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## Report

### 2019 TAF TSI IMPLEMENTATION STATUS REPORT OF THE EUROPEAN UNION AGENCY FOR RAILWAYS

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# Contents

Abbreviations.....	3
Reference documents .....	4
Reference legislation .....	4
Table of Figures .....	5
1. EXECUTIVE SUMMARY .....	7
2. INTRODUCTION .....	10
3. CONTEXT .....	11
4. PARTICIPATION IN THE 2019 REPORTING SESSION.....	15
4.1. Responses to the survey .....	15
4.2. Participation per company type.....	17
5. DATA BASIS FOR EVALUATION .....	18
6. IMPLEMENTATION MONITORING OF TAF TSI FUNCTIONS .....	20
6.1. Common Reference Files – Primary Location Codes (IMs) .....	20
6.2. Common Reference Files - Company Code (all companies) .....	22
6.3. Common Interface Implementation (all companies).....	25
6.4. Train Ready (IMs and RUs-F) .....	28
6.5. Train Running Information (IMs and RUs-F) .....	31
6.6. Train Running Interrupted Message (IMs and RUs-F).....	35
6.7. Train Composition Message (IMs and RUs-F) .....	38
6.8. Consignment Note Data (RUs-F) .....	42
6.9. Wagon Movement (RUs-F).....	44
6.10. Wagon and Intermodal Unit Operating Database (RUs-F) .....	46
6.11. Rolling Stock Reference Database (WKS).....	48
6.12. Reasons for not starting implementation of TAF/TAP TSI functions .....	50
6.13. Degree of implementation at European level.....	51
7. COMMON SECTOR TOOLS .....	53
8. CONCLUSION AND FINDINGS.....	54
8.1. Functions to be reported in the next report.....	55
8.2. Calendar for next reporting .....	55
ANNEX 1: Distribution of freight fleet per country in Europe .....	56
ANNEX 2: Responses contact list 2019 .....	56
ANNEX 3: Responses contact list v9 .....	64

## Abbreviations

Abbreviation	Definition
CEF	Connecting Europe Facility
CER	Community of European Railway and Infrastructure Companies
CI	Common Interface
DI	Degree of Implementation
EC	European Commission
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
IM	Infrastructure Manager
INEA	Innovation and Networks Executive Agency
JSG	Joint Sector Group
NCP	National Contact Point
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)
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
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)	ERA TAF TSI Implementation Cooperation Group held on 27th March 2019	<a href="#">Minutes</a>	27.03.2017

## Reference legislation

Ref. N°	Document Reference	Title	Last Issue
[1]	<a href="#">Left blank intentionally</a>		
[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
[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

## Table of Figures

Figure 1: Agency TAF TSI Implementation Cooperation Group process .....	10
Figure 2: PM <sup>2</sup> project lifecycle .....	14
Figure 3: Reporting Schedule for the 2020 Reporting wave .....	55
Diagram 1: Evolution of participation over time .....	15
Diagram 2: Evolution of response rate over time .....	15
Diagram 3: Number of responses per country .....	16
Diagram 4: Evolution of responses per country .....	16
Diagram 5: Evolution of participating per company type over time .....	17
Diagram 6: Number of types of company per reporting session .....	18
Diagram 7: Number of types of company per reporting session .....	19
Diagram 8: Common Reference Files - Primary Location Codes (PLC) .....	20
Diagram 9: Evolution of PLC implementation .....	21
Diagram 10: Common Reference Files - Company Codes (CC).....	22
Diagram 11: Evolution of implementation for Company Codes .....	23
Diagram 12: Common Reference Files – Common Interface (CI).....	25
Diagram 13: Evolution of implementation for Common Interface .....	26
Diagram 14: Train Ready (TR) .....	28
Diagram 15: Train Running Information (TRI) .....	31
Diagram 16: Evolution of implementation for Train Running Information.....	32
Diagram 17: Implementation of TRI of IMs across European countries .....	33
Diagram 18: Train Running Interrupted Message (TRIM) .....	35
Diagram 19: Train Composition Message (TCM).....	38
Diagram 20: Evolution of implementation for Train Composition Message.....	40
Diagram 21: Implementation of TCM of IMs across European countries.....	40
Diagram 22: Consignment Note Data (CND) .....	42
Diagram 23: Evolution of implementation for Consignment Note Data (CND) .....	43
Diagram 24: Wagon Movement (WM).....	44
Diagram 25: Evolution of implementation for Wagon Movement (WM).....	45
Diagram 26: Wagon and Intermodal Unit Operating Database .....	46
Diagram 27: Evolution of implementation for WIMO .....	47
Diagram 28: Rolling Stock Reference Database .....	48
Diagram 29: Evolution of implementation for RSRD .....	49
Diagram 30: Reasons for not starting implementation of TAF/TAP TSI functions .....	50
Diagram 31: Evolution of insufficient awareness of TAF/TAP requirements .....	50
Diagram 32: Reported DI for IM functions .....	51
Diagram 33: Reported DI for RUs-F functions .....	52
Diagram 34: Reported DI for WK functions .....	52
Diagram 35: Common sector tools in use .....	53

Map 1: Implementation of Primary Location Codes .....	21
Map 2: Implementation of Company Codes .....	23
Map 3: Implementation of Common Interface (IMs) .....	25
Map 4: Implementation of Common Interface (RUs).....	26
Map 5: Implementation of Train Ready (IMs) .....	29
Map 6: Implementation of Train Ready (RUs).....	29
Map 7: Implementation of Train Running Information (IMs).....	31
Map 8: Implementation of Train Running Information (RUs) .....	32
Map 9: Implementation of Train Running Interrupted (IMs) .....	36
Map 10: Implementation of Train Running Interrupted (RUs).....	36
Map 11: Implementation of Train Composition (IMs).....	39
Map 12: Implementation of Train Composition (RUs) .....	39
Map 13: Implementation of Consignment Note (RUs).....	42
Map 14: Implementation of Wagon Movement (RUs).....	44
Map 15: Implementation of WIMO (RUs) .....	46
Map 16: Implementation of RSRD (RUs) .....	48

## 1. EXECUTIVE SUMMARY

This report contains the data provided to report the status of the implementation by **31.12.2019** of the following TAF TSI [2] functions:

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

This 2019 report provides a view of the implementation of these ten functions, agreed by the Agency TAF TSI Cooperation Group in March 2019. The first conclusion can be drawn from the fact that the number of companies reporting has increased compared to the previous report from 172 to 207.

There were all together 645 companies registered in the JSG Reporting Tool (<http://taf-jsg.info/>). Therefore the ratio of companies reported is this time 31,2% of the potential responding companies (compared to 28,7% from the previous session).

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>1</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 at that time 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:

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<sup>1</sup> See «Reference Documents» and <http://www.era.europa.eu/Document-Register/Documents/TAF-TSI-Master-Plan.pdf>.

- CER<sup>2</sup>
- UIC
- EIM
- UNIFE
- 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 reports was available.

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 116 companies across Europe.

The following key findings per TAF function can be highlighted:

- In general terms, when we consider a reference 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 a more significant number 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

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<sup>2</sup> See «Abbreviations» for acronyms.



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 (+ the wagon movement) is improving in comparison with the realisation milestones committed on the TAF TSI Master Plan (1). Indeed, the actual value is however behind the expected implementation value by 2017, when half of Railway Undertakings respondents committed to deploy this function by 2016.
- Regarding the level of implementation of the Train Composition Message, the actual implementation status is significantly below the expectations committed by the companies on the TAF TSI Master Plan (1). Same holds for the Wagon Movement, Consignment Note and Train Running Delay functions.

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 of not meeting 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 2019 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 permits to conclude that the RUs have already started delivering information about the implementation of the TAF TSI [2] compliant RSRD database.

## 2. INTRODUCTION

This 2019 Implementation 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].

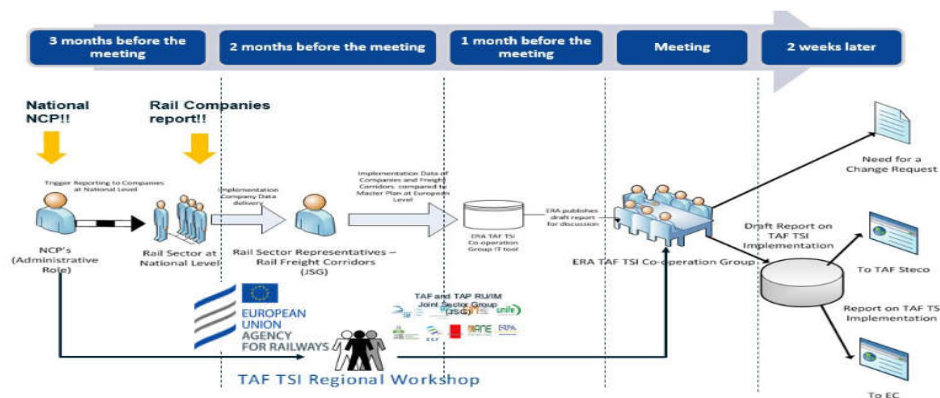
In particular, Article 5 of the Regulation [2] attributes to the European Union Agency for Railways, named the Agency along the report, the task to assess and oversee the implementation of the Regulation to determine whether the agreed objectives and deadlines have been achieved and to provide an assessment 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 Objective 2.3 (Harmonised Train Control System and Telematics) of the Agency work programme for 2020. On this basis, the Agency continues to manage the evolution of the TAF TSI within the framework of the Co-operation Group for the Implementation of Telematics Applications for Freight (started 2014). 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 upon request 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>3</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 at that time 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) has set-up two IT tools to collect and visualize the data submitted by the European 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 645 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:

- 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:

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<sup>3</sup> <https://ec.europa.eu/inea/en/connecting-europe-facility>

- Train Preparation (train composition and train ready),
- Train Running Information,
- Service Disruption.
- 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 Data Function,
  - Train Preparation (train composition and train ready),
  - Wagon Movement Function,
  - Wagon and Intermodal Unit Operational Database (WIMO) Function,
  - Rolling Stock Reference Database.

The scope of the present 2019 report is to inform about the deployment of the functions scheduled to be implemented by end of 2019 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 meeting (3) held in March 2019, this report provides information about the implementation of the following functions:

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

To have a common approach for all companies' contributors submitting implementation information, **a common criterion has been agreed with the representatives of the rail sector at the start of the reporting activities 2015 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.

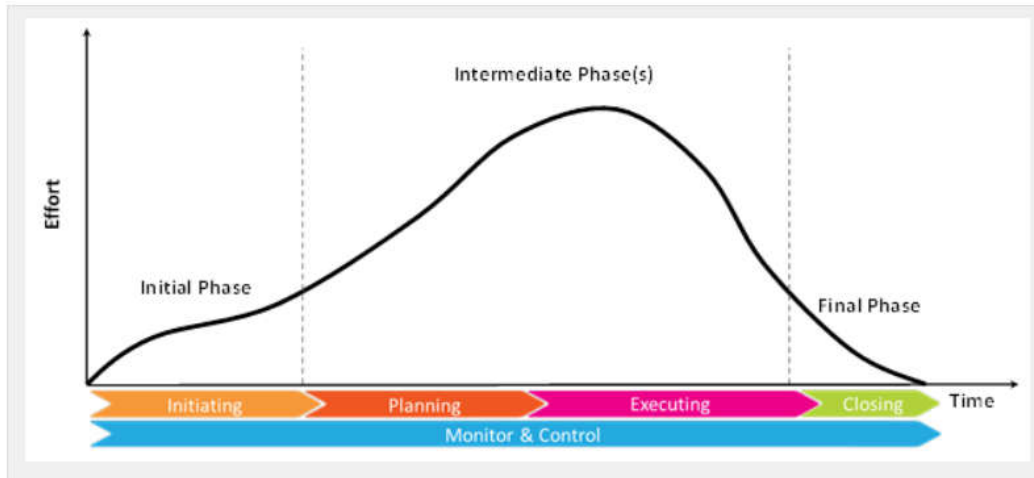


Figure 2: PM<sup>2</sup> project lifecycle.

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 < 100% -> Green colour on the map.
  - Closing & Production accomplished: DI = 100% -> Dark Green colour on the map.

## 4. PARTICIPATION IN THE 2019 REPORTING SESSION

### 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 diagram 1 together with the number of responses received thereof. Since the last report one year ago, invitations and responses have grown again.

The 2019 report includes 72 Wks submitted by UIP using RSRD<sup>2</sup>.

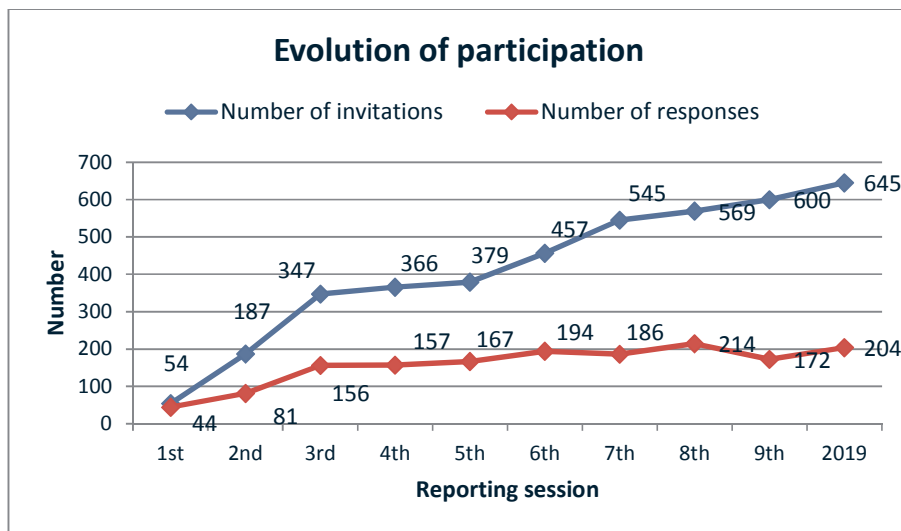


Diagram 1: Evolution of participation over time

Hence, the response rate, calculated as number of responses in relation to number of invitations, has grown to 31,6 % (see diagram 2).

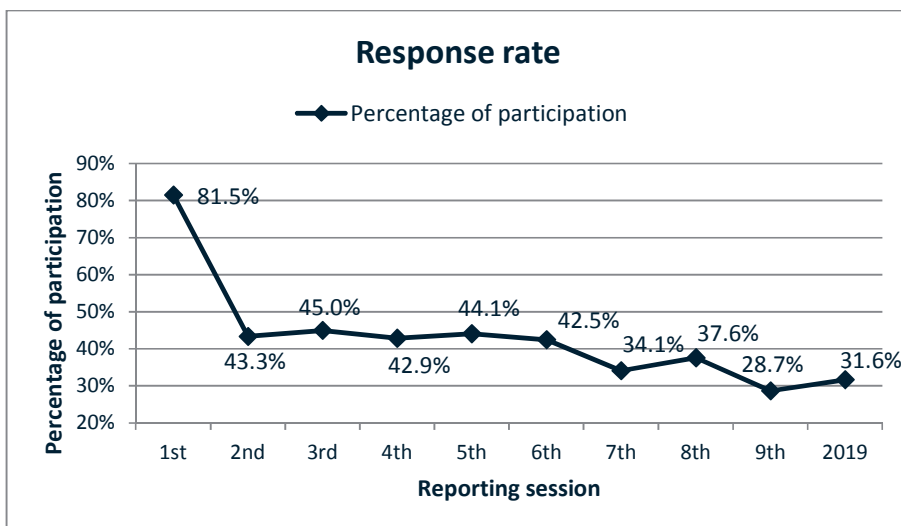


Diagram 2: Evolution of response rate over time

Diagram 3 displays the distribution of total responses per country. The feedback comprises 22 EU Member States plus Switzerland and Turkey.

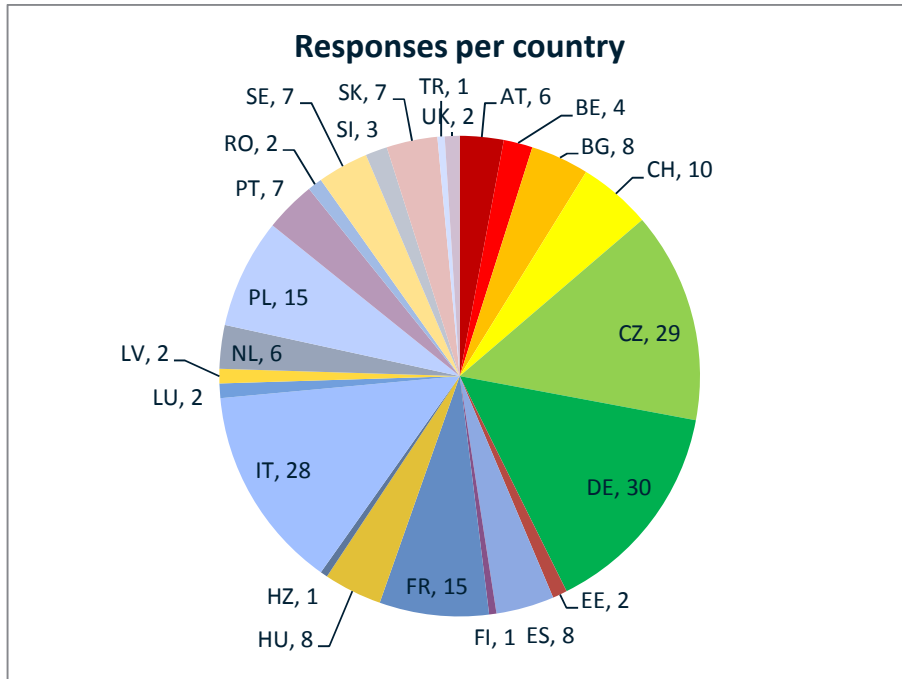


Diagram 3: Number of responses per country

Diagram 4 shows the distribution and the development of responses per country. The total number of responses in the 2019 reporting period is 204, which is 32 more than in the last session.

