prescribed in the TAF TSI Master Plan (1). The weighting factor used to weigh the RUs declared data in the JSG survey is based on the figures stated in the report **“Fourth report on monitoring development in the rail market”** issued by the European Commission in June 2014, where **Annex 19** provides the figures concerning **“Market shares of railway undertakings (2011-2012)”**.

Regarding the Railway Undertakings, an addition of series of degree of implementation weighted by a Weighting factor is calculated using the following formula:

$$\text{Average DI} = \sum_{i=1}^n DI(i) \times WF(i) ;$$

Where DI(i) = Degree of Implementation declared by the company (i) starting freight transport activities or intending to develop it in the near future,

WF(i) = Weighting Factor for company (i) based on **“Fourth report on monitoring development in the rail market”** issued by the European Commission in June 2014,

and n = number of companies reporting in a country.

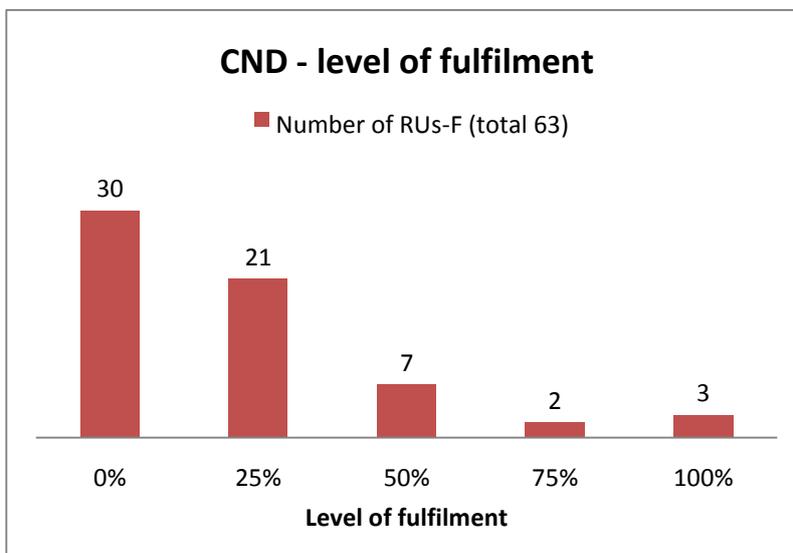
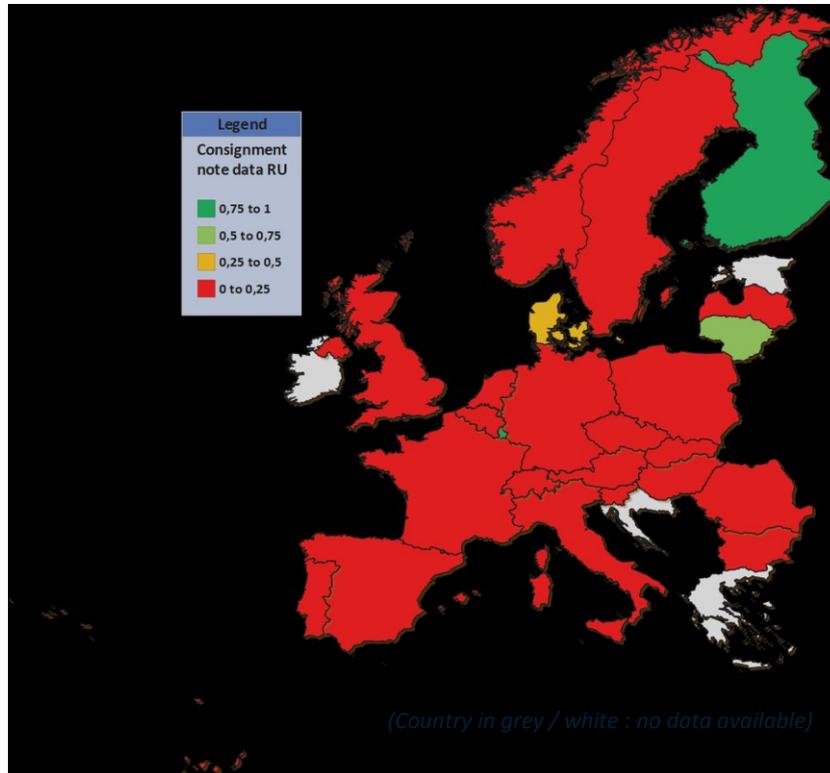


Figure 18: Consignment Note Data (CND)

The Degree of Implementation (DI) of this function for 1st half 2017 per country on a map is expressed as follows:



**Map 8. Consignment Note Data (RUs)**

## 5.7 Wagon and Intermodal Unit Operating Database (RUs-F)

The Target Implementation Milestone for realisation of the Wagon and Intermodal Unit Operating Database function (WIMO) according to the TAF TSI Masterplan was 2016.

The 'Wagon and Intermodal Unit Operating Database' function (WIMO) is relevant for RUs-F only. However, IMs realising this function on behalf of RUs-F are not taken into account in the present report.

This function remains at a low degree of implementation of about 3 %. The reason for this must be further investigated. Companies claim that some requirements and the criteria for fulfilling are still unclear (Figures 19 and 20).

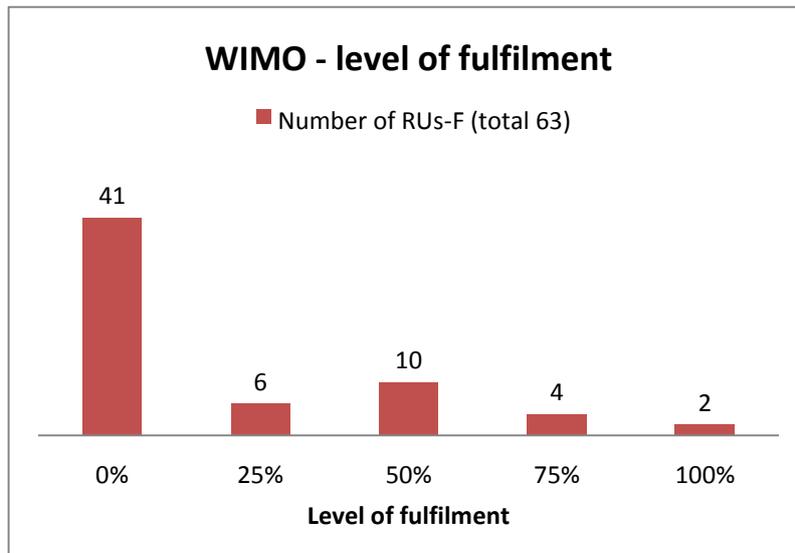


Figure 19: Wagon and Intermodal Unit Operating Database

Figure 20 indicates the very low degree of completion for WIMO with no sign of improvement over time.