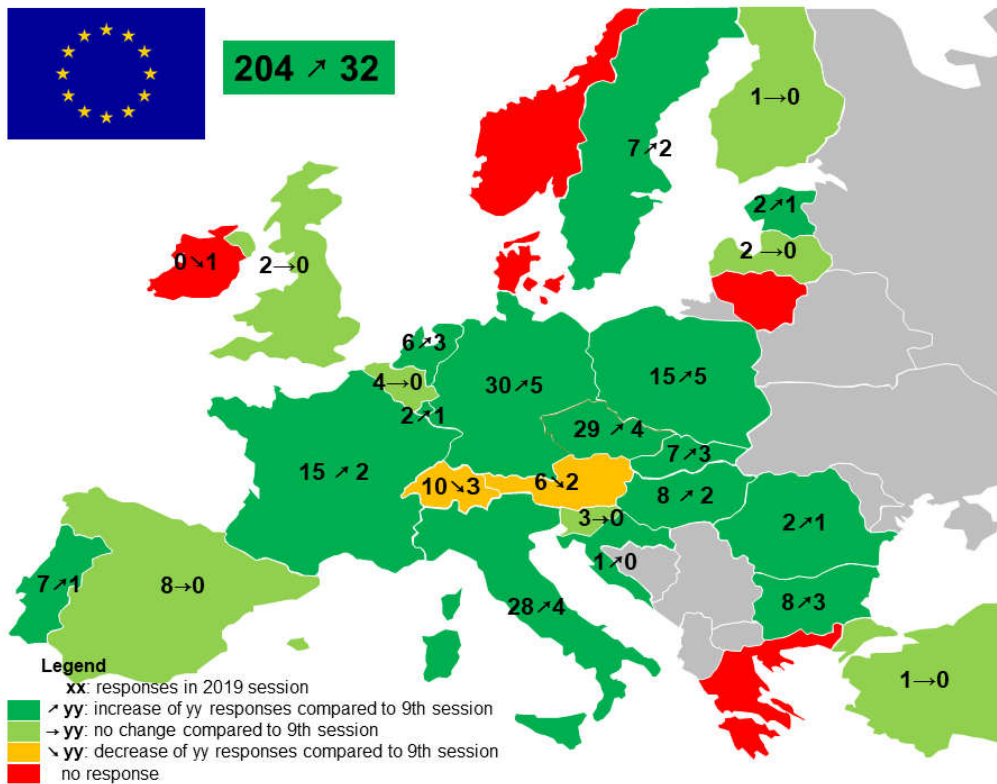


Diagram 4: Evolution of responses per country



## 4.2. Participation per company type

Some companies in this survey may have multiple roles, such as RU and WK at the same time. Therefore, the total number of responses displayed in diagram 1 (204 companies) and listed in Annex 2 is lower than the total number of company types shown in diagram 5 hereafter (250 companies).

Compared to the previous survey, participation for all types of company has grown.

Annex 2 'Responses contact list 2019' to this report gives a detailed overview about the companies per country having replied to the 2019 session of TAF and TAP TSI implementation monitoring. Please note, that there are entities which have reported on behalf of several companies.

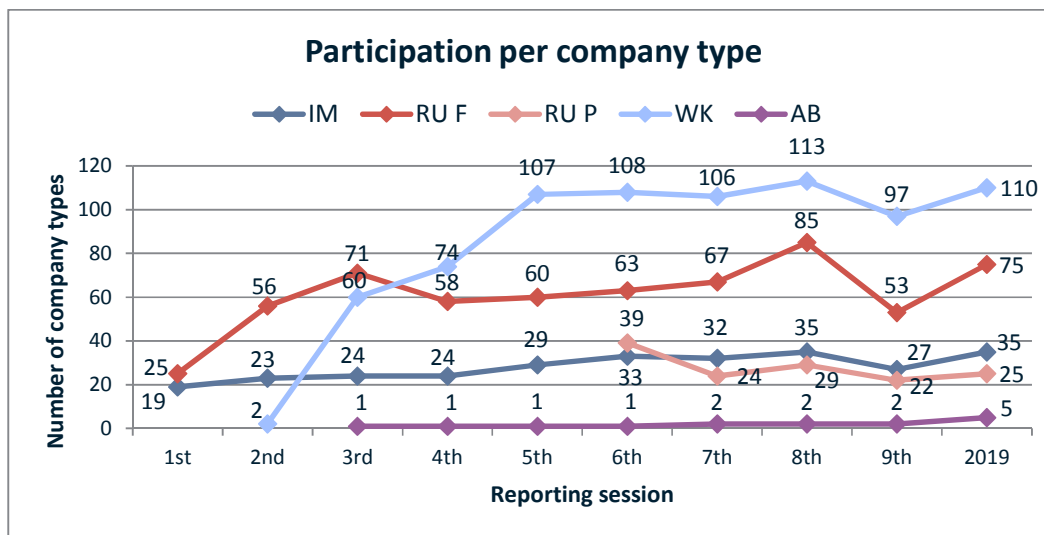


Diagram 5: Evolution of participating per company type over time

## 5. DATA BASIS FOR EVALUATION

To establish a wider sector representation, 26 companies from the previous survey, which have not replied this time, are also taken into consideration. For companies having reported to both surveys, only the company information from the latest session is included.

Diagram 6 displays the total number of types of company (271) with their allocation to the following reporting sessions:

- Companies only reporting to the 9<sup>th</sup> reporting session (top with light colour)
- Companies reporting to both 9<sup>th</sup> and 2019 reporting session (middle with normal colour)
- New companies reporting to the 2019 reporting session only (bottom with dark colour)

The data included in this report thus represents the data since July 2018.

The number of companies taken over from the last reporting is relatively low (26) while the number of new companies in the present session is relatively high (74).

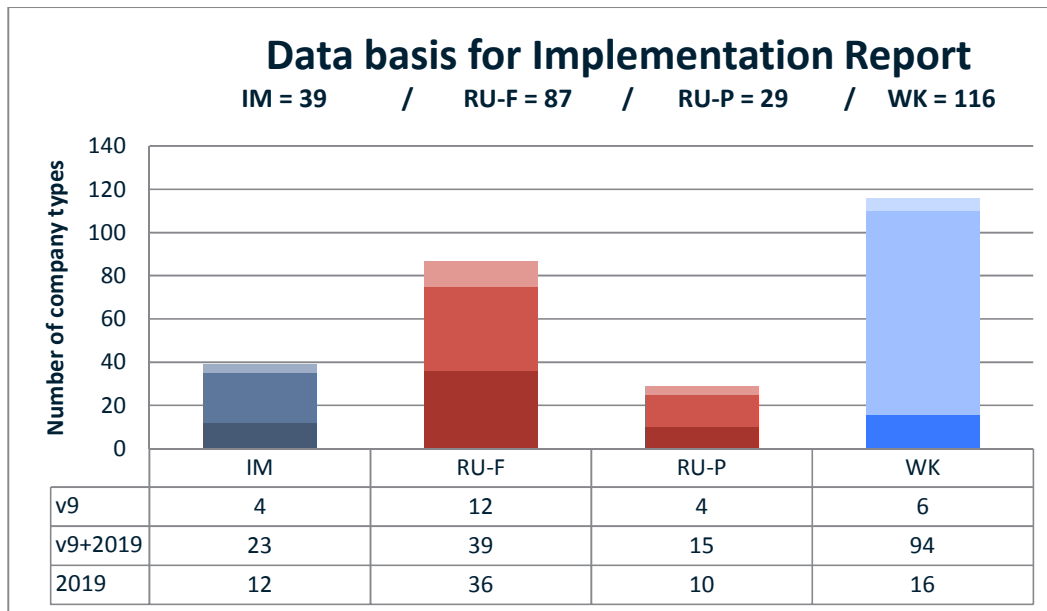


Diagram 6: Number of types of company per reporting session

Annex 3 'Responses contact list v9' to this report lists the companies per country having replied to the eighth session of TAF and TAP TSI implementation monitoring and not to the present one.

Since the seventh reporting session, replies from the previous survey have each time been considered. Diagram 7 displays this time, a falling number of company types as data basis for evaluation.

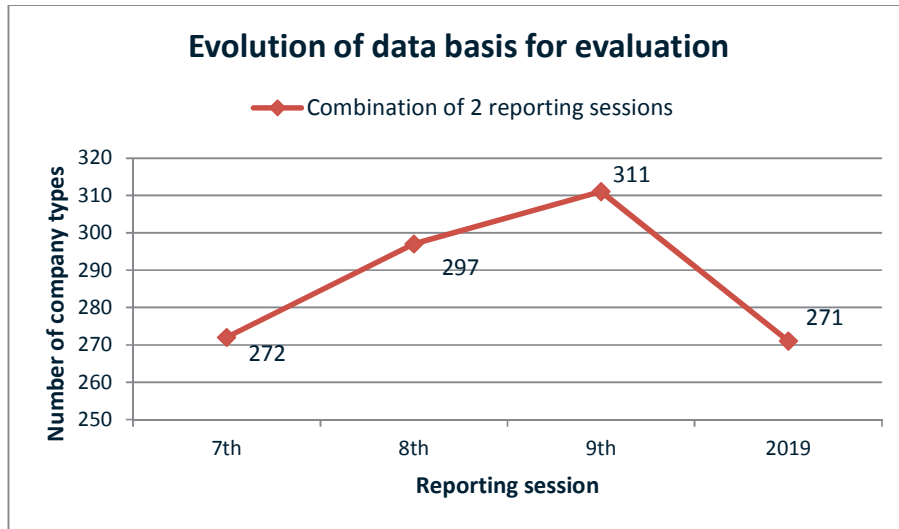


Diagram 7: Number of types of company per reporting session

## 6. IMPLEMENTATION MONITORING OF TAF TSI FUNCTIONS

### 6.1. 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 must be defined by IMs. Consequently, the following diagram 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 part of this report.

Diagram 8 indicates, that most IMs reported to have completed the Common Reference Files for locations on their network. However, complete population of PLC is not yet reached. Regarding the level of fulfilment of PLC implementation, diagram 8 shows 22 IMs with complete implementation. 4 out of 39 IMs in the evaluation are considered with data from the previous survey.

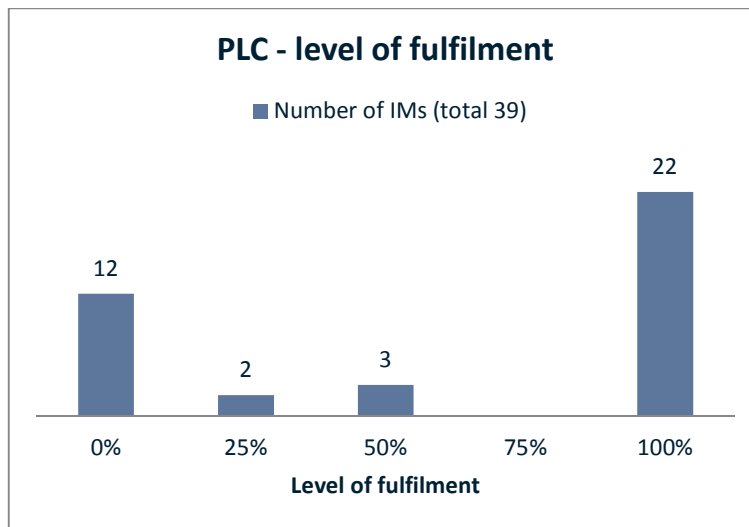
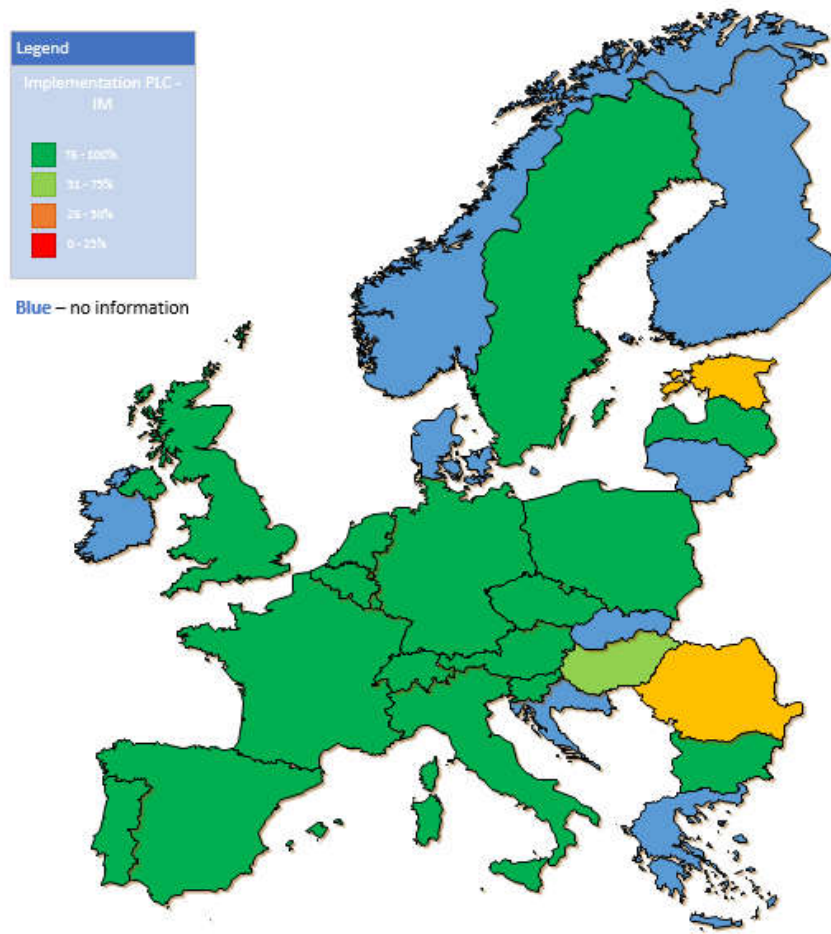


Diagram 8: Common Reference Files - Primary Location Codes (PLC)

Diagram 9 shows the decrease of complete implementation of PLC in relation to the declining number of IM responses.



Map 1: Implementation of Primary Location Codes

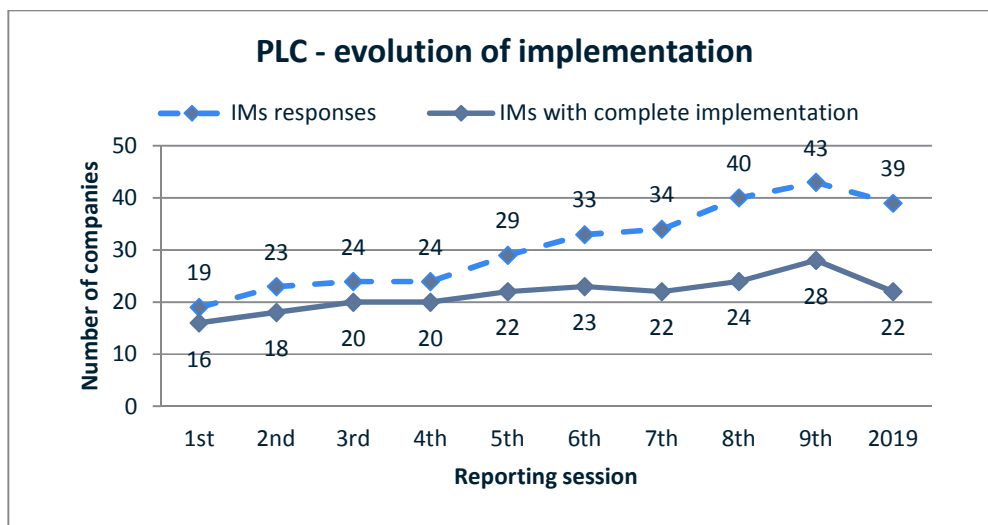


Diagram 9: Evolution of PLC implementation

AT	All reported implemented
BE	
BG	
CH	
ES	
FR	
LU	
LV	
NL	
PT	
RO	
SI	
UK	
EE	12/31/2020
HU	3/31/2020
CZ	Latest date not reported
DE	
IT	
PL	
SE	
SK	
FI	No reports from MS
HR	

Table 1 Latest PLC implementation dates reported by IMs

As far as latest planned end date of PLC implementation is concerned, for:

- 13 reporting MS - IM reports show only complete implementation,
- 2 reporting MS - at least one IM reports implementation yet in 2020,
- 6 reporting MS - at least one IM do not report the implementation date,
- 2 reporting MS - no IM are reports available.

## 6.2. 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 (diagram 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. Most of companies having replied to the query possess a CC.

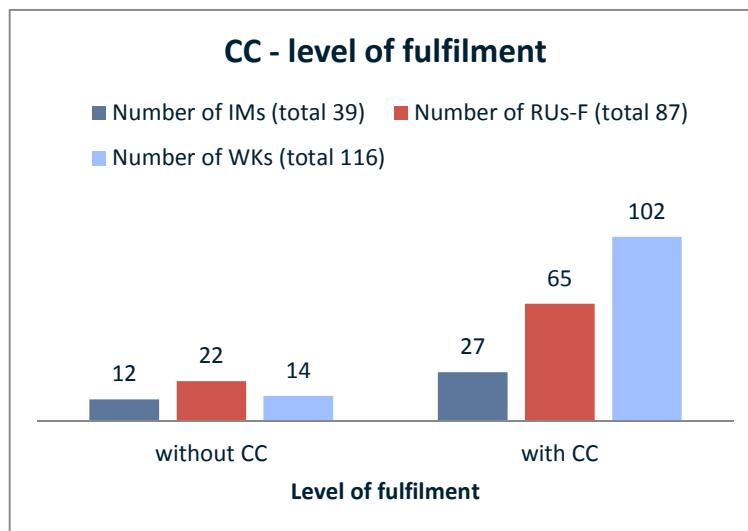
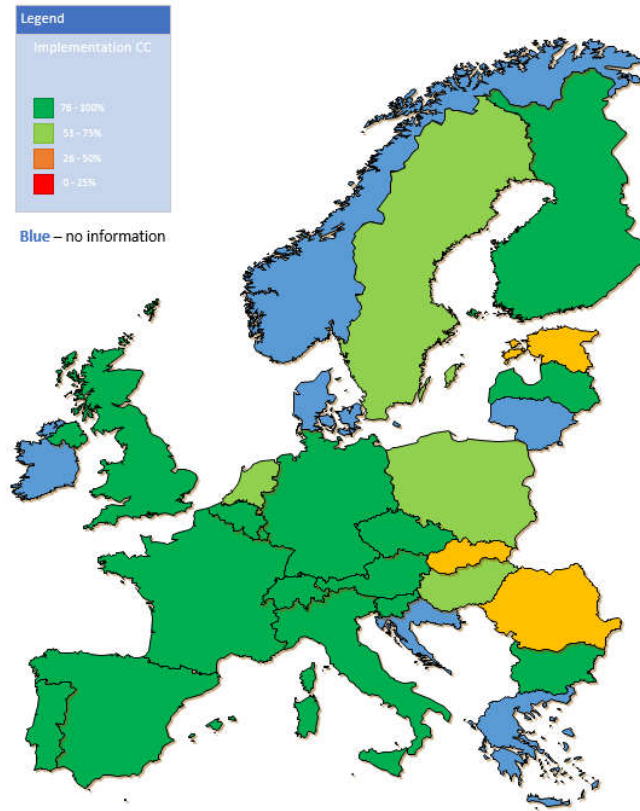


Diagram 10: Common Reference Files - Company Codes (CC)



Map 2: Implementation of Company Codes

According to Diagram 11, the number of companies with CCs has declined for all types of companies together with the total number of responses since the last survey.