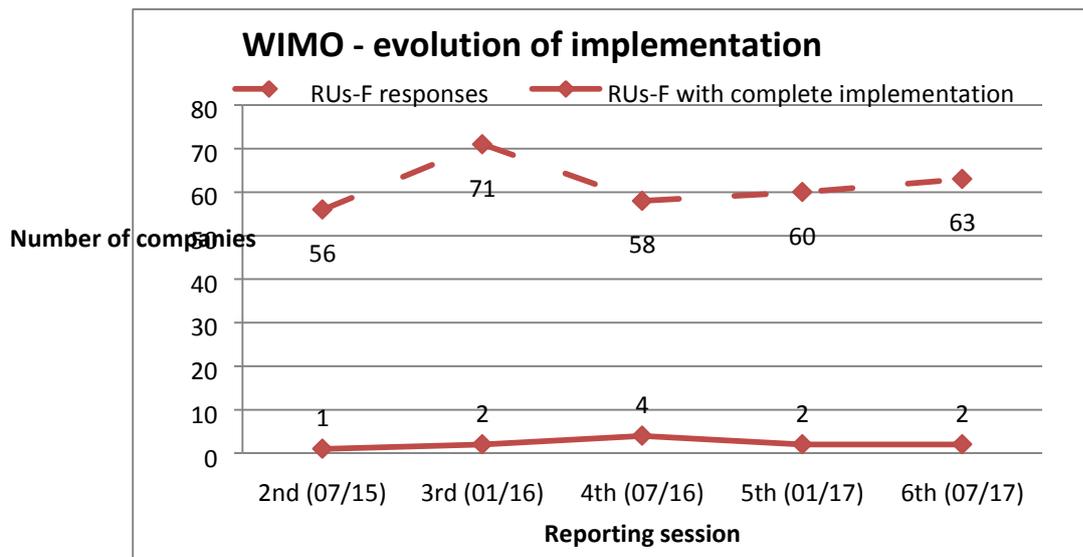
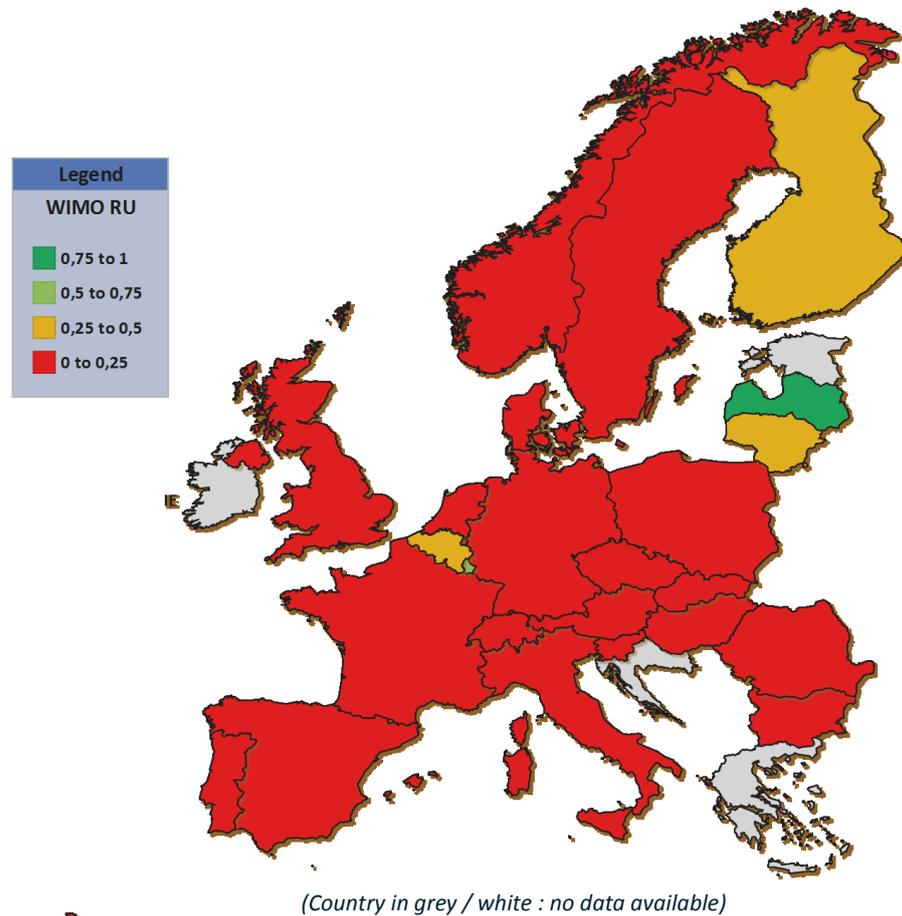


Figure 20: Evolution of implementation for WIMO

The Degree of Implementation (DI) of this function for 1st half 2017 per country on a map is expressed as follows:



**Map 9. Wagon and Intermodal Unit Operating Database (RUs)**

### 5.8 Rolling Stock Reference Database (WKs)

The Target Implementation Milestone for realisation of the RSRD function according to the TAF TSI Masterplan was 2015.

The ‘Rolling Stock Reference Database’ function (RSRD) is relevant for companies which keep wagons. Those companies might at the same time also be RUs or IMs.

A number of companies intends fulfilling this functionality in a collaborative way via the common sector tool RSRD<sup>2</sup>. Information delivered by UIP for RSRD<sup>2</sup> means 100% of fulfilment. Thanks to RSRD<sup>2</sup> the degree of implementation is reported to be at 65 %.