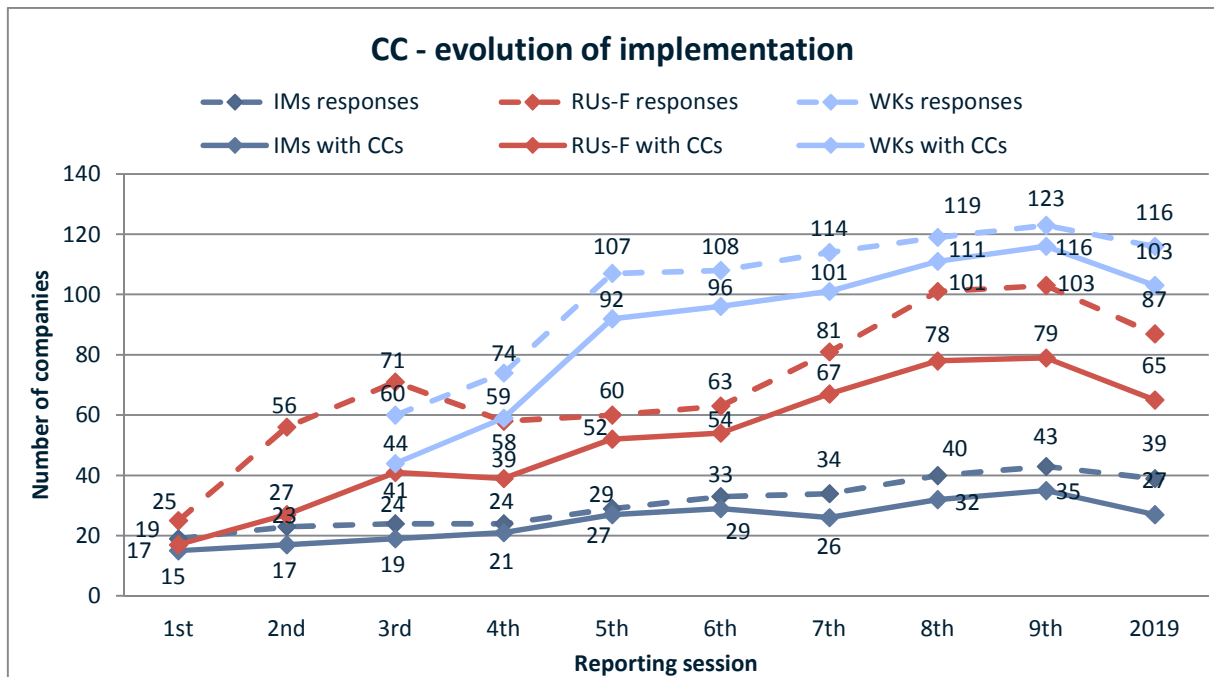


Diagram 11: Evolution of implementation for Company Codes

CC

AT	All reported implemented
BE	
BG	
CZ	
ES	
FR	
HU	
LU	
LV	
NL	
PT	
RO	
SI	
SK	
UK	
EE	12/31/2020
CH	Latest date not reported
DE	
IT	
PL	
SE	No reports from MS
FI	
HR	

Table 2 Latest CC implementation dates reported by IM

As far as latest planned end date of CC implementation by IM is concerned, for:

- 15 reporting MS - IM reports show only complete implementation,
- 1 reporting MS - at least one IM reports implementation yet in 2020,
- 5 reporting MS - at least one IM do not report the implementation date,
- 2 reporting MS - no IM reports are available.

CC	
AT	All reported implemented
CH	
DE	
FI	
FR	
HU	
HR	
LU	
LV	
PT	
SI	
SK	
UK	
BE	
NL	1/1/2021
EE	12/31/2022
BG	Latest date not reported
CZ	
ES	
IT	
PL	No reports from MS
SE	
RO	

Table 3 Latest CC implementation dates reported by RU-F

And for RU-F respectively:

- 13 reporting MS - RU reports show only complete implementation,
- 2 reporting MS - at least one RU reports implementation yet in 2020,
- 6 reporting MS - at least one RU do not report the implementation date,
- 2 reporting MS - there is no RU reports available.



### 6.3. 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.

Diagram 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 22 IMs, 26 RUs-F and 13 Wks. RSRD<sup>2</sup> has yet not implemented the CI. Wks using RSRD<sup>2</sup> therefore form part of the 25% level.

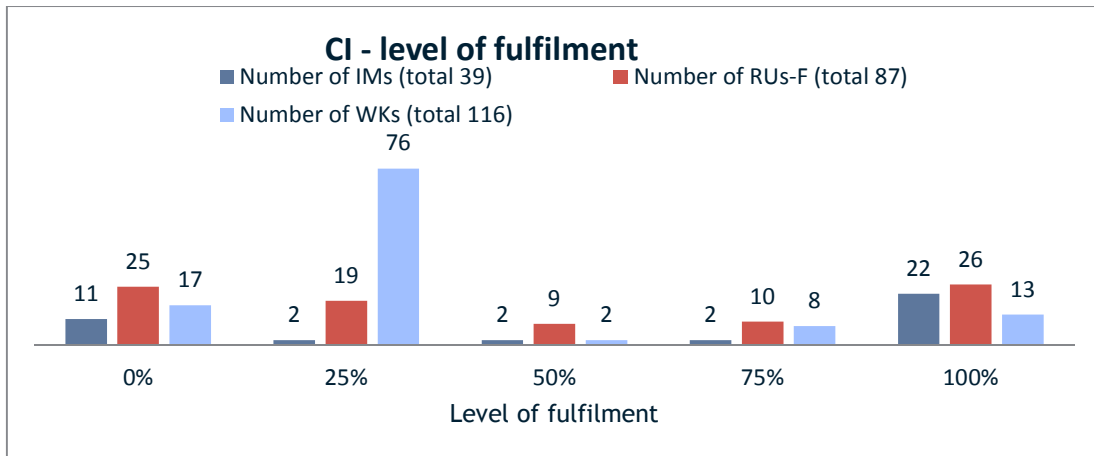
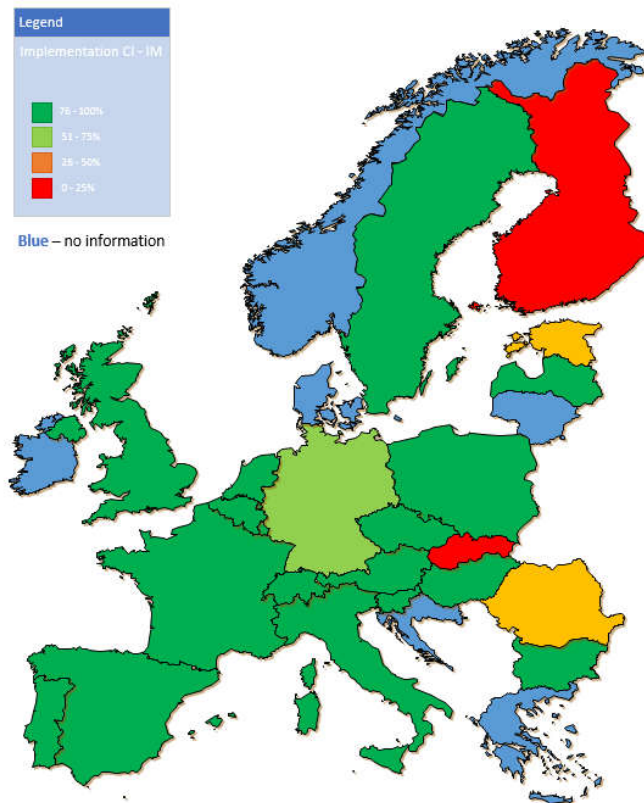
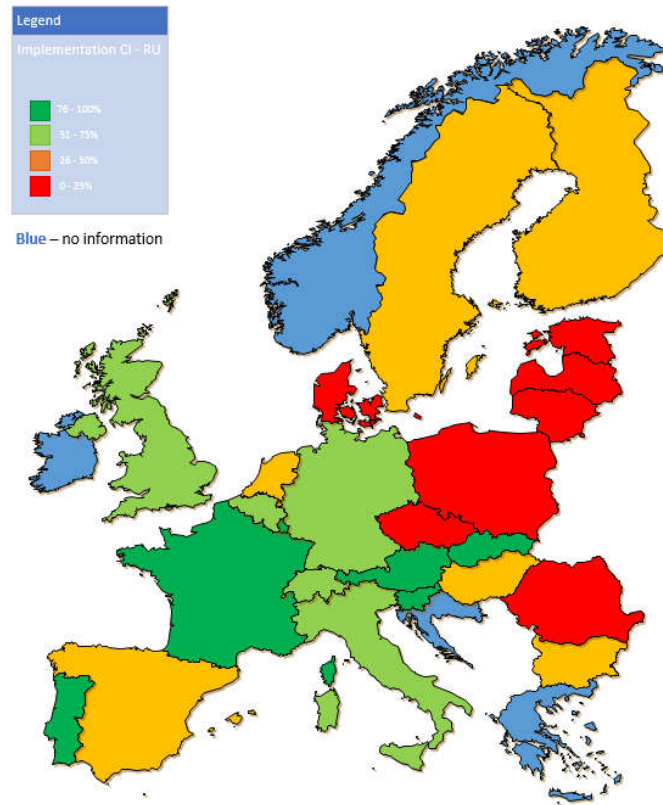


Diagram 12: Common Reference Files – Common Interface (CI)



Map 3: Implementation of Common Interface (IMs)



Map 4: Implementation of Common Interface (RUs)

The development of complete implementation of the CI over time according to diagram 13 shows again the relation to the number of responses per company type. There is positive evolution of CI in production for IMs and negative evolution for RUs-F and Wks up to December 2019.

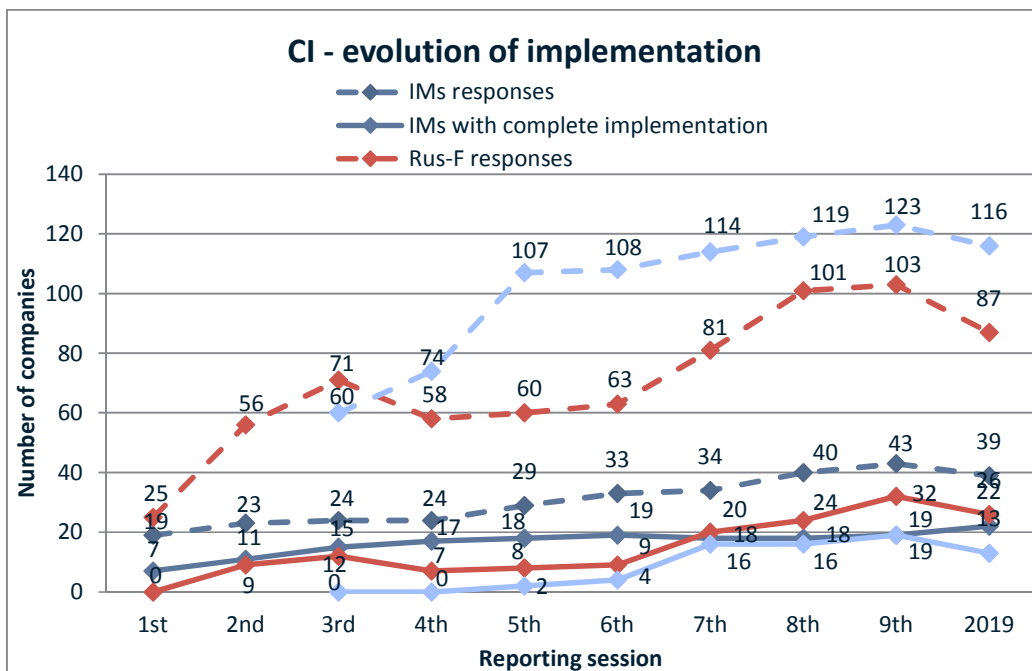


Diagram 13: Evolution of implementation for Common Interface

CI	
AT	All reported implemented
BE	
BG	
CH	
CZ	
ES	
FR	
HU	
LU	
NL	
PT	
RO	
SI	
SK	
UK	
EE	12/31/2020
LV	12/31/2022
DE	Latest date not reported
IT	
PL	
SE	
FI	No reports from MS
HR	No reports from MS

Table 4 Latest CI implementation dates reported by IM

As far as latest planned end date of CI implementation by IM is concerned, for:

- 15 reporting MS - IM reports show only complete implementation,
- 1 reporting MS - at least one IM reports implementation yet in 2020,
- 1 reporting MS - at least one IM reports implementation in 2022,
- 4 reporting MS - at least one IM do not report the implementation date,
- 2 reporting MS - no IM reports are available.

CI	
FR	All reported implemented
HR	
LU	
SI	
UK	
DE	6/30/2020
PT	1/31/2020
SK	6/30/2020
AT	6/30/2021
BE	12/31/2021
ES	12/1/2021
BG	Latest date not reported
CH	
CZ	
FI	
HU	
IT	
NL	
PL	
SE	
RO	No reports from MS

Table 5 Latest CI implementation dates reported by RU-F

And for RU-F respectively:

- 5 reporting MS - RU reports show only complete implementation,
- 3 reporting MS - at least one RU reports implementation yet in 2020,
- 3 reporting MS - at least one RU reports implementation in 2021,
- 9 reporting MS - at least one RU do not report the implementation date,
- 1 reporting MS - there is no RU reports available.

#### 6.4. Train Ready (IMs and RUs-F)

The Target Implementation Milestone for realisation of the Train Ready Message (TR) according to the TAF TSI Masterplan was 2019.

About one third of IMs and RUs-F stated implementing the Train Ready function using the respective TAF message. Companies using other means of implementation in accordance with the TSIs remain out of consideration.

The level of fulfilment of diagram 14 shows 6 IMs and 12 RUs-F with 100% implementation of the TAF message. This function is reported for the first time and no evolution of implementation is available.

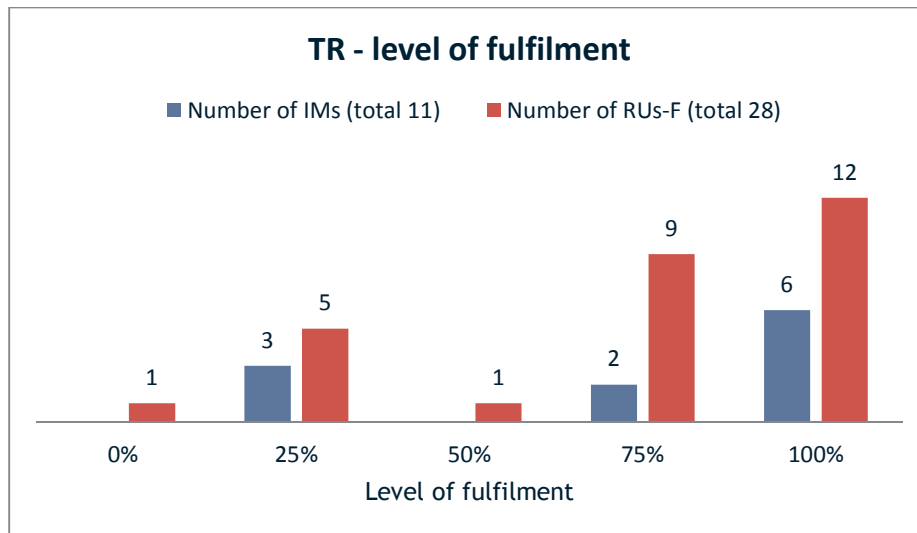
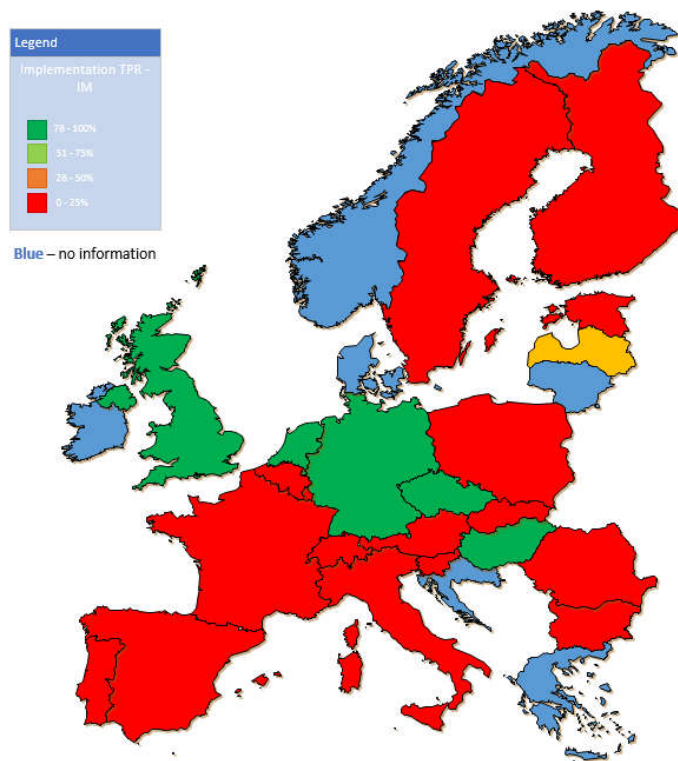
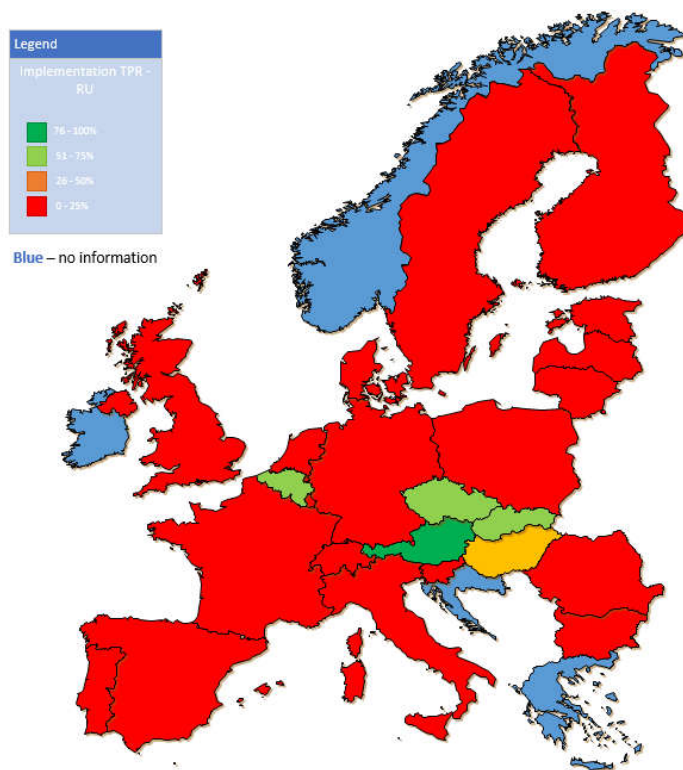


Diagram 14: Train Ready (TR)



Map 5: Implementation of Train Ready (IMs)



Map 6: Implementation of Train Ready (RUs)

	TR
HU	All reported implemented
NL	
UK	
AT	Latest date not reported
BE	
BG	
CH	
CZ	
DE	
EE	
ES	
FR	
IT	
LU	
LV	
PL	
PT	
RO	
SE	
SI	
SK	
FI	No reports from MS
HR	

Table 6 Latest TR implementation dates reported by IM

As far as latest planned end date of TR implementation by IM is concerned, for:

- 3 reporting MS - IM reports show only complete implementation,
- 18 reporting MS - at least one IM do not report the implementation date,
- 2 reporting MS - no IM reports are available.