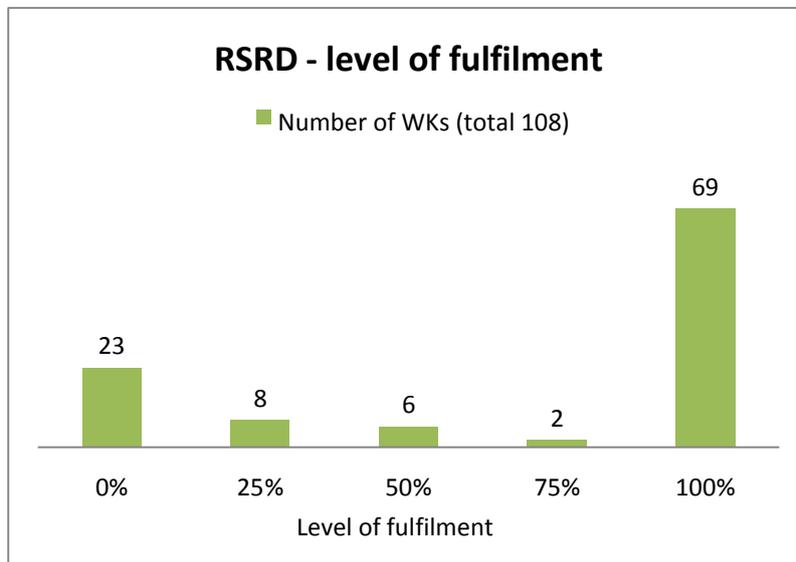


Figure 21: Evolution of implementation for RSRD

Following the nearly identical number of WKs using RSRD<sup>2</sup> and similar participation to the survey, the implementation rate remains stable compared to the previous report (see Figure 26).

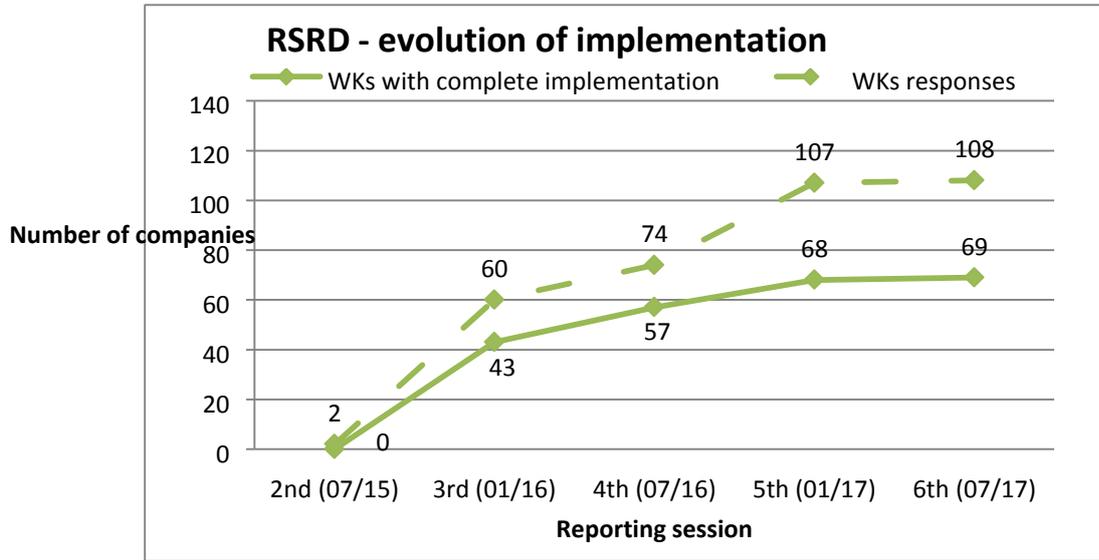
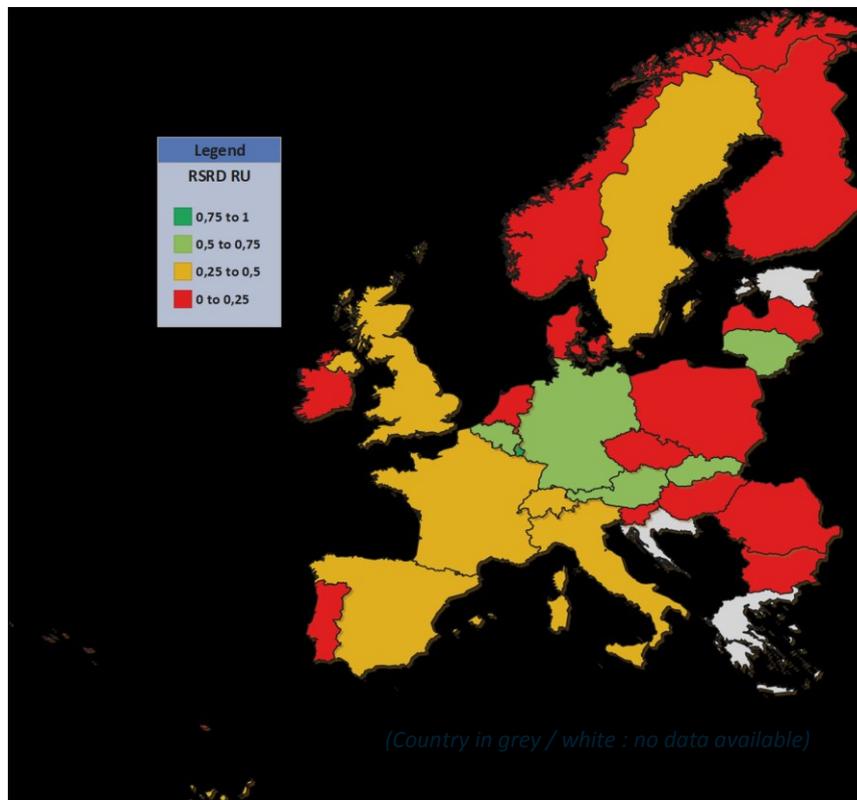


Figure 22: Evolution of implementation for RSRD

The Degree of Implementation (DI) of this function for 1st half 2017 per country on a map is expressed as follows:



**Map 10. Rolling Stock Reference Database (RUs)**

### 5.9 Reasons for not starting implementation of TAF/TAP TSI functions

Companies could declare in a dedicated answer for each TAF/TAP TSI function one reason why they did not yet start implementing it. Figure 23 gives a summary of the reasons selected by the companies.