	TR
AT	All reported implemented
BE	Latest date not reported
BG	
CH	
CZ	
DE	
EE	
ES	
FI	
FR	
HU	
HR	
IT	
LU	
LV	
NL	
PL	
PT	
SE	
SI	
SK	
UK	
RO	No reports from MS

Table 7 Latest TR implementation dates reported by RU-F

And for RU-F respectively:

- 1 reporting MS - RU reports show only complete implementation,
- 21 reporting MS - at least one RU do not report the implementation date,
- 1 reporting MS - there is no RU reports available.

## 6.5. 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 was 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.

Diagram 15 indicates 20 IMs and 28 RUs-F with 100 % level of fulfilment.

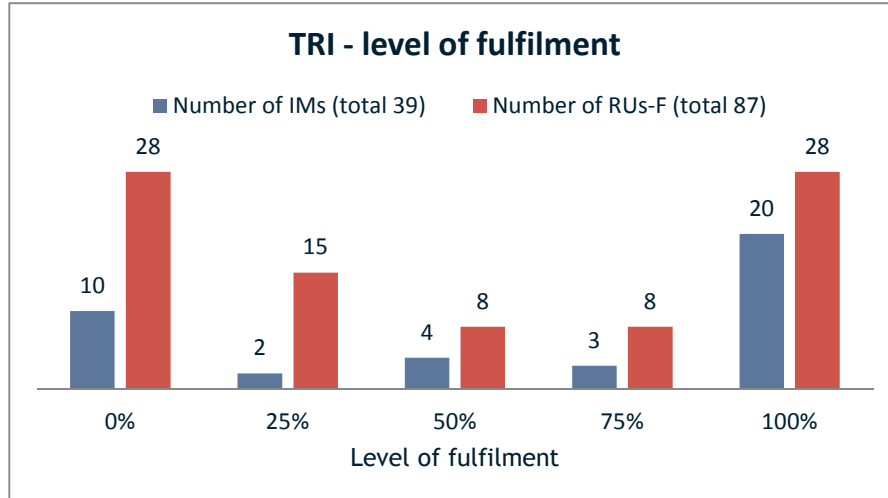
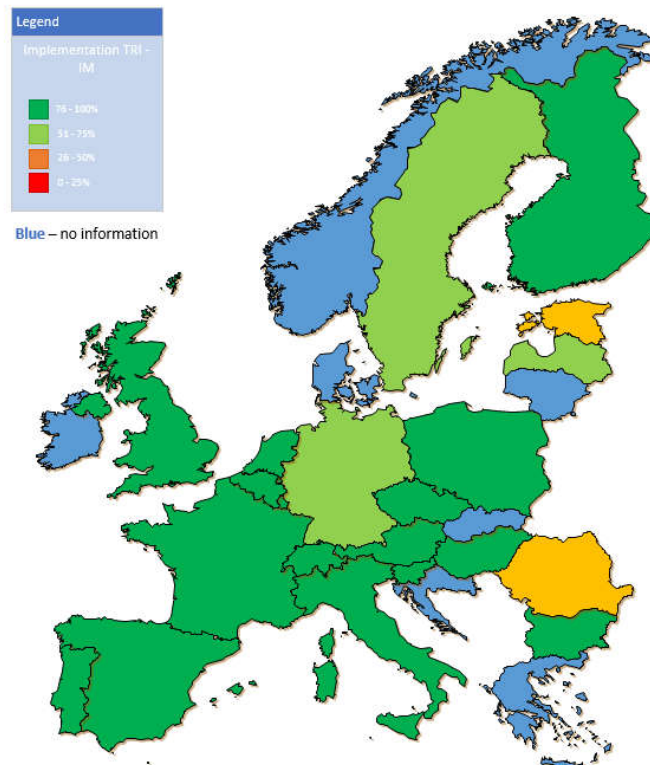
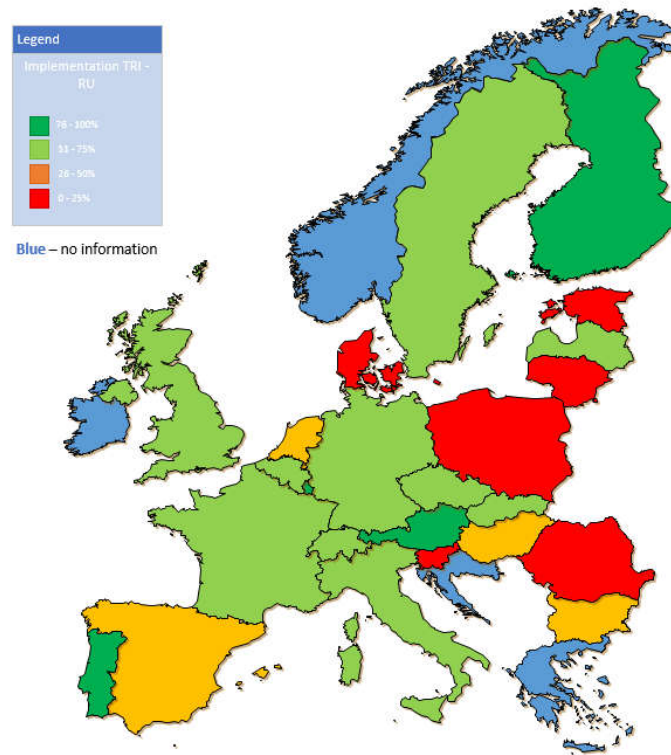


Diagram 15: Train Running Information (TRI)



Map 7: Implementation of Train Running Information (IMs)



Map 8: Implementation of Train Running Information (RUs)

Regarding diagram 16, the number of IMs having implemented completely the TRI increased in comparison to the previous reporting session. Contrary to that, the number of RUs-F decreased at a lower level of participation.

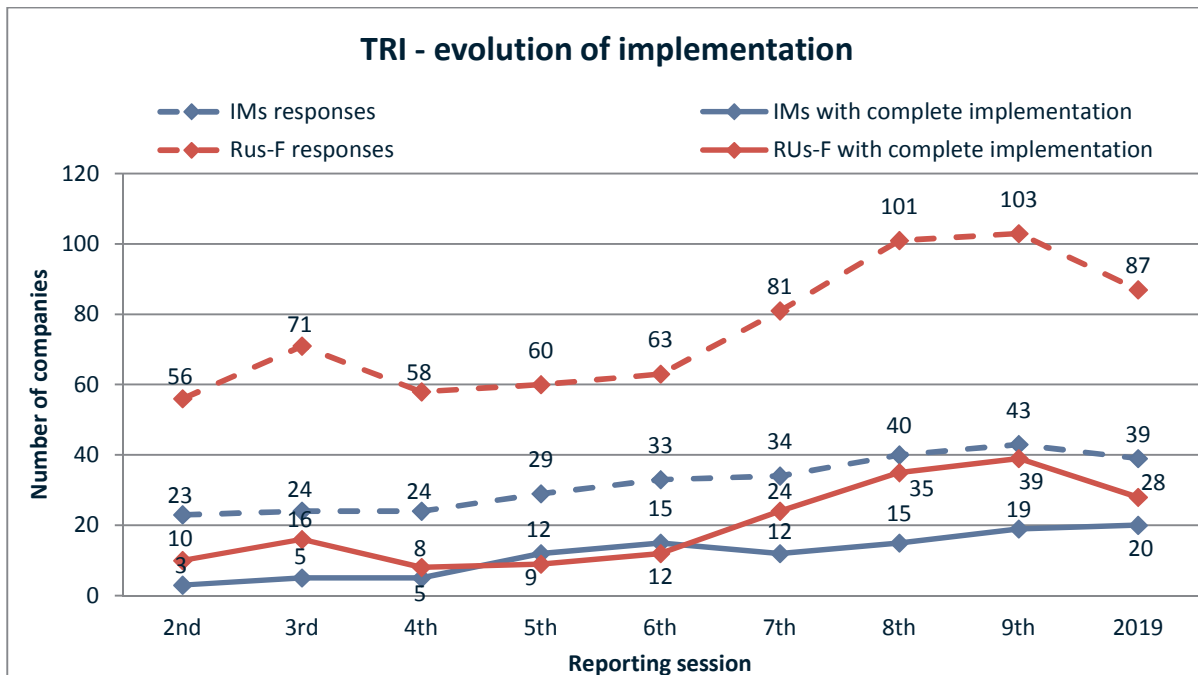


Diagram 16: Evolution of implementation for Train Running Information



Diagram 17 gives an impression about the state of implementation of TRI by IMs in countries across Europe. The IMs having the longest network have been taken as relevant for the country. For IMs still in development the current planned end date and the respective level of fulfilment is shown in diagram 17.

In CH, CZ and HU there are two IMs having completed TRI implementation. Among the IMs there are 11 small companies, such as harbours, having responded to this survey. Contrary to the level of fulfilment of dominating IMs, such small companies across Europe have not even started projects.

Compared to the situation one year ago, one additional country has completed implementation of TRI.

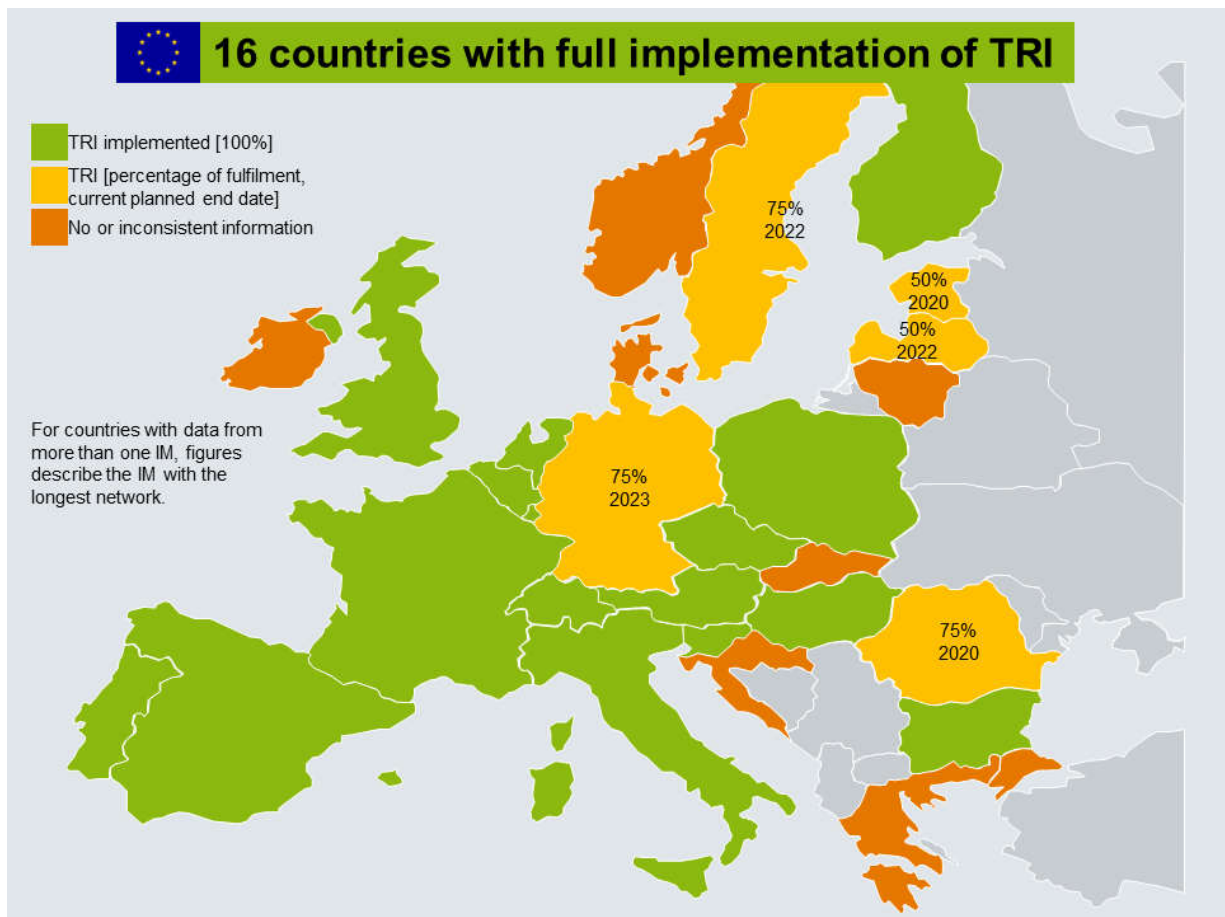


Diagram 17: Implementation of TRI of IMs across European countries

TRI	
AT	All reported implemented
BE	
BG	
CZ	
ES	
FR	
HU	
LU	
NL	
PT	
SI	
SK	
UK	
CH	Latest date not reported
DE	
EE	
IT	
LV	
PL	
RO	
SE	No reports from MS
FI	
HR	

Table 8 Latest TRI implementation dates reported by IM

As far as latest planned end date of TRI implementation by IM is concerned, for:

- 13 reporting MS - IM reports show only complete implementation,
- 8 reporting MS - at least one IM do not report the implementation date,
- 2 reporting MS - no IM reports are available.

TRI	
AT	All reported implemented
DE	
FI	
LU	
LV	
UK	
BE	Latest date not reported
BG	
CH	
CZ	
EE	
ES	
FR	
HU	
HR	
IT	
NL	
PL	
PT	
SE	
SI	
SK	
RO	No reports from MS

Table 9 Latest TRI implementation dates reported by RU-F

And for RU-F respectively:

- 6 reporting MS - RU reports show only complete implementation,
- 1 reporting MS - at least one RU do not report the implementation date,
- 1 reporting MS - there is no RU reports available.

## 6.6. Train Running Interrupted Message (IMs and RUs-F)

The Target Implementation Milestone for realisation of the Train Running Interrupted Message (TRIM) according to the TAF TSI Masterplan was 2019.

This function is reported for the first time. Hence, the totality of companies is lower as no results from the previous survey exist. Furthermore, no evolution of implementation is available.

The level of fulfilment of diagram 18 shows 10 IMs and 9 RUs-F with complete implementation of the TRIM message.

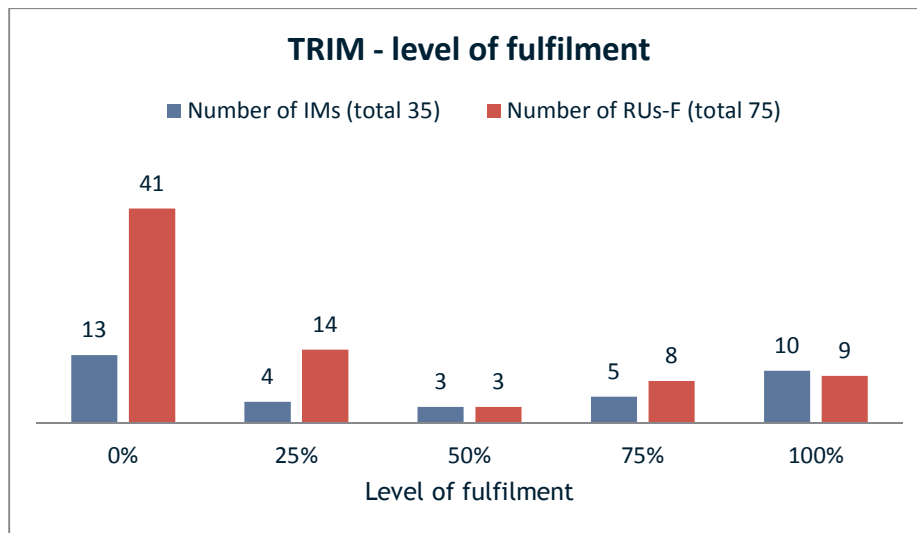
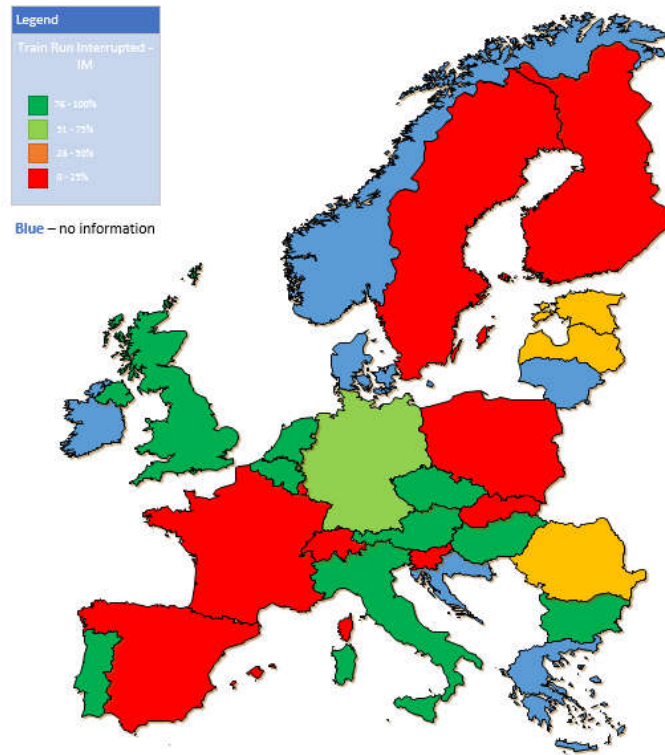
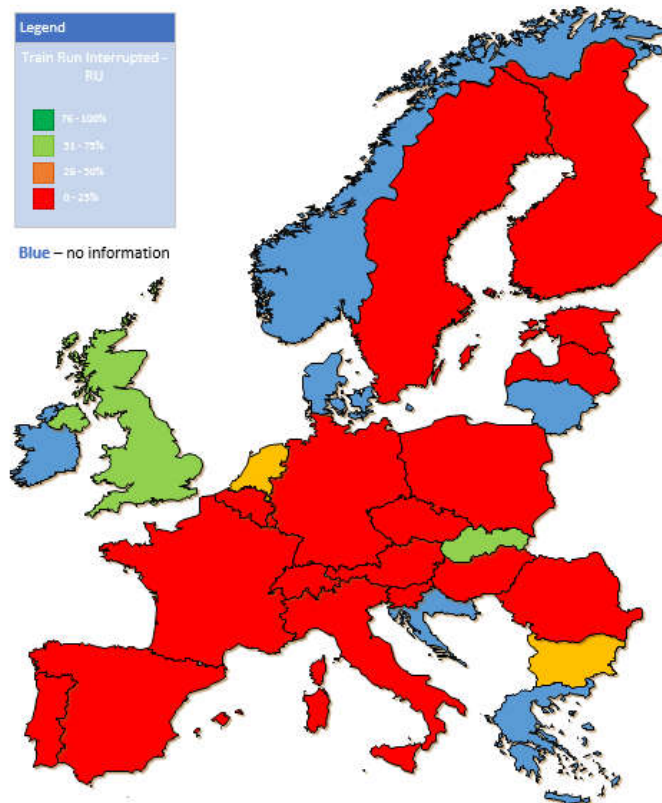