The reason 'insufficient awareness of TAF/TAP TSI requirements' is stable in respect to the previous report, while all other reasons for not implementing TAF TAP TSI functions have risen.

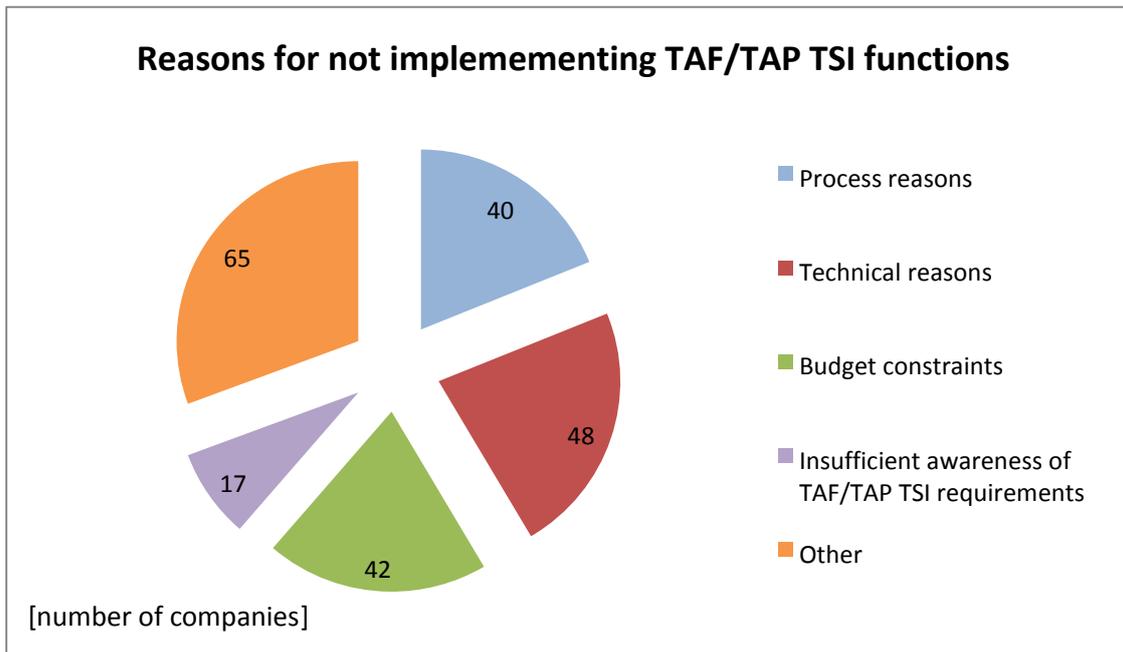


Figure 23: Reasons for not starting implementation of TAF/TAP TSI functions

### 5.10 Degree of implementation at European level

This chapter summarises the development of the Degree of Implementation (DI) at European level for the TAF TSI functions since the beginning of reporting.

The DI in this report is defined as the relation of companies having fully implemented (100 %) the particular function compared to the companies having replied to this query in per cent.

Figure 24 shows the DI for functions to be implemented by IMs. TRI shows still a quite positive growing trend over time. PLC, CC and CI implementation however decline compared to the last report. This might partly be explained by the growing number of IMs taking part.

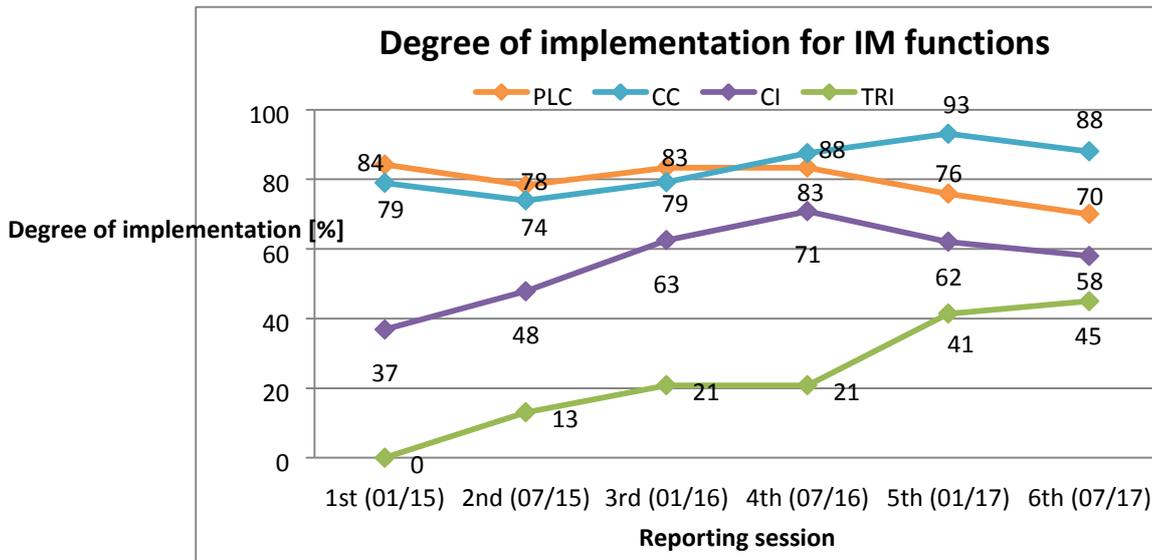


Figure 24: Reported DI for mandatory IM functions

Figure 25 indicates the evolution of implementation for RUs-F functions. Generally the proportion of RUs having finished implementation is considerably lower than for IMs. The DI for the CC stays high at 86 %, but the other RUs-F functions stagnate at a low level of implementation. The CND message is not shown yet as it is reported for the first time in the present session.

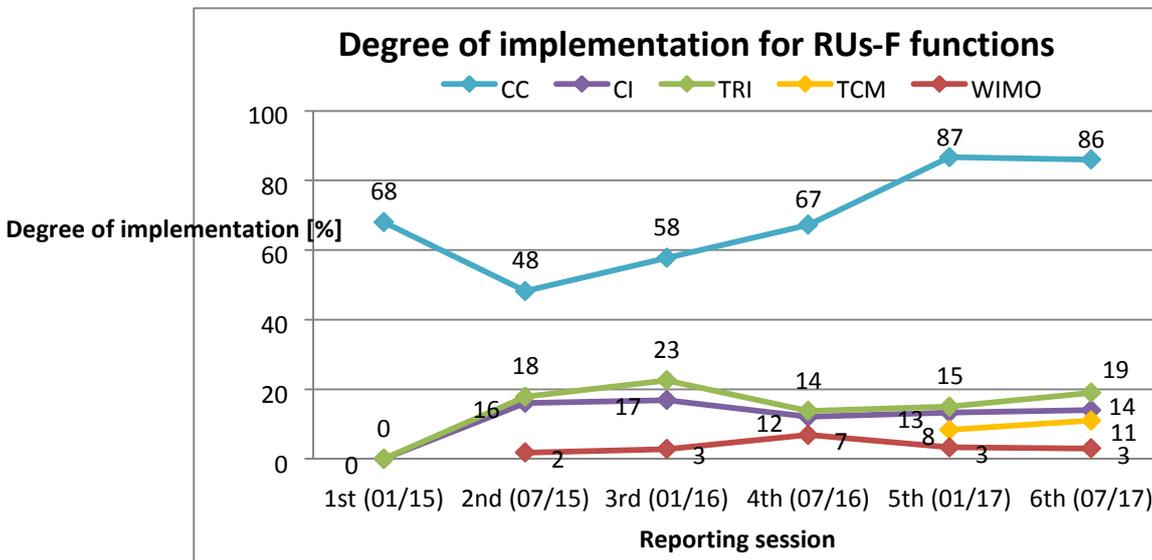


Figure 25: Reported DI for mandatory RUs-F functions

Figure 26 shows the reported DI for WkS for the first time in the present report. Similar to the RUfunctions, only the DI of CC increases, whereas the RSRD completion remains stable. With 2 WK having CI in production, the respective DI is negligible.

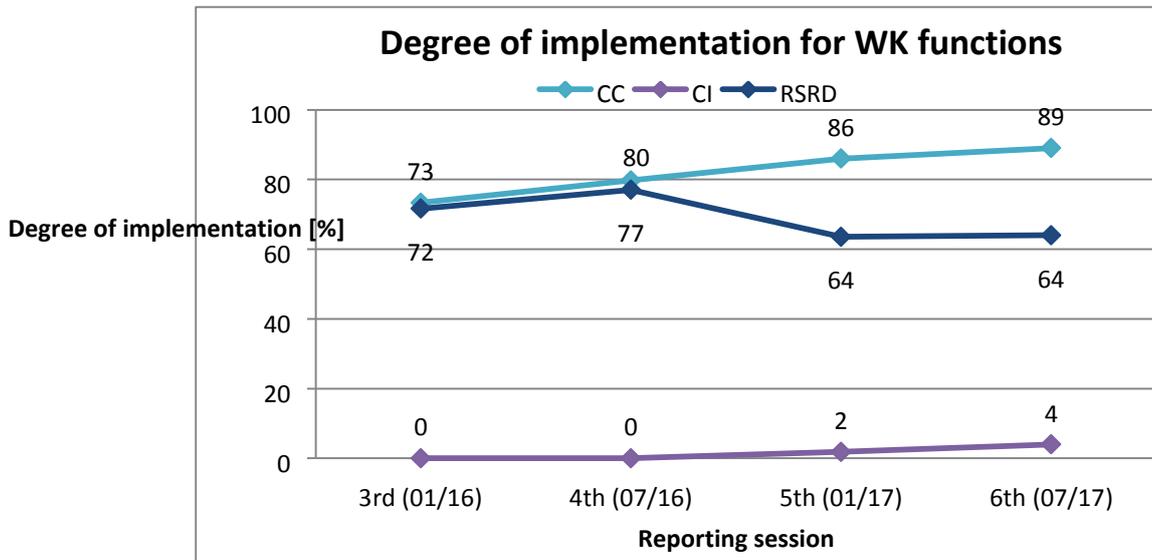


Figure 26: Reported DI for mandatory WK functions

## 6. Intentions for implementation

### 6.1 Common sector tools

Participants of the questionnaire could select all common sector tools in use to meet some specific requirements of the TAF/TAP TSI. The number of companies having indicated using such tools are summarised in Figure 27.

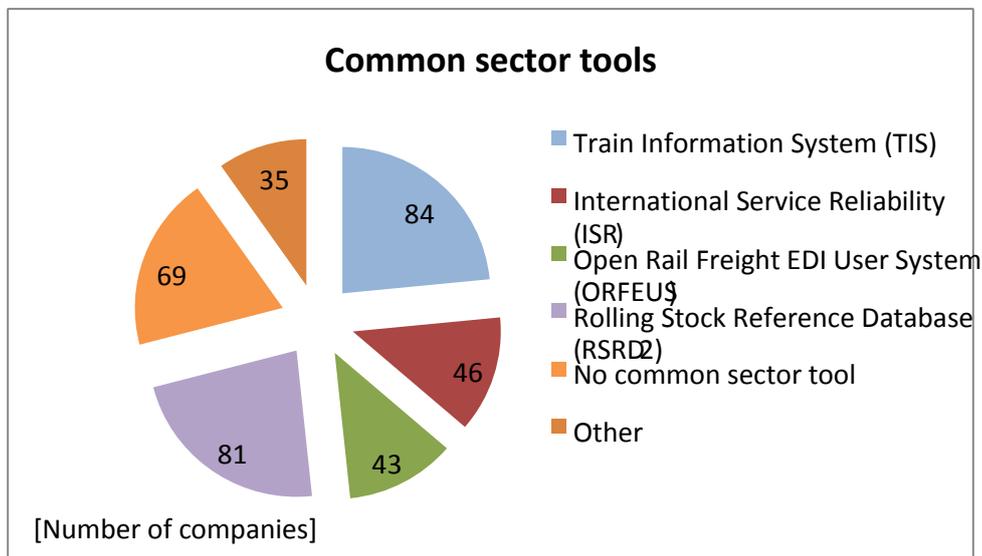


Figure 27: Common sector tools in use

Nominations of common sector tools went up by 50 % from last reporting, RSRD and TIS both remaining the most used ones.

In respect to the responses received from relevant types of company, both tools are in use by about 70 % of its potential users.