Diagram 18: Train Running Interrupted Message (TRIM)



Map 9: Implementation of Train Running Interrupted (IMs)



Map 10: Implementation of Train Running Interrupted (RUs)

TRIM	
AT	All reported implemented
BE	
BG	
NL	
PT	
UK	
CH	Latest date not reported
CZ	
DE	
EE	
ES	
FR	
HU	
IT	
LU	
LV	
PL	
RO	
SE	
SI	
SK	
FI	No reports from MS
HR	

Table 10 Latest TRIM implementation dates reported by IM

As far as latest planned end date of TRIM implementation by IM is concerned, for:

- 6 reporting MS - IM reports show only complete implementation,
- 15 reporting MS - at least one IM do not report the implementation date,
- 2 reporting MS - no IM reports are available.

TRIM	
UK	All reported implemented
AT	Latest date not reported
BE	
BG	
CH	
CZ	
DE	
EE	
ES	
FI	
FR	
HU	
HR	
IT	
LU	
LV	
NL	
PL	
PT	
SE	
SI	
SK	
RO	No reports from MS

Table 11 Latest TRIM implementation dates reported by RU-F

And for RU-F respectively:

- 1 reporting MS - RU reports show only complete implementation,
- 21 reporting MS - at least one RU do not report the implementation date,
- 1 reporting MS - there is no RU reports available.

## 6.7. Train Composition Message (IMs and 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 was end of 2018. TCM is mandatory to be sent by RUs-F. However, implementation by IMs is also reported, because the message is sometimes required via the Network Statement. 12 IMs and 27 RUs-F have implemented TCM completely.

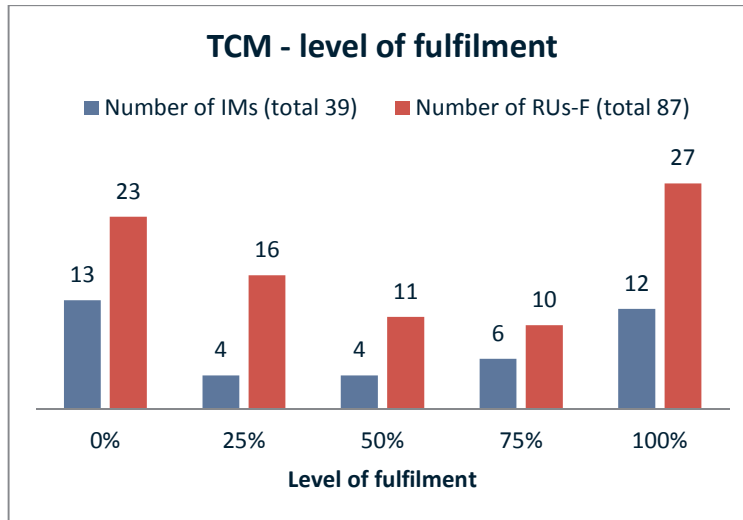
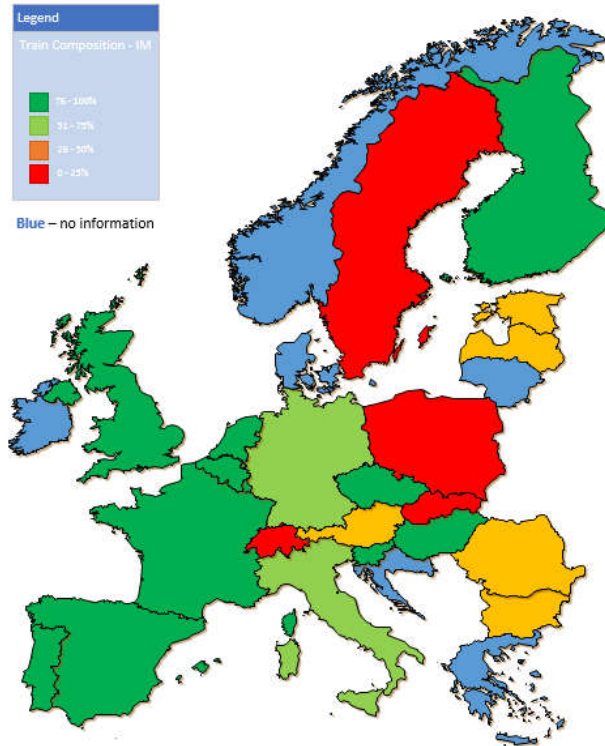
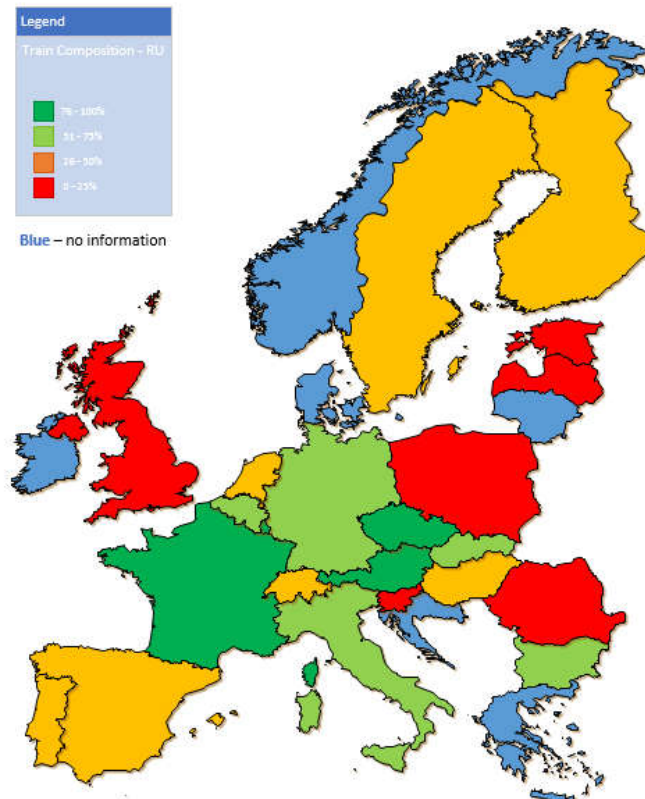


Diagram 19: Train Composition Message (TCM)



Map 11: Implementation of Train Composition (IMs)



Map 12: Implementation of Train Composition (RUs)

Figures show increase in terms of complete implementation of TCM since last reporting session. 27 RUS-F out of 87 which replied to the survey have completely implemented the TCM while 12 out of 39 IMs have finished their duty.

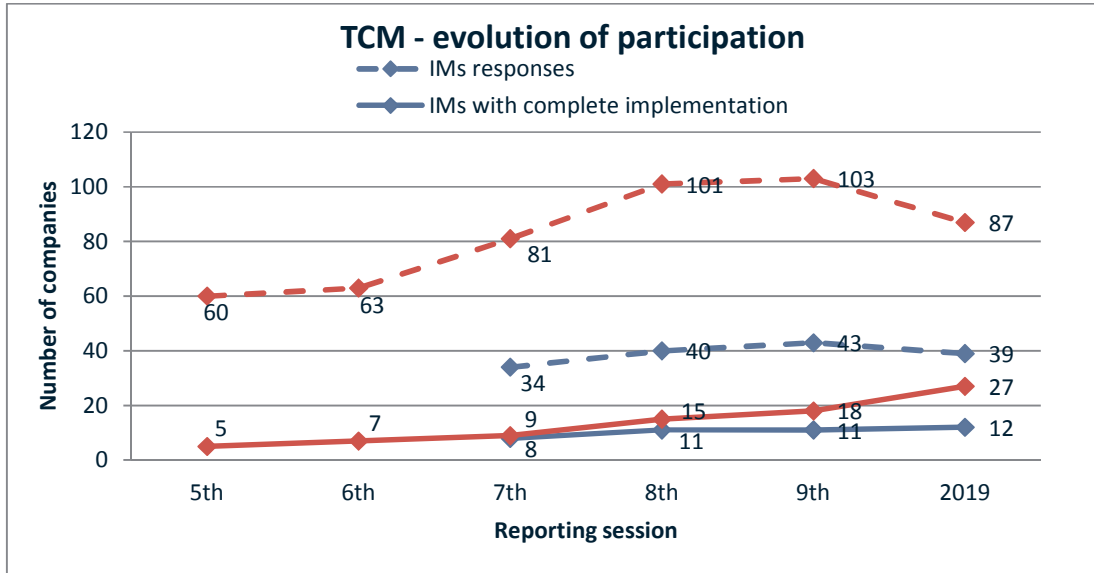


Diagram 20: Evolution of implementation for Train Composition Message

The European map (diagram 21) indicates the level of implementation regarding the TCM function for dominating IMs in each country. Where complete implementation has not yet been reached, current planned end date and level of fulfilment is given.

Among the IMs there are small companies, such as harbours, which have not even started projects.

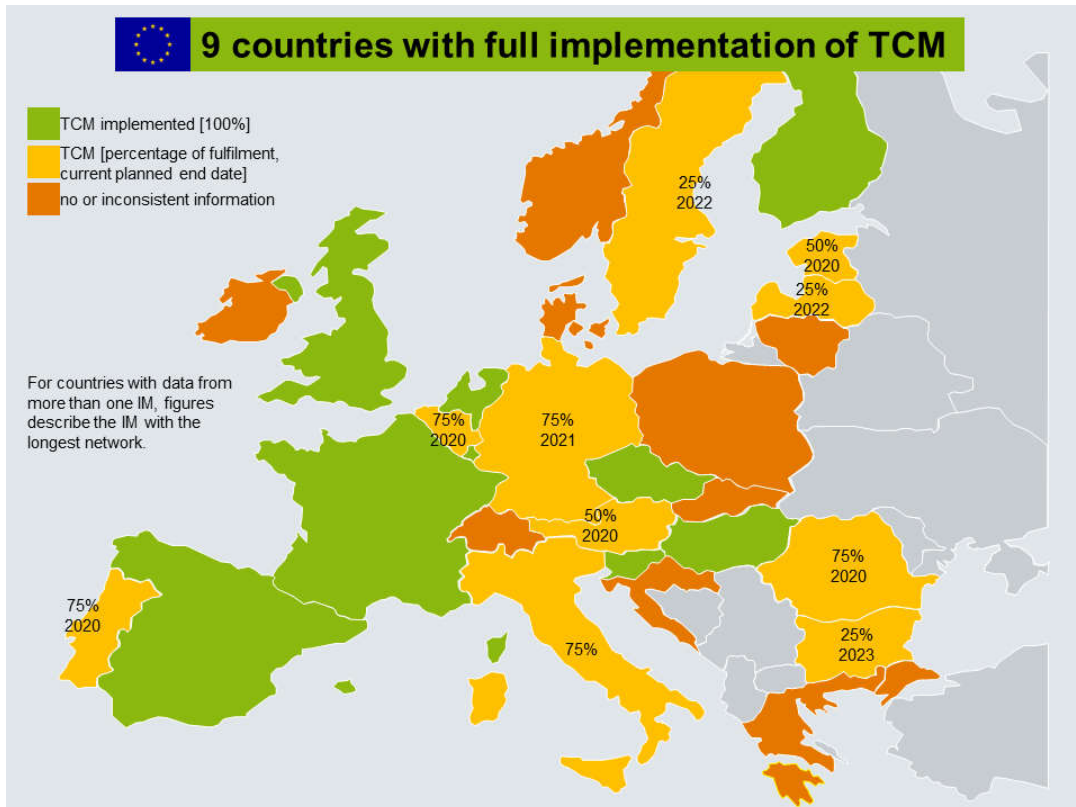


Diagram 21: Implementation of TCM of IMs across European countries



TCM	
CZ	All reported implemented
ES	
FR	
HU	
LU	
NL	
SI	
SK	
UK	
AT	
BE	5/29/2020
EE	12/31/2020
PT	6/30/2020
RO	12/31/2020
LV	12/31/2022
BG	12/31/2023
CH	Latest date not reported
DE	
IT	
PL	
SE	
FI	No reports from MS
HR	No reports from MS

Table 12 Latest TCM implementation dates reported by IM

As far as latest planned end date of TCM implementation by IM is concerned, for:

- 9 reporting MS - IM reports show only complete implementation,
- 5 reporting MS - at least one IM reports implementation yet in 2020,
- 1 reporting MS - at least one IM reports implementation in 2022,
- 1 reporting MS - at least one IM reports implementation in 2023
- 5 reporting MS - at least one IM do not report the implementation date,
- 2 reporting MS - no IM reports are available.

TCM	
AT	All reported implemented
LU	
DE	12/31/2020
PT	3/31/2020
SI	12/7/2020
SK	12/31/2020
BE	12/31/2021
NL	1/1/2021
ES	2/28/2022
LV	12/31/2022
BG	Latest date not reported
CH	
CZ	
EE	
FI	
FR	
HU	
HR	
IT	
PL	
SE	
UK	
RO	No reports from MS

Table 13 Latest TCM implementation dates reported by RU-F

And for RU-F respectively:

- 2 reporting MS - RU reports show only complete implementation,
- 4 reporting MS - at least one RU reports implementation yet in 2020,
- 2 reporting MS - at least one RU reports implementation in 2021,
- 2 reporting MS - at least one RU reports implementation in 2022,
- 12 reporting MS - at least one RU do not report the implementation date,
- 1 reporting MS - there is no RU reports available.

## 6.8. Consignment Note Data (RUs-F)

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

Diagram 22 indicates only 13 RUs-F out of 87 having finished implementation of CND.

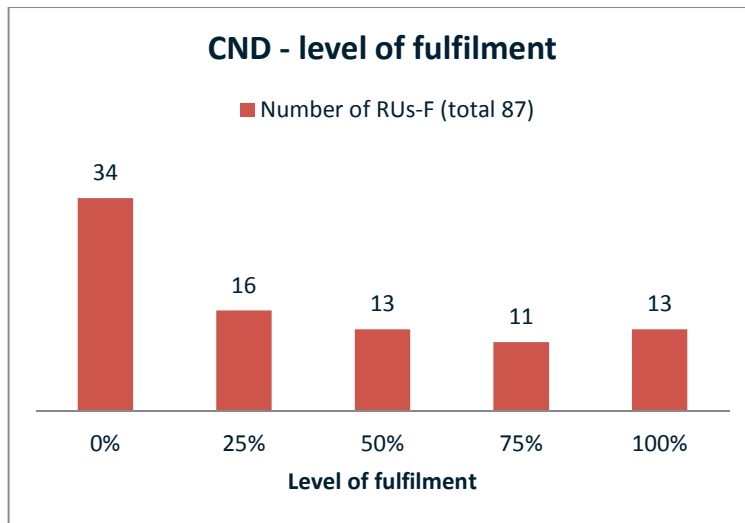
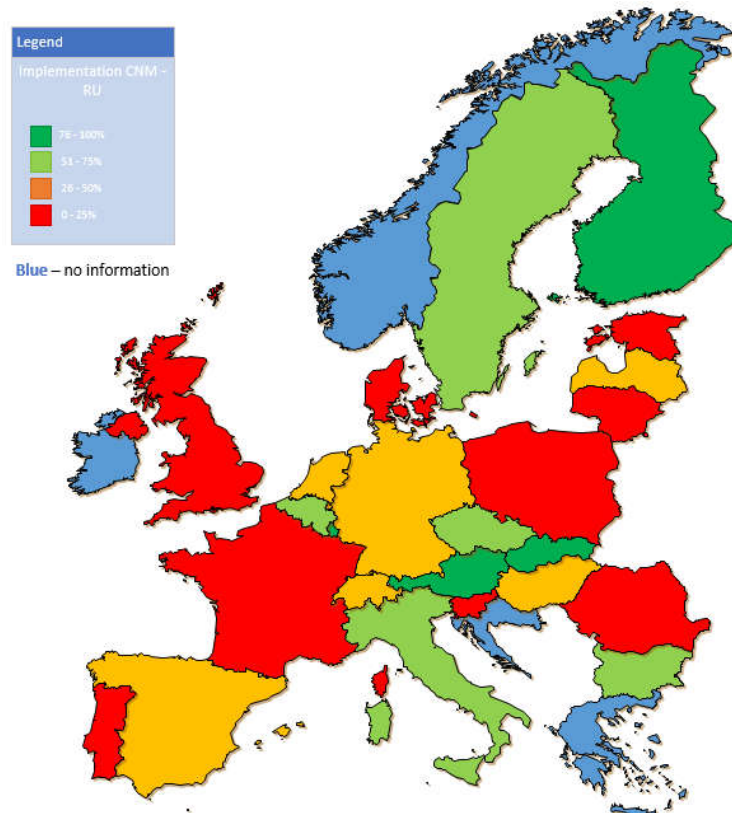


Diagram 22: Consignment Note Data (CND)



Map 13: Implementation of Consignment Note (RUs)

Contrary to the evolution of responses the evolution of implementation for CND increases quite significantly for this function (diagram 23).