## 7. Conclusions

The number of companies having responded to the 6th questionnaire is significantly lower than the number of companies having been invited. The response rate of about 43 % remains more or less stable since the second reporting session already. In particular, feedback from smaller companies is still below expectations.

Higher absolute numbers of participation result from the fact, that RU-Ps have for the first time been invited to respond for a limited number of TAF TSI functions.

Extrapolating the participation from the Czech Republic to the whole European Union seems to indicate, that a large part of the European railway sector is not yet covered by this TAF TSI implementation report.

For some TAF TSI functions there is a strong need to precisely define the compliance with TAF TSI regulation. For example for the WIMO function, companies claim that some requirements and the criteria for fulfilling are still unclear. Furthermore it is recommended to define a process in order to update, maintain and use Primary Location Codes.

The degree of implementation as set out in Figures 24 to 26 of this report is calculated from the responses to the questionnaire. If companies not having responded would be also taken into calculation, the degree of implementation would drop by around half of the percentage.

## 8. Regional Workshops

To provide an appropriate response to the first action requested to EU institutions, the Agency TAF TSI Implementation Cooperation Group adopted in the 2<sup>nd</sup> meeting held on 29<sup>th</sup> and 30<sup>th</sup> September 2015 (6) the decision to launch a campaign of Regional Workshops across European Member States.

There were two WSs held 2017:

### 8.1 TAF WS 12/13 September 2017 – Warsaw, Poland

- Attendees: 60 RUs/IMs/WKs/IT providers from Poland, Estonia, Latvia and Lithuania
- Information about TAF regulation and TAF implementation status – incumbent actors: on the right track  
→ further action / project for 3 Baltic States needed
- Information about TAF regulation and TAF implementation status – newcomer actors: room for improvement  
→ further communication or WS needed

### 8.2 TAF (and TAP) WS 21 September 2017 – Stockholm, Sweden

- Attendees: 50 RUs/IMs/WKs from Sweden

- Information about TAF regulation and TAF implementation status – incumbent actors: on the right track
- Information about TAF regulation and TAF implementation status – newcomer actors: room for improvement  
→ further communication or WS needed

### 8.3 Proposal for next Workshop

- Planned date: End of February 2018
- Venue: Bucharest
- Countries covered: Romania, Greece and Bulgaria

## 9. Proposals to support the Reporting Process

In order to clarify the scope and content of the TAF TSI Implementation Report and the TAP TSI Implementation Report, it has been agreed (7) that the content of the reports will be discussed in TAF TSI co-operation group for TAP TSI RU-IM basic parameters and in the TAP TSI retail co-operation group for the TAP TSI retail basic parameters.

Therefore, the Agency will deliver two reports, one for TAF TSI and another for TAP TSI (retail and RU-IM-communication).

Beyond this, it has been agreed to put in place the following measures to facilitate the implementation and engagement of the small and medium sized RUs and IMs:

- To deliver newsletters after every Implementation Cooperation Group (ICG) meeting to the NCPs with the main outcomes of every meeting.
- To translate questionnaire at the JSG reporting tool into other languages: this will increase the level of response.
- The Agency must address the TSI TAF TAP topic to the top management of IMs and RUs by participation in appropriate “High Level Rail Events” throughout Europe with the current PRIME and RU Dialogue Groups.
- The Agency will analyse the costs for the upgrade/setup of the legacy systems of the RU’s.
- The Agency should explain together with EC about the additional funding for the TAF TSI functions, and in particular, the implementation of the common interface and the upgrade of the legacy systems.
- Continue with dissemination in form of regional workshops.

### 9.1 Functions to be reported in the next report

During the 6<sup>th</sup> TAF TSI Implementation Cooperation Group meeting held in October 2017, it was agreed to report about the following functions for the 7<sup>th</sup> Reporting wave in the frame of the TAF TSI regulation:

- Primary location codes
- Company codes
- Common interface

- Train running information
- RSRD
- WIMO
- Train composition message
- Consignment note data

## 9.2 Calendar for reporting

In the frame of the 6<sup>th</sup> TAF TSI Implementation Cooperation Group meeting held in October 2017, it was agreed the following schedule to report about the implementation of TAF TSI functions and RU-IM Communication for TAP TSI:

	2017		2018			
	November	December	January	February	March	April
■ Preparing questionnaire at IRG	23					
■ Agreeing questionnaire with ERA		1				
■ Publishing questionnaire / initiating session		11				
■ Opening JSG Reporting Tool			02-26			
■ Revising draft Report at IRG				21-22		
■ Agreeing draft Report with ERA						
■ Approving draft Report at JSG				27		
■ Presenting at ERA Coop Group					13-14	
■ Publishing JSG Report						

**Figure 28: Reporting Schedule for the 7<sup>th</sup> Reporting wave**

**Annex 1: Responses Contact List**

Nr.	Member State	Type of Company	Company name	Reporting Entity
1	AT	IM	ÖBB Infrastruktur	
2	AT	RU F, WK	Rail Cargo Austria	
3	AT	WK	GATX Rail Austria GmbH	RSRD <sub>2</sub>
4	AT	WK	Felbermayr Transport- und Hebetchnik GmbH & Co KG	RSRD <sub>2</sub>
5	AT	WK	Logistik Service GmbH	RSRD <sub>2</sub>
6	AT	WK	Bahnbau Wels GmbH	RSRD <sub>2</sub>
7	AT	WK	Propangas AG	RSRD <sub>2</sub>
8	BE	IM	Infrabel	
9	BE	RU F, WK	Lineas Group	
10	BE	RU P	THI factory	
11	BE	WK	LINEAS Intermodal	RSRD <sub>2</sub>
12	BE	WK	LINEAS	RSRD <sub>2</sub>
13	BG	RU F, WK	DB Cargo Bulgaria	DB Cargo AG
14	CH	IM	SBB Infrastruktur	
15	CH	IM	BLS-Netz	
16	CH	RU F	SBB Cargo International	
17	CH	RU F, WK	DB Cargo Switzerland	DB Cargo AG
18	CH	RU P	SBB Personenverkehr	
19	CH	WK	VTG Cargo AG	RSRD <sub>2</sub>
20	CH	WK	Ermewa SA, Geneva branch	RSRD <sub>2</sub>
21	CH	WK	TRANSWAGGON AG	RSRD <sub>2</sub>
22	CH	WK	MITRAG AG	RSRD <sub>2</sub>
23	CH	WK	WASCOSA AG Luzern	RSRD <sub>2</sub>
24	CH	WK	HASTAG (Zürich) AG	RSRD <sub>2</sub>
25	CH	WK	Diversified Investments SA	RSRD <sub>2</sub>
26	CZ	IM	Správa železniční dopravní cesty	
27	CZ	IM, RU F	PDV RAILWAY	
28	CZ	IM, RU F, RU P	Jindrichohradecké místní dráhy	
29	CZ	IM, RU F, WK	Advanced world transport	
30	CZ	IM, RU F, WK	Sokolovská uhelná	
31	CZ	RU F	EP Cargo	
32	CZ	RU F	LTE Czechia	LTE Group
33	CZ	RU F	TONCUR	