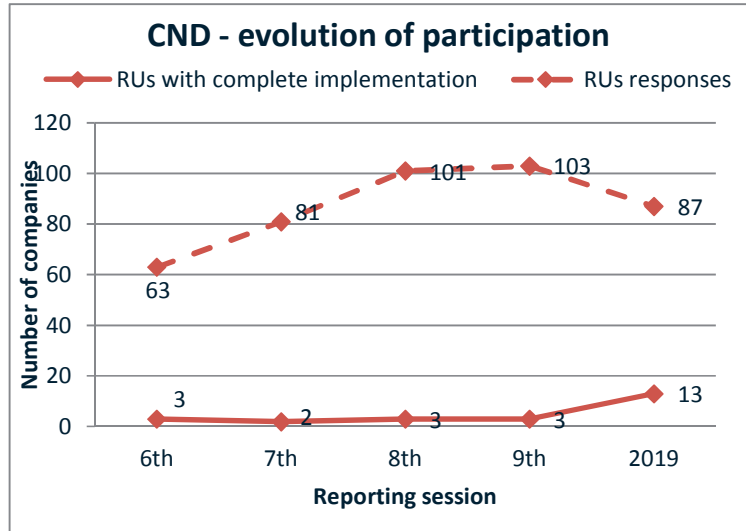


Diagram 23: Evolution of implementation for Consignment Note Data (CND)

CND	
AT	All reported implemented
LU	implemented
BE	12/31/2020
DE	3/31/2020
PT	3/31/2020
SI	10/5/2020
SK	12/31/2020
ES	12/31/2022
FR	1/1/2022
LV	12/31/2022
BG	Latest date not reported
CH	
CZ	
EE	
FI	
HU	
HR	
IT	
NL	
PL	
SE	No reports from MS
UK	
RO	

Table 14 Latest CND implementation dates reported by RU-F

As far as latest planned end date of CND implementation by RU-F is concerned, for:

- 2 reporting MS - RU reports show only complete implementation,
- 5 reporting MS - at least one RU reports implementation yet in 2020,
- 3 reporting MS - at least one RU reports implementation in 2022,
- 12 reporting MS - at least one RU do not report the implementation date,
- 1 reporting MS - no IM reports are available.

### 6.9. Wagon Movement (RUs-F)

The Target Implementation Milestone for realisation of the Wagon Movement function (WM) according to the TAF TSI Masterplan was end of 2016.

Responses to this questionnaire indicate 6 RUs-F having completed the WM function from a total of 87 companies.

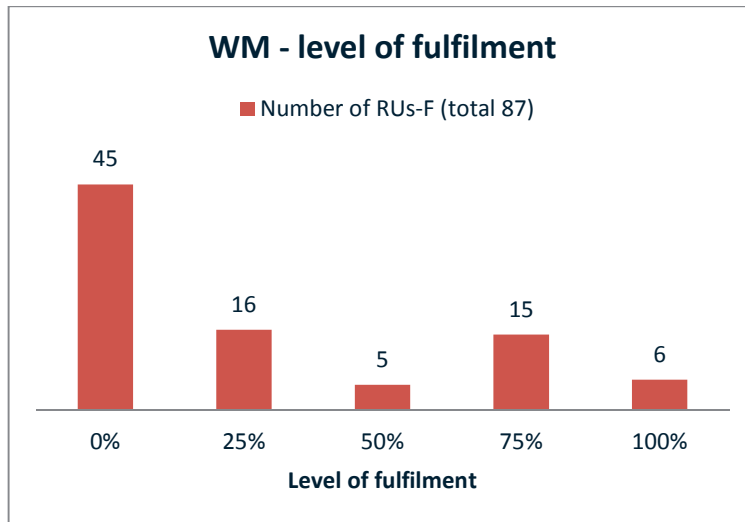
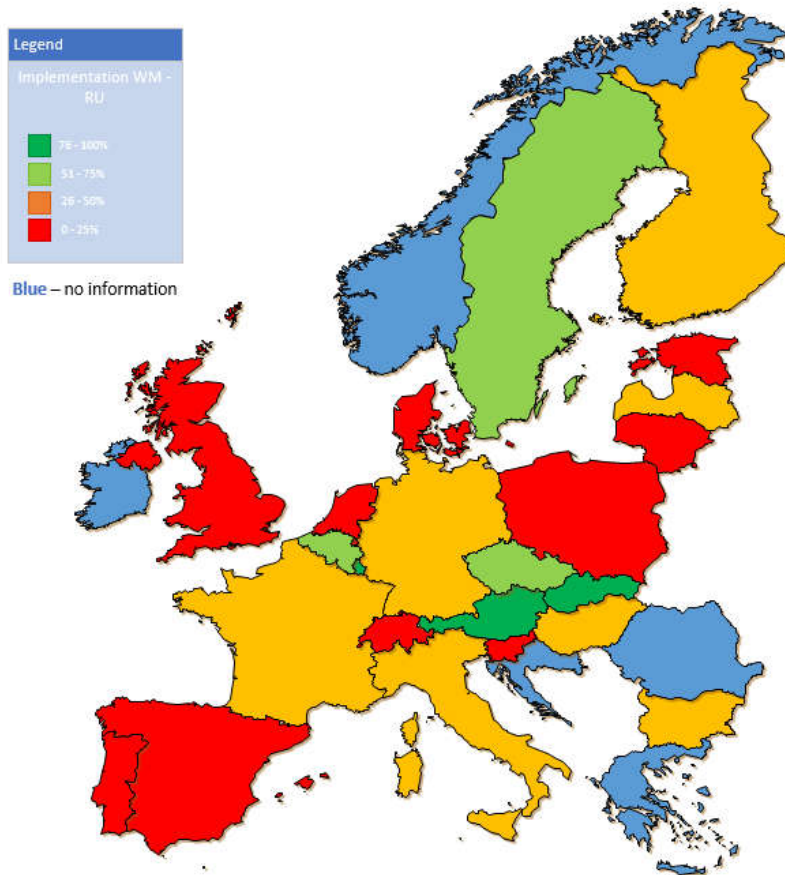


Diagram 24: Wagon Movement (WM)



Map 14: Implementation of Wagon Movement (RUs)

Despite the positive evolution of implementation for WM, it rests at a low level (diagram 25).

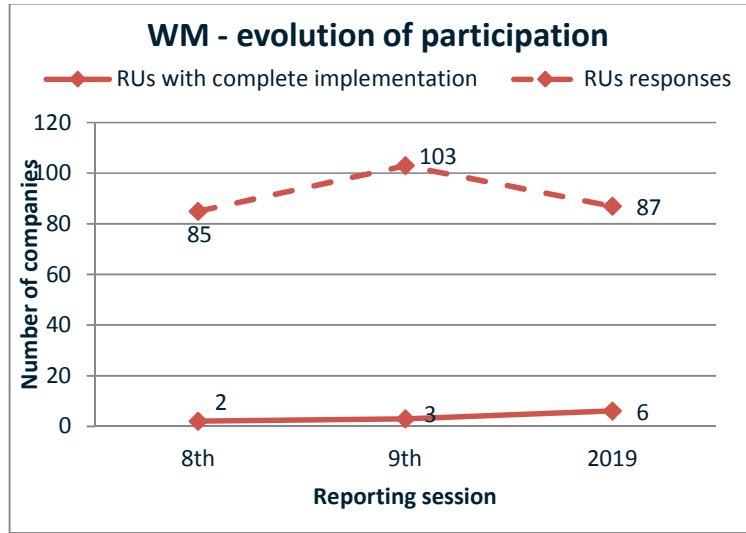


Diagram 25: Evolution of implementation for Wagon Movement (WM)

	WM
LU	All reported implemented
AT	12/31/2020
PT	3/31/2020
SK	12/31/2020
BE	12/31/2021
SI	6/30/2021
ES	1/31/2022
LV	12/31/2022
BG	Latest date not reported
CH	
CZ	
DE	
EE	
FI	
FR	
HU	
HR	
IT	
NL	No reports from MS
PL	
SE	
UK	
RO	

Table 15 Latest CNL implementation dates reported by RU-F

As far as latest planned end date of WM implementation by RU-F is concerned, for:

- 1 reporting MS - RU reports show only complete implementation,
- 3 reporting MS - at least one RU reports implementation yet in 2020,
- 2 reporting MS - at least one RU reports implementation in 2021,
- 2 reporting MS - at least one RU reports implementation in 2022,
- 14 reporting MS - at least one RU do not report the implementation date,
- 1 reporting MS - no IM reports are available.

### 6.10. 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 considered in the present report.

This function remains at a low level of fulfilment with 8 companies having this function in production. The reason for this must be further investigated. Companies claim that some requirements and the criteria for fulfilling are still unclear (diagram 26).

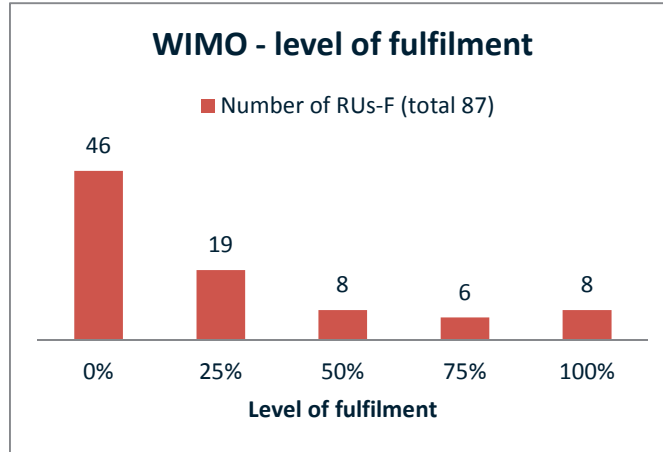
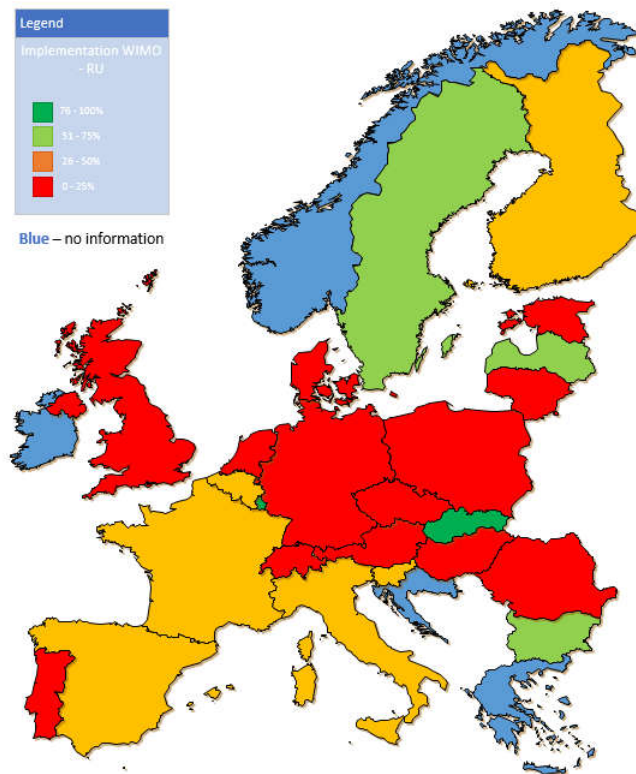


Diagram 26: Wagon and Intermodal Unit Operating Database



Map 15: Implementation of WIMO (RUs)

Diagram 27 indicates the low degree of completion for WIMO with a little sign of improvement over time.

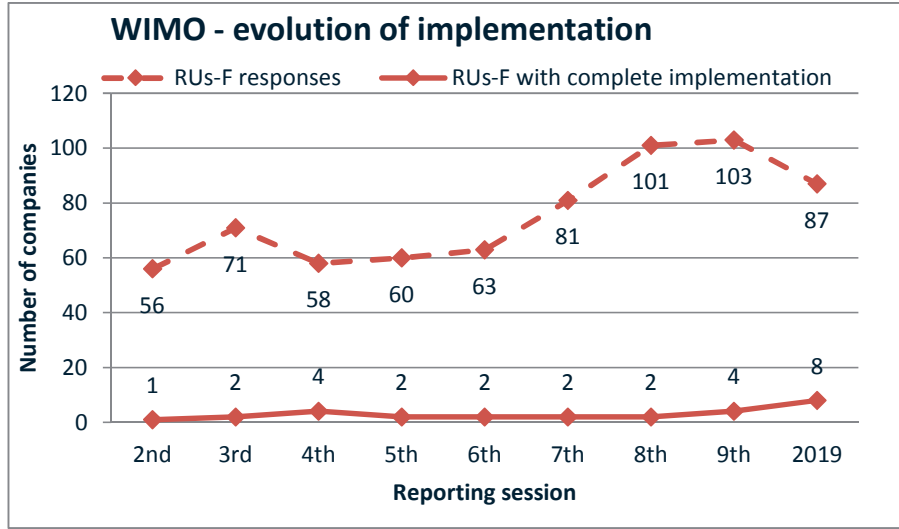


Diagram 27: Evolution of implementation for WIMO

WIMO	
LU	All reported implemented
LV	All reported implemented
AT	Latest date not reported
BE	
BG	
CH	
CZ	
DE	
EE	
ES	
FI	
FR	
HU	
HR	
IT	
NL	
PL	
PT	
SE	
SI	
SK	
UK	
RO	No reports from MS

Table 16 Latest WIMO implementation dates reported by RU-F

As far as latest planned end date of WM implementation by RU-F is concerned, for:

- 2 reporting MS - RU reports show only complete implementation,
- 20 reporting MS - at least one RU do not report the implementation date,
- 1 reporting MS - no IM reports are available.

## 6.11. 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.

Many companies intend 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. 84 WKs have implemented this function, out of which 72 WKs thanks to RSRD<sup>2</sup>.

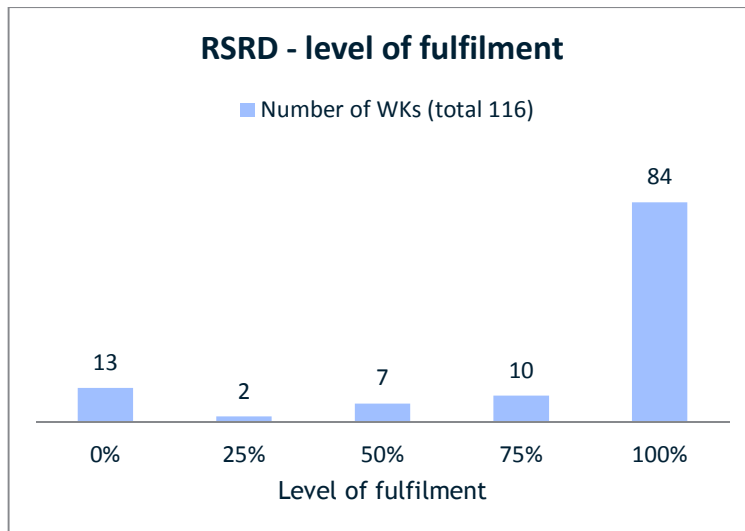
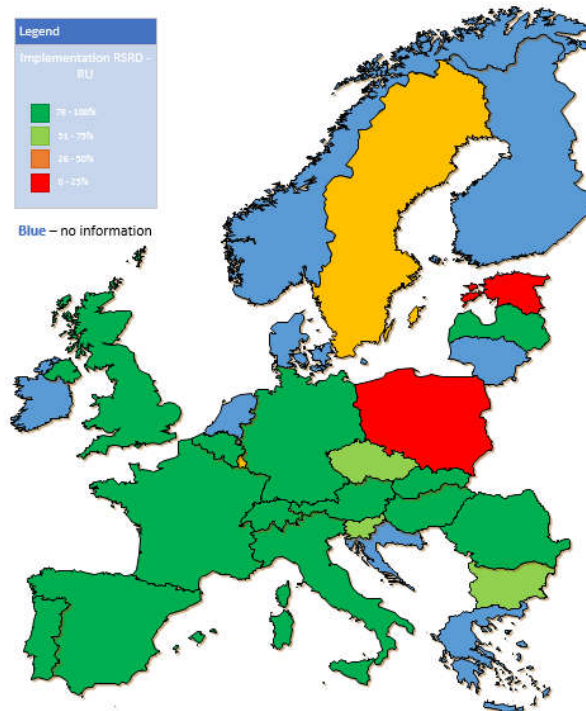


Diagram 28: Rolling Stock Reference Database



Map 16: Implementation of RSRD



Following the lower participation to the survey, the evolution of implementation remains growing compared to the previous report (see diagram 29).

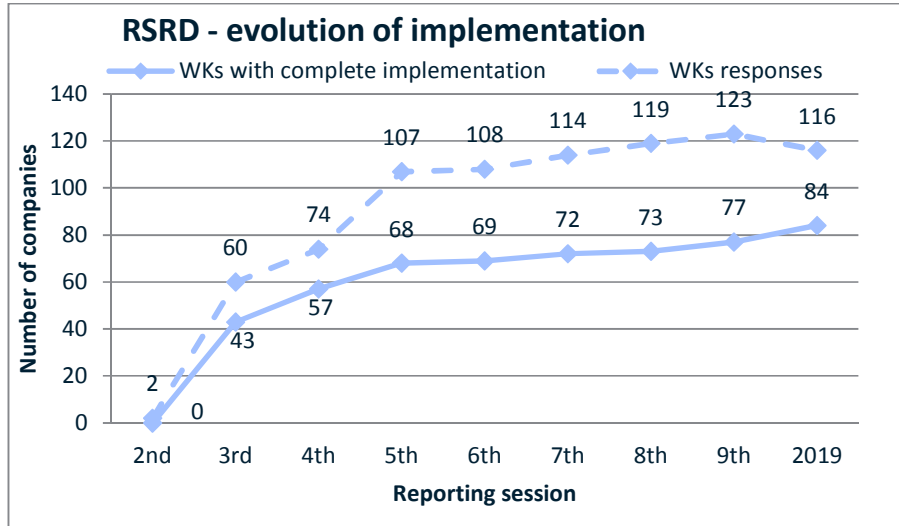


Diagram 29: Evolution of implementation for RSRD

### 6.12. 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. Diagram 30 gives a summary of the reasons selected by the companies.

Feedback regarding reasons for not implementing went down slightly by minus 17 in total in line with slight decrease in terms of participation to the survey.

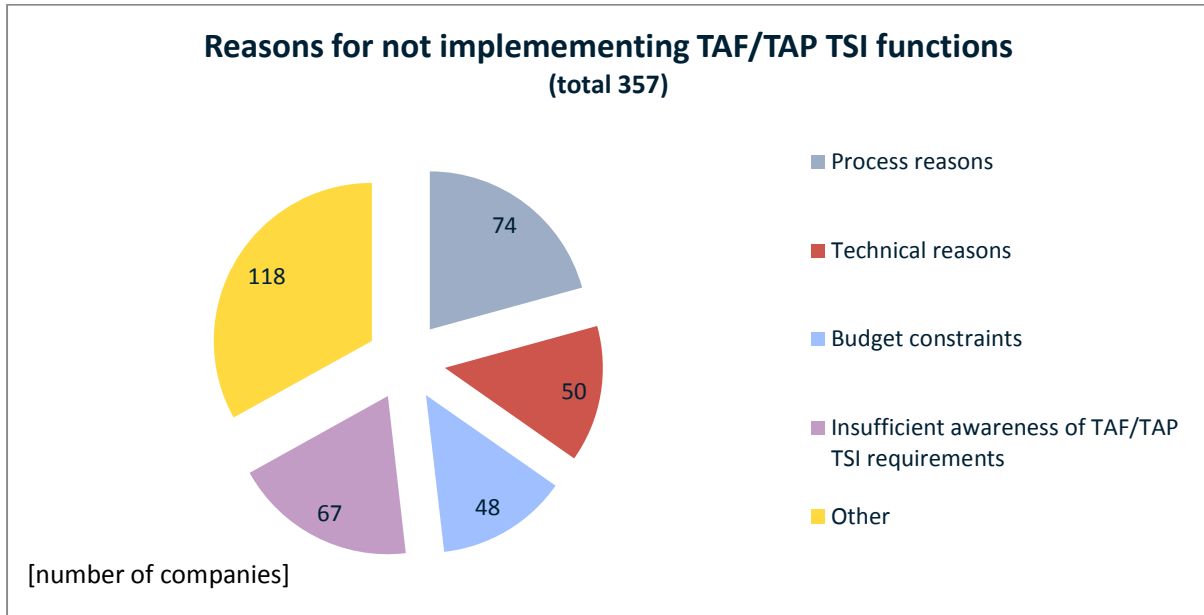


Diagram 30: Reasons for not starting implementation of TAF/TAP TSI functions

Diagram 31 gives a closer look to the development of ‘Insufficient awareness of TAF/TAP TSI requirements’ over time.

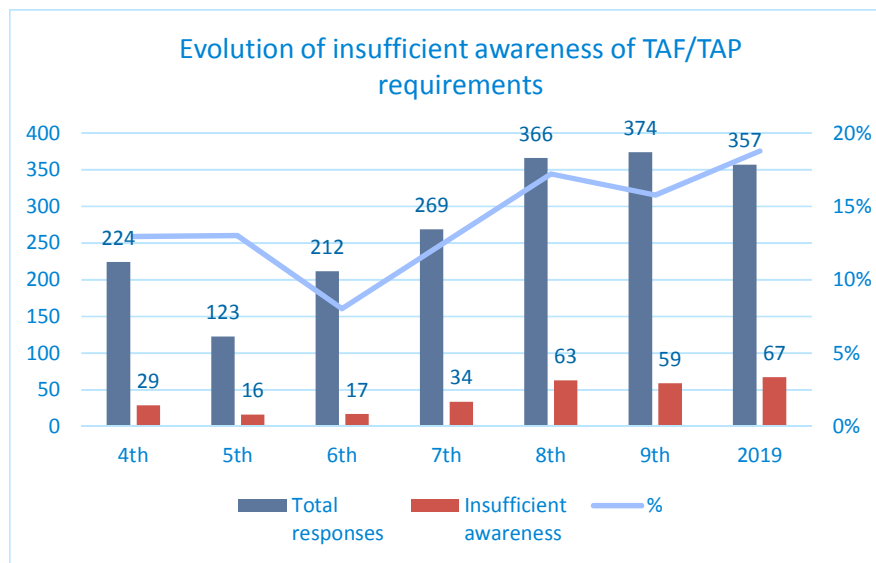


Diagram 31: Evolution of insufficient awareness of TAF/TAP requirements

The percentage given in diagram 31 as a green line, is calculated as the number of companies not being aware about TAF/TAP in relation to all companies giving a reason for not starting to implement. It turns out, that this percentage increased about 11 % since the 6<sup>th</sup> reporting session to the maximum value of 19 % last year. Dedicated information sessions should be initiated as a mitigation measure.

### 6.13. 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 function compared to the companies having replied to this query in %.

Diagram 32 shows the DI for functions to be implemented by IMs. Implementation of these functions shows a mixed trend relative to the last report. The TR and TRIM functions, both reported for the first time, reach a degree of implementation of 55 % and 29 %.

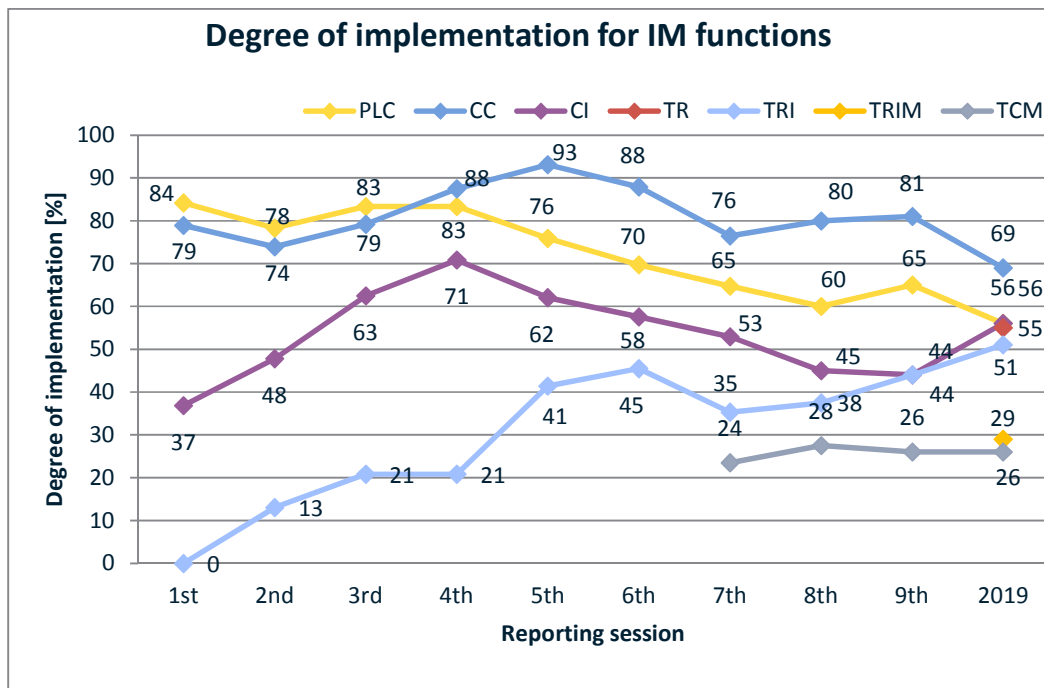


Diagram 32: Reported DI for IM functions

Diagram 33 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 function stays high at 75 %. The other RUs-F functions stagnate at a low level of around 30 % and less, but mostly with a positive development.

Functions monitored for the first time have a DI of 43 % (TR) and 12 % (TRIM).

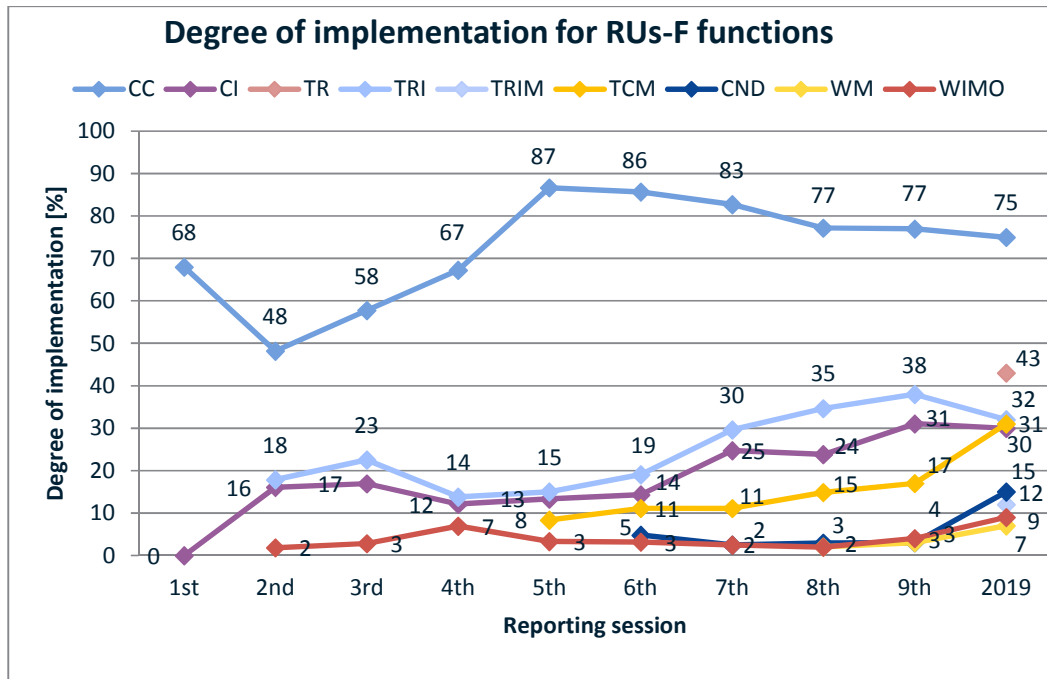


Diagram 33: Reported DI for RUs-F functions

Diagram 34 shows a positive trend for the reported DI for the RSRD function in the present report. DIs for CC and CI declined since last monitoring.

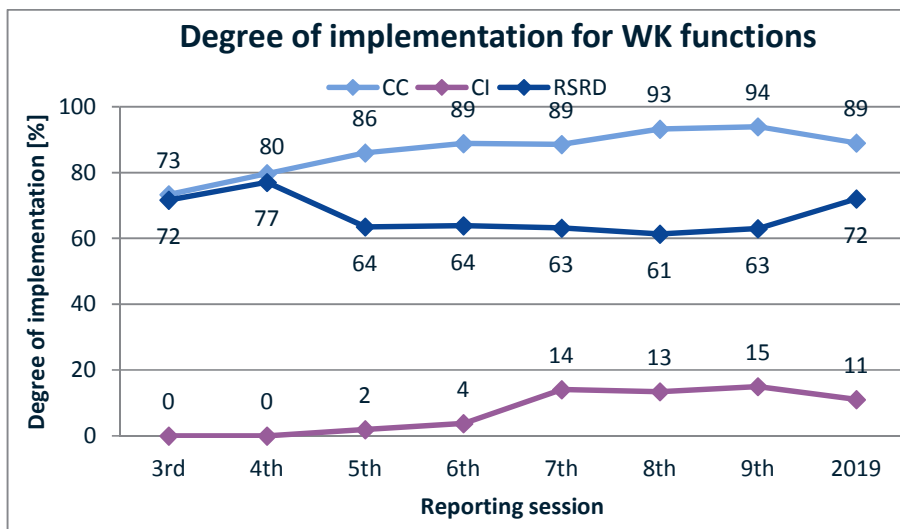


Diagram 34: Reported DI for WK functions

## 7. 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 has fallen from 476 to 387 and are summarised in diagram 33.

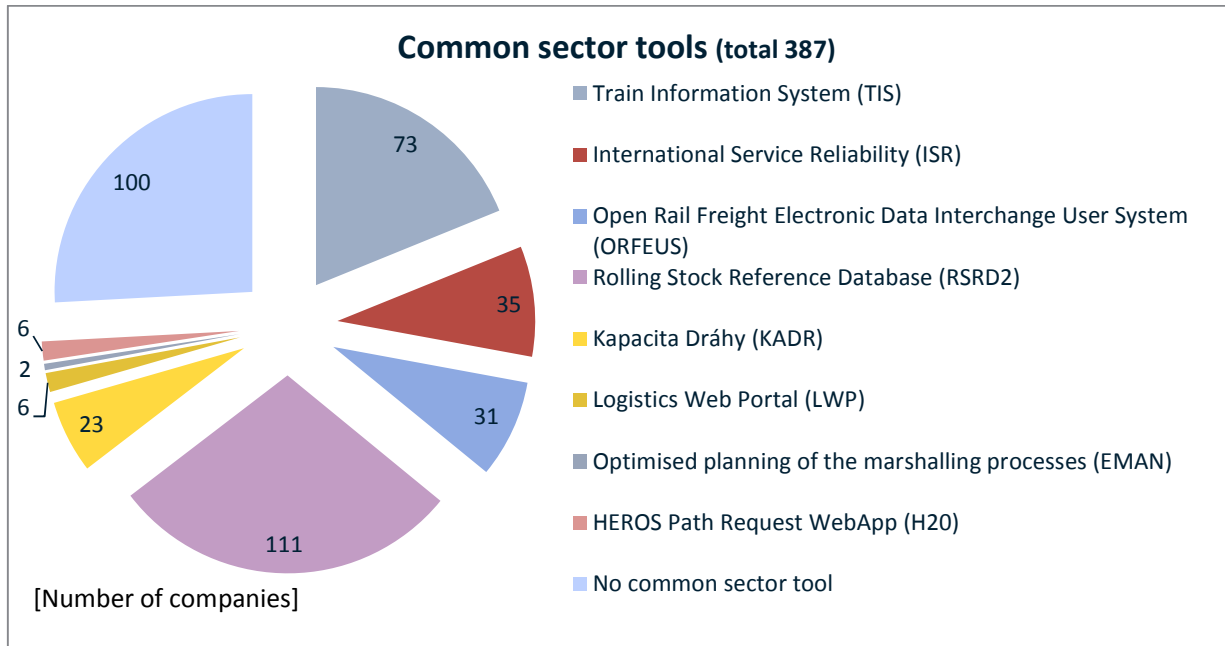


Diagram 35: Common sector tools in use

In line with the reduction of the total number of companies, the use of all common sector tools went down (except for LWP and H20 at a very low level).

RSRD<sup>2</sup> and TIS both stay the most used Common Sector Tools.

In respect to the responses received from relevant types of companies, RSRD<sup>2</sup> is in use by about 90 % and TIS is in use by about 50 % of its potential users included in this query.

## 8. CONCLUSION AND FINDINGS

The number of companies having responded to the 2019 questionnaire is, as always, significantly lower than the number of companies having been invited. The response rate of 31 % of the current reporting session is one of the lowest since the beginning of reporting. There might be different reasons for this negative trend:

- Companies are getting tired answering the same questions
- Little progress within the company to be reported

Participation has improved compared to the previous reporting session. The inclusion of data from the previous reporting session is an effort to have a more complete view of the company's feedback and of the current level of implementation. As a result of the higher response in the current reporting session only 26 types of companies of the previous reporting could be included.

The degree of implementation (DI) for the different TAF functions (diagrams 32 to 34) in the present report shows generally a mixed development. The DI declines for the PLC and CC functions of IMs, the CC and TRI functions of RUs and the CC and CI functions of WKs. Such a development is not logic for the implementation of the TAF TSI functions. However, this is an important lesson learned from the current reporting process, which urgently needs to be improved. A stable basis of the most important companies in terms of market share participating to the survey is a condition to improve quality.

Degree of implementation of CC has the highest value for all types of companies. For all other functions the degree of implementation for IMs is higher than the one for RUs.

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. This task has been initiated from the sector and work is ongoing.

The evolution of insufficient awareness of TAF/TAP requirements is steadily growing to the maximum value of 19 % in 2019. Dedicated information sessions should be initiated as a mitigation measure.

The degree of implementation (DI) as set out in diagrams 32 to 34 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 off.

RSRD<sup>2</sup> and TIS remain the most used common sector tools following feedback to this survey. 90 % of responding companies benefit from RSRD<sup>2</sup>, while it is 50 % for TIS.

### 8.1. Functions to be reported in the next report

During the 10<sup>th</sup> TAF TSI Implementation Cooperation Group meeting held on 11 March 2020, it was agreed to report about the following functions for the 10<sup>th</sup> Reporting wave in the frame of the TAF TSI regulation:

- Primary Location Codes (PLC)
- Company Code (CC)
- Common Interface (CI)
- Train Running Information (TRI)
- Train Composition Message (TCM)
- Consignment Note Data (CND)
- Wagon Movement (WM)
- Rolling Stock Reference Database (RSRD)
- Train ready
- Service Disruption
- PathRequest
- Shipment ETA
- TrainID

### 8.2. Calendar for next reporting

In the frame of the 10<sup>th</sup> TAF TSI Implementation Cooperation Group meeting held on 11 March 2019, it was agreed the following the schedule to report about the implementation of TAF TSI functions and RU-IM Communication for TAP TSI (2020 Reporting wave):

	2020/2021						
	September	October	November	December	January	February	March
■ Preparing questionnaire at IRG	30						
■ Agreeing questionnaire with ERA		1					
■ ad-hoc ICG on translation issues		13					
■ Opening JSG/CSG Reporting Tool			16	11			
■ Revising draft Report at IRG						10	
■ Agreeing draft Report with ERA						11	
■ Approving draft Report at JSG							
■ Presenting at ERA Coop Group							11
■ Publishing JSG Report							

Figure 3: Reporting Schedule for the 2020 Reporting wave

## ANNEX 1: Distribution of freight fleet per country in Europe

Country	Valid registrations VVR / Eurostat	Wagons In GCU	Wagons In RSRD (Data provided by RSRD <sup>2</sup> – UIP) <sup>4</sup>
Austria	19.706	20.052	7.882
Belgium	40.375	10.426	17.361
Bulgaria	12865	3.492	244
Croatia		5.837	5
Czech Republic	53.885	40.503	20.251
Denmark	2.305	1	830
Estonia	-	0	0
Finland	-	4	-
Norway	-	0	0
France	113.261	77.319	53.232
Germany	102.778	168.866	100.722
Greece	4.094	0	2.047
Hungary	12.918	11.649	646
Ireland	-	0	0
Italy	44.482	26.519	31.137
Latvia	11.210	0	8.676
Lithuania	-	0	0
Luxembourg	4.216	2.966	8432
Netherlands	21.957	18.058	7.026
Poland	109.165	70.435	22.924
Portugal	3.379	6	206
Romania	24.076	14.561	963
Slovakia	33.359	24.279	24.352
Slovenia	3.767	3.468	54
Spain	12.760	18.131	4.014
Switzerland	27.398	17.211	13.425
Sweden	12.760	8.820	4.083
United Kingdom	-	616	-

## ANNEX 2: Responses contact list 2019

<sup>4</sup> The table has been updated with the data provided by UIP-RSRD<sup>2</sup>.