Nr.	Member State	Type of Company	Company name	Reporting Entity
34	CZ	RU F	SLEZSKOMORAVSKÁ DRÁHA	
35	CZ	RU F	TCHAS ŽD	
36	CZ	RU F	IDS CARGO	
37	CZ	RU F, RU P	KŽC Doprava	
38	CZ	RU F, RU P	CityRail	
39	CZ	RU F, RU P	LTE Logistik a Transport Slovakia s.r.o.	LTE Group
40	CZ	RU F, RU P, WK	Ceske drahy	
41	CZ	RU F, WK	DBV-IT	
42	CZ	RU F, WK	ČD Cargo	
43	CZ	RU F, WK	LOKO TRANS	
44	CZ	RU P	GW Train Regio	
45	CZ	WK	Cement Hranice	
46	CZ	WK	ČR SSHR	
47	CZ	WK	Coal Services	
48	CZ	WK	Vápenka Čertovy schody	
49	CZ	WK	VÁPENKA VITOŠOV	
50	CZ	WK	ZX-BENET	
51	CZ	WK	státní podnik DIAMO	
52	CZ	WK	NH-TRANS	
53	CZ	WK	Spolek pro chemickou a hutní výrobu	
54	CZ	WK	KKB	
55	CZ	WK	KOTOUČ ŠTRAMBERK	
56	CZ	WK	Škoda Auto	
57	CZ	WK	Lafarge Cement, a.s.	RSRD <sub>2</sub>
58	CZ	WK	RYKO PLUS spol. s r.o.	RSRD <sub>2</sub>
59	CZ	WK	Railco a.s.	RSRD <sub>2</sub>
60	CZ	WK	Felbermayr Transport- und Hebetchnik spol.s.r.o.	RSRD <sub>2</sub>
61	CZ	WK	KOS Trading, akciová společnost	RSRD <sub>2</sub>
62	CZ	WK	Lovochemie, a.s.	RSRD <sub>2</sub>
63	CZ	WK	V.K.S. Vagon Komercc Speed, spol. s r.o.	RSRD <sub>2</sub>
64	CZ	WK	ArcelorMittal Ostrava a.s.	RSRD <sub>2</sub>
65	DE	IM	DB Netz	
66	DE	RU F	RheinCargo	

Nr.	Member State	Type of Company	Company name	Reporting Entity
67	DE	RU F	SBB Cargo Deutschland GmbH	SBB Cargo International
68	DE	RU F, WK	DB Cargo	
69	DE	RU F, WK	MEG Mitteldeutsche Eisenbahn GmbH	DB Cargo AG
70	DE	RU F, WK	RBH Logistics GmbH	
71	DE	WK	Ermewa GmbH	RSRD <sub>2</sub>
72	DE	WK	GATX Rail Germany GmbH	RSRD <sub>2</sub>
73	DE	WK	TRANSWAGGON GmbH	RSRD <sub>2</sub>
74	DE	WK	VTG Rail Europe GmbH	RSRD <sub>2</sub>
75	DE	WK	VTG Aktiengesellschaft	RSRD <sub>2</sub>
76	DE	WK	Aretz GmbH und Co. KG	RSRD <sub>2</sub>
77	DE	WK	NACCO GmbH	RSRD <sub>2</sub>
78	DE	WK	ERR European Rail Rent GmbH	RSRD <sub>2</sub>
79	DE	WK	AlzChem AG	RSRD <sub>2</sub>
80	DE	WK	DAHER PROJECTS GmbH	RSRD <sub>2</sub>
81	DE	WK	Vossloh Logistics GmbH	RSRD <sub>2</sub>
82	DE	WK	Kombiverkehr Deutsche Gesellschaft für kombinierten Güterverkehr mbH & Co KG	RSRD <sub>2</sub>
83	DE	WK	Zürcher Bau GmbH	RSRD <sub>2</sub>
84	DE	WK	Kurt Nitzer (GmbH & Co.) KG	RSRD <sub>2</sub>
85	DE	WK	Mosolf Automotive Railway GmbH	RSRD <sub>2</sub>
86	DE	WK	BASF SE	RSRD <sub>2</sub>
87	DE	WK	On Rail - Gesellschaft für Eisenbahnausrüstung und Zubehör mbH	RSRD <sub>2</sub>
88	DE	WK	Tyczka Gase GmbH	RSRD <sub>2</sub>
89	DE	WK	voestalpine Rail Center Königsborn GmbH	RSRD <sub>2</sub>
90	DE	WK	On Rail Gesellschaft für Vermietung und Verwaltung von Eisenbahnwaggons mbH	RSRD <sub>2</sub>
91	DE	WK	Petrochem Mineralöl-Handels-GmbH	RSRD <sub>2</sub>
92	DK	IM	Banedanmark	
93	DK	RU F, WK	DB Cargo Scandinavia AS	DB Cargo AG
94	DK	RU P	BF Logistics	
95	DK	RU P	DSB	

Nr.	Member State	Type of Company	Company name	Reporting Entity
96	DK	RU P	Lokaltog	
97	DK	RU P	Nordjyske Jernbaner	
98	DK	RU P	Midtjyske Jernbaner	
99	EL	IM	O.S.E.	
100	ES	IM	ADIF	
101	ES	RU F	RENFE MERCANCIAS	
102	ES	RU F	Logitren Ferroviaria	
103	ES	RU F, RU P	FERROVIAL RAILWAY	
104	ES	RU F, WK	TF Transfesa	DB Cargo AG
105	ES	WK	Transportes Ferroviarios Especiales S.A.	RSRD <sub>2</sub>
106	ES	WK	Sociedad de estudios y explotacion de material auxiliar de transportes S.A.	RSRD <sub>2</sub>
107	FI	RU F, RU P, WK	VR Group	
108	FR	IM	SNCF Réseau	
109	FR	RU F	FRET SNCF	
110	FR	RU F, WK	ECR Euro Cargo Rail SA	DB Cargo AG
111	FR	RU P	SNCF Voyageurs	
112	FR	WK	Ermewa SA	RSRD <sub>2</sub>
113	FR	WK	NACCO S.A.S.	RSRD <sub>2</sub>
114	FR	WK	Monfer France SASU	RSRD <sub>2</sub>
115	FR	WK	ATIR-RAIL	RSRD <sub>2</sub>
116	FR	WK	Compagnie Française de Produits Métallurgiques	RSRD <sub>2</sub>
117	FR	WK	STVA S.A.	RSRD <sub>2</sub>
118	FR	WK	SOCOMAC	RSRD <sub>2</sub>
119	HU	AB	VPE	
120	HU	IM	MÁV	
121	HU	IM	GYSEV	
122	HU	RU F	MMV	
123	HU	RU F, WK	DB Cargo Hungaria Kft	DB Cargo AG
124	IE	WK	TOUAX Rail Ltd.	RSRD <sub>2</sub>
125	IT	IM	Ferrovie Emilia Romagna	
126	IT	IM	RETE FERROVIARIA ITALIANA	
127	IT	IM	La Ferroviaria Italiana	
128	IT	IM, RU F, RU P, WK	Società Ferrovie Udine Cividale	

Nr.	Member State	Type of Company	Company name	Reporting Entity
129	IT	RU F	SBB Cargo Italia	SBB Cargo International
130	IT	RU F	HUPAC	
131	IT	RU F	TX Logistik	
132	IT	RU F	Dinazzano PO	
133	IT	RU F	GTS Rail	
134	IT	RU F, RU P	Trasporto Ferroviario Toscano	
135	IT	RU F, WK	DB Cargo Italia Srl	DB Cargo AG
136	IT	RU F, WK	MERCITALIA RAIL	
137	IT	RU P	TRENORD	
138	IT	RU P	GRUPPO TRASPORTI TORINESI	
139	IT	RU P	Trenitalia	
140	IT	RU P	ARRIVA Italia Rail	
141	IT	RU P	SNCF Voyages Italia	
142	IT	RU P	Trasporto Passeggeri Emilia Romagna	
143	IT	RU P	Trenord	
144	IT	RU P	TRENTINO TRASPORTI ESERCIZIO	
145	IT	WK	Lotras srl	RSRD <sub>2</sub>
146	IT	WK	Monfer Cereali SRL	RSRD <sub>2</sub>
147	LT	IM, RU F, RU P, WK	Lithuanian Railways	
148	LT	RU F	Captrain Italia	
149	LU	IM, RU F, RU P, WK	CFL	
150	LV	IM, RU F, WK	VAS Latvijas dzelzceļš	
151	NL	IM	ProRail	
152	NL	RU F, WK	DB Cargo Nederland N.V.	DB Cargo AG
153	NO	IM	Bane NOR	
154	NO	RU F	LKAB Malmtrafikk AS	
155	PL	IM	PKP	
156	PL	IM, RU P	PKP	
157	PL	RU F, WK	DB Cargo Polska Spolka Akcyjna	DB Cargo AG
158	PL	RU P	Koleje Małopolskie	
159	PL	RU P	Koleje Śląskie	
160	PL	RU P	Koleje Dolnoslaskie	

Nr.	Member State	Type of Company	Company name	Reporting Entity
161	PL	RU P	PKP Intercity	
162	PL	RU P	Arriva RP	
163	PL	WK	Łódzka Kolej Aglomeracyjna	
164	PL	WK	GATX Rail Poland Sp. z o.o.	RSRD <sub>2</sub>
165	PL	WK	Tankwagon Sp. z o. o.	RSRD <sub>2</sub>
166	PL	WK	Felbermayr Immo Sp.z.o.o.	RSRD <sub>2</sub>
167	PT	IM	Infraestruturas de Portugal	
168	PT	RU F	Medway	
169	PT	RU F, WK	TAKARGO	
170	PT	RU P	CP	
171	PT	WK	ADP Fertilizantes, S.A.	RSRD <sub>2</sub>
172	PT	WK	CIMPOR - Serviços de Apoio à Gestão de Empresas, S.A.	RSRD <sub>2</sub>
173	RO	IM	CFR	
174	RO	RU F, WK	DB Cargo Rail Romania SRL	DB Cargo AG
175	SE	IM	Trafikverket	
176	SE	RU F	Hector Rail	
177	SE	RU F	LKAB Malmtrafik	LKAB Malmtrafikk AS
178	SE	RU F, WK	Green Cargo	
179	SE	RU P	sj	
180	SE	WK	TRANSWAGGON AB	RSRD <sub>2</sub>
181	SE	WK	Stena Recycling AB	RSRD <sub>2</sub>
182	SI	IM	SŽ Infrastruktura	
183	SI	RU F	SŽ TOVORNI PROMET	
184	SI	WK	Adria kombi d.o.o.	RSRD <sub>2</sub>
185	SK	IM	Slovak Railways	
186	SK	RU F, RU P	LTE Slovakia	LTE Group
187	SK	RU F, WK	Cargo Slovakia	
188	SK	RU P	RegioJet	
189	SK	RU P	Železničná spoločnosť Slovensko	
190	SK	WK	Ing. Alica Ovciariková A.O.	RSRD <sub>2</sub>
191	SK	WK	Felbermayr Slovakia s.r.o.	RSRD <sub>2</sub>

Nr.	Member State	Type of Company	Company name	Reporting Entity
192	TR	WK	TRANSWAGGON Vagon Isletmeleri Ltd. Sti.	RSRD <sub>2</sub>
193	UK	IM	Network Rail Infrastructure	
194	UK	RU F, WK	DB Cargo (UK) Ltd	DB Cargo AG