Nr.	Member State	Type of Company	Company name	Reporting Entity
1	AT	IM	ÖBB Infrastruktur AG	
2	AT	RU-F	Wiener Lokalbahnen Cargo GmbH	
3	AT	RU-F, WK	Rail Cargo Austria	
4	AT	WK	Felbermayr Transport- und Hebetchnik GmbH & Co KG	RSRD <sup>2</sup>
5	AT	WK	NACCO S.A.S.	RSRD <sup>2</sup>
6	AT	WK	VTG Austria Ges.m.b.H.	RSRD <sup>2</sup>
7	BE	IM	INFRABEL	
8	BE	RU-F, WK	Lineas N.V.	
9	BE	WK	Lineas SA/NV	RSRD <sup>2</sup>
10	BE	WK	Mosolf Automotive Railway GmbH	RSRD <sup>2</sup>
11	BG	IM	NRIC (National Railway Infrastructure Company)	
12	BG	RU-F	„TBD-Tovarni prevozi“ JSC	
13	BG	RU-F	BDZ Cargo	
14	BG	RU-F	Bulgarian Railway Company	
15	BG	RU-F	EXPRESS SERVICE OOD	
16	BG	RU-F	Rail Cargo Carrier - Bulgaria Ltd	
17	BG	RU-F, WK	DB Cargo Bulgaria EOOD	
18	BG	RU-P	BDZ-Passengers	
19	CH	IM	BLS-Netz AG	
20	CH	IM	Schweizerische Südostbahn AG	
21	CH	RU-F	BLS Cargo	
22	CH	RU-F	SBB Cargo International	SBB Cargo International
23	CH	RU-F	WRS Widmer Rail Services AG	WRS Widmer Rail Services AG
24	CH	WK	Diversified Investments SA	RSRD <sup>2</sup>
25	CH	WK	HASTAG (Zürich) AG	RSRD <sup>2</sup>
26	CH	WK	MITRAG AG	RSRD <sup>2</sup>
27	CH	WK	SBB Cargo AG	RSRD <sup>2</sup>
28	CH	WK	TRANSWAGGON AG	RSRD <sup>2</sup>
29	CZ	IM, RU-F	UNIPETROL Doprava s.r.o.	Unipetrol Group
30	CZ	IM, WK, AB	Správa železniční dopravní cesty (SŽDC)	
31	CZ	RU-F	DBV-ITL, s.r.o.	

Nr.	Member State	Type of Company	Company name	Reporting Entity
32	CZ	RU-F	SLEZSKOMORAVSKÁ DRÁHA a.s.	
33	CZ	RU-F	Sokolovská uhelná, právní nástupce, a.s.	
34	CZ	RU-F	TCHAS ŽD s.r.o.	
35	CZ	RU-F, RU-P	LTE Logistik a Transport Slovakia s.r.o.	LTE Group
36	CZ	RU-F, RU-P, WK	Ceske drahy, a.s.	
37	CZ	RU-F, WK	ČD Cargo, a.s.	
38	CZ	RU-F, WK	PKP CARGO INTERANTIONAL a.s.	
39	CZ	WK	Česká republika - Správa státních hmotných rezerv	
40	CZ	WK	Ceskomoravsky cement	
41	CZ	WK	Coal Services a.s.	
42	CZ	WK	DIAMO, státní podnik	RSRD <sup>2</sup>
43	CZ	WK	Ermewa GmbH	RSRD <sup>2</sup>
44	CZ	WK	Ermewa SA	RSRD <sup>2</sup>
45	CZ	WK	Felbermayr Transport- und Hebetchnik spol.s.r.o.	RSRD <sup>2</sup>
46	CZ	WK	KOS Trading, akciová společnost	RSRD <sup>2</sup>
47	CZ	WK	Lafarge Cement, a.s.	RSRD <sup>2</sup>
48	CZ	WK	Liberty Ostrava a.s.	RSRD <sup>2</sup>
49	CZ	WK	Lovochemie, a.s.	RSRD <sup>2</sup>
50	CZ	WK	NH-TRANS, SE	3562
51	CZ	WK	RYKO PLUS spol. s r.o.	RSRD <sup>2</sup>
52	CZ	WK	ŠKODA AUTO a.s.	RSRD <sup>2</sup>
53	CZ	WK	Spolek pro chemickou a hutní výrobu, akciová společnost	
54	CZ	WK	Státní podnik DIAMO	
55	CZ	WK	V.K.S. Vagon Komercc Speed, spol. s r.o.	RSRD <sup>2</sup>
56	CZ	WK	Vápenka Čertovy schody a.s.	
57	CZ	WK	VÁPENKA VITOŠOV s.r.o.	
58	DE	IM	DB Netz AG	
59	DE	IM	Häfen und Güterverkehr Köln AG	
60	DE	IM	SWS Seehafen Stralsund GmbH	
61	DE	RU-F	SBB Cargo Deutschland GmbH	SBB Cargo International
62	DE	RU-F	WRS Deutschland	WRS Widmer Rail Services AG

Nr.	Member State	Type of Company	Company name	Reporting Entity
63	DE	RU-P	DB Regio AG	
64	DE	WK	AlzChem Trostberg GmbH	RSRD <sup>2</sup>
65	DE	WK	Aretz GmbH und Co. KG	RSRD <sup>2</sup>
66	DE	WK	BASF SE	RSRD <sup>2</sup>
67	DE	WK	DAHER PROJECTS GmbH	RSRD <sup>2</sup>
68	DE	WK	ERR European Rail Rent GmbH	RSRD <sup>2</sup>
69	DE	WK	GATX Rail Austria GmbH	RSRD <sup>2</sup>
70	DE	WK	GATX Rail Germany GmbH	RSRD <sup>2</sup>
71	DE	WK	ITL Eisenbahngesellschaft mbH	RSRD <sup>2</sup>
72	DE	WK	Kombiverkehr Deutsche Gesellschaft für kombinierten Güterverkehr mbH & Co. KG	RSRD <sup>2</sup>
73	DE	WK	Logistik Service GmbH	RSRD <sup>2</sup>
74	DE	WK	NACCO GmbH	RSRD <sup>2</sup>
75	DE	WK	On Rail - Gesellschaft für Eisenbahnausrüstung und Zubehör mbH	RSRD <sup>2</sup>
76	DE	WK	On Rail Gesellschaft für Vermietung und Verwaltung von Eisenbahnwaggons mbH	RSRD <sup>2</sup>
77	DE	WK	Petrochem Mineralöl-Handels-GmbH	RSRD <sup>2</sup>
78	DE	WK	Propangas AG	RSRD <sup>2</sup>
79	DE	WK	Railco a.s.	RSRD <sup>2</sup>
80	DE	WK	TRANSWAGGON GmbH	RSRD <sup>2</sup>
81	DE	WK	Tyczka Gase GmbH	RSRD <sup>2</sup>
82	DE	WK	voestalpine Rail Center Königsborn GmbH	RSRD <sup>2</sup>
83	DE	WK	Vossloh Logistics GmbH	RSRD <sup>2</sup>
84	DE	WK	VTG Aktiengesellschaft	RSRD <sup>2</sup>
85	DE	WK	VTG Schweiz GmbH	RSRD <sup>2</sup>
86	DE	WK	WASCOSA AG Luzern	RSRD <sup>2</sup>
87	DE	WK	Zürcher Bau GmbH	RSRD <sup>2</sup>
88	EE	IM	Estonian Railways	
89	EE	WK, AB	Operal AS	
90	ES	RU-F	ACCIONA RAIL SERVICES S.A	
91	ES	RU-F	Captrain España	
92	ES	RU-F	Logitren Ferroviaria	
93	ES	RU-F	TRANSITIA RAIL	
94	ES	RU-F, RU-P	CONTINENTAL RAIL, S.A.U.	

Nr.	Member State	Type of Company	Company name	Reporting Entity
95	ES	WK	Ferrocarrils de la Generalitat de Catalunya	RSRD <sup>2</sup>
96	ES	WK	Sociedad de estudios y explotacion de material auxiliar de transportes S.A.	RSRD <sup>2</sup>
97	ES	WK	VTG Rail Europe GmbH Sucursal en España	RSRD <sup>2</sup>
98	FI	RU-F, RU-P	VR-Group Ltd	
199	FR	IM	SNCF Réseau	
100	FR	RU-F	Europorte	
101	FR	RU-F	SNCF MOBILITES - Fret	
102	FR	RU-F	VFLI	
103	FR	RU-P	SNCF Mobilités Voyageurs	
104	FR	WK	ATIR-RAIL	RSRD <sup>2</sup>
105	FR	WK	EVS S.A.	RSRD <sup>2</sup>
106	FR	WK	Lotras srl	RSRD <sup>2</sup>
107	FR	WK	Millet SAS	RSRD <sup>2</sup>
108	FR	WK	SNCF MOBILITES MATERIEL	3391
109	FR	WK	SOCOMAC	RSRD <sup>2</sup>
110	FR	WK	STVA S.A.	RSRD <sup>2</sup>
111	FR	WK	Transportes Ferroviarios Especiales S.A.	RSRD <sup>2</sup>
112	FR	WK	VTG France SAS	RSRD <sup>2</sup>
113	FR	WK	VTG Rail Europe GmbH	RSRD <sup>2</sup>
114	HU	AB	VPE Vasúti Pályakapacitás-elosztó Kft.	
115	HU	IM	GYSEV Zrt.	
116	HU	IM	Hungarian State Railways	
117	HU	RU-F	MÁV FKG Ltd.	
118	HU	RU-F, WK	Rail Cargo Hungaria Zrt.	
119	HU	RU-P	MÁV-START	
120	HU	WK	Felbermayr Immo Sp.z.o.o.	RSRD <sup>2</sup>
121	HU	WK	Záhony-Port Zrt	
122	HZ	RU-F	Transagent Rail	
123	IT	IM	Ferrovie Emilia Romagna	
124	IT	IM	FERROVIENORD	
125	IT	IM	La Ferroviaria Italiana S.p.A.	
126	IT	IM	RETE FERROVIARIA ITALIANA S.p.A.	
127	IT	IM, RU-F, RU-P	FERROVIE UDINE - CIVIDALE	

Nr.	Member State	Type of Company	Company name	Reporting Entity
128	IT	IM, RU-P	Ente Autonomo Volturno	
129	IT	RU-F	Adriafer s.r.l.	
130	IT	RU-F	Captrain Italia	
131	IT	RU-F	FuoriMuro Servizi Portuali e Ferroviari srl	
132	IT	RU-F	GTS Rail	
133	IT	RU-F	Hupac SpA	
134	IT	RU-F	Inrail S.p.A.	
135	IT	RU-F	Rail Traction Company	
136	IT	RU-F	Sistemi Territoriali SpA	
137	IT	RU-F	TX Logistik AG - Sede Secondaria Italiana	
138	IT	RU-F, RU-P	MERCITALIA SHUNTING e TERMINAL	
139	IT	RU-F, WK	Mercitalia Rail S.r.L.	
140	IT	RU-P	Arriva Italia Rail s.r.l.	
141	IT	RU-P	Trasporto Ferroviario Toscano S.p.A.	
142	IT	RU-P	Trasporto Passeggeri Emilia Romagna SpA	
143	IT	RU-P	Trenitalia	
144	IT	RU-P	Trenord Srl	
145	IT	RU-P	Trentino Trasporti Spa	
146	IT	WK	Ambrogio Trasporti	
147	IT	WK	Giovanni Ambrosetti Auto Logistica S.p.A	RSRD <sup>2</sup>
148	IT	WK	Mercitalia Intermodal	
149	IT	WK	SITFA SpA	
150	IT	WK	Società Italiana Trasporti Ferroviari Autoveicoli S.p.A.	RSRD <sup>2</sup>
151	LU	AB	Administration des chemins de fer luxembourgeois	
152	LU	IM, RU-F, RU-P, WK, AB	CFL (IM) / CFL (RU-P) / CFL Cargo (RU-F) / CFL Cargo (WK) / ACF (AB)	
153	LV	IM	VAS Latvijas dzelzceļš (LDz)	
154	LV	RU-F, WK	SIA LDZ CARGO	
155	NL	IM	ProRail	
156	NL	RU-F	Db Cargo Netherlands	
157	NL	RU-F	Shunter Tractie B.V.	
158	NL	RU-F	SPITZKE Spoorbouw BV	
159	NL	RU-F	VolkerRail	

Nr.	Member State	Type of Company	Company name	Reporting Entity
160	NL	RU-F, RU-P	Railexperts BV	
161	PL	IM	PKP POLSKIE LINIE KOLEJOWE S.A.	
162	PL	IM, RU-F, WK	PKP Energetyka S.A.	
163	PL	IM, RU-F, WK	PRZEDSIĘBIORSTWO BUDOWNICTWA SPECJALISTYCZNEGO "TRANSKOL" Sp. z o.o.	
164	PL	IM, RU-P	PKP Szybka Kolej Miejska w Trójmieście Sp. z o. o.	
165	PL	RU-F	CTL Logistics Sp. z o.o.	
166	PL	RU-F	Freightliner PL	
167	PL	RU-F	Inter Cargo	
168	PL	RU-F	LOTOS Kolej Sp. z o.o.	
169	PL	RU-F, WK	CEMET S.A.	
170	PL	RU-F, WK	CIECH Cargo Sp.z o.o.	
171	PL	RU-F, WK	Majkoltrans Sp. z o.o.	
172	PL	RU-F, WK	ZUE S.A	
173	PL	RU-P	Łódzka Kolej Aglomeracyjna Sp. z o.o.	
174	PL	WK	GATX Rail Poland Sp. z o.o.	RSRD <sup>2</sup>
175	PL	WK	Tankwagon Sp. z o. o.	RSRD <sup>2</sup>
176	PT	IM	Infraestruturas de Portugal	
177	PT	RU-F	Takargo	
178	PT	RU-P	CP Comboios de Portugal EPE	
179	PT	RU-P	FERTAGUS, S.A.	
180	PT	WK	ADP Fertilizantes, S.A.	RSRD <sup>2</sup>
181	PT	WK	CIMPOR - Serviços de Apoio à Gestão de Empresas, S.A.	RSRD <sup>2</sup>
182	PT	WK	Takargo, Transporte de Mercadorias, S.A.	RSRD <sup>2</sup>
183	RO	IM	CFR	
184	RO	WK	TOUAX Rail Ltd.	RSRD <sup>2</sup>
185	SE	IM	Øresundsbro Konsortiet	
186	SE	IM	Trafikverket	
187	SE	IM, RU-F, RU-P, WK	Tågakeriet i Bergslagen AB	
188	SE	RU-F	CFL cargo Sverige AB	
189	SE	RU-F, WK	Green Cargo	
190	SE	WK	Stena Recycling AB	RSRD <sup>2</sup>

Nr.	Member State	Type of Company	Company name	Reporting Entity
191	SE	WK	TRANSWAGGON AB	RSRD <sup>2</sup>
192	SI	IM	SŽ Infrastruktura, d.o.o.	
193	SI	RU-F, WK	SŽ Tovorni promet, d.o.o.	
194	SI	WK	Adria kombi d.o.o.	RSRD <sup>2</sup>
195	SK	IM, RU-F	UNIPETROL Doprava s.r.o.	Unipetrol Group
196	SK	RU-F, RU-P	LTE Logistik a Transport Slovakia s.r.o.	LTE Group
197	SK	RU-F, WK	AWT Rail SK	AWT Rail Group
198	SK	RU-F, WK	Železničná spoločnosť Cargo Slovakia, a.s.	
199	SK	WK	Duslo, a.s.	RSRD <sup>2</sup>
200	SK	WK	Felbermayr Slovakia s.r.o.	RSRD <sup>2</sup>
201	SK	WK	Ing. Alica Ovciariková A.O.	RSRD <sup>2</sup>
202	TR	WK	TRANSWAGGON Vagon Isletmeleri Ltd. Sti.	RSRD <sup>2</sup>
203	UK	IM	Network Rail Infrastructure Limited	
204	UK	RU-F, WK	DB Cargo UK	

### ANNEX 3: Responses contact list v9

Nr.	Member State	Type of Company	Company name	Reporting Entity
1	BG	RU-F	PORT RAIL LTD	
2	CH	IM	SBB AG, Division Infrastruktur	
3	CH	RU-F	SBB CARGO AG	
4	CH	RU-P	SBB AG, Division Personenverkehr	
5	CH	WK	SBB CARGO AG	
6	CZ	RU-F	GJW Praha spol. s r.o.	
7	CZ	RU-F	Ostravská dopravní společnost - Cargo,a s.	
8	CZ	RU-P	Leo Express s.r.o.	
9	CZ	WK	ArcelorMittal Ostrava, a.s.	
10	CZ	WK	KOS Trading a. s.	
11	CZ	WK	RYKO PLUS spol. s r.o.	
12	DE	RU-F	DB Cargo	
13	DE	WK	DB Cargo	
14	ES	IM	ADIF Administrador de Infraestructuras Ferroviarias	
15	ES	RU-F	RENFE MERCANCIAS	
16	HU	IM	MMV Magyar Magánvasút Zrt.	
17	IT	IM	Ferrovie del Gargano	
18	IT	RU-F	Dinazzano Po SpA	
19	IT	RU-F	Ferrovie del Gargano	
20	IT	RU-P	Italo - Nuovo Trasporto Viaggiatori S.p.A.	
21	IT	RU-P	SAD - Trasporto Locale SpA	
22	PL	RU-F	Captrain Polska Sp. z o.o.	
23	PL	RU-F	JSW Logistics Sp. z o.o.	
24	PL	RU-F	Kolej Bałtycka S.A.	
25	PL	WK	JSW Logistics Sp. z o.o.	
26	PT	RU-F	Medway - Operador Ferroviário e Logístico de Mercadorias, SA	



