

Report

2020 TAF TSI IMPLEMENTATION STATUS REPORT OF THE EUROPEAN UNION AGENCY FOR RAILWAYS

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0.1	11/03/2021	1 st draft for the TAF TSI Implementation Cooperation Group (ICG) comments
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Abbreviations

Abbreviation	Definition
AB	(path) Allocation Body
CC	Company Code
CEF	Connecting Europe Facility
CER	Community of European Railway and Infrastructure Companies
CI	Common Interface
CND	Consignment Note Data
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
PLC	Primary Location Code
PM ²	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 ²	Rolling Stock Reference Database implementation made by UIP members
RU	Railway Undertaking
RU-F	Freight Railway Undertaking
TAF	Telematics Applications for Freight
TCM	Train Composition Message

Abbreviation	Definition
AB	(path) Allocation Body
TIS	Train Information System developed by RNE
TR	Train Ready
TRI	Train Running Information
TRIM	Train Running Interrupted Message
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
WK	Wagon Keeper
WM	Wagon Movement

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 11th March 2020	Minutes	11.03.2020

Reference legislation

Ref. N°	Document Reference	Title	Last Issue
[1]	Left blank intentionally		
[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. Amended by the Commission Implementing Regulation (EU) 2021/541 of 26 March 2021.	26.03.2021
[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 TAF TSI implementation report 2020 summarizes the results received via the European rail Joint Sector Group (JSG) Reporting Tool in November/December 2020 and thus shows the status of implementation by the end of 2020.

For this reporting session a total of 684 invitations were sent out and 266 responses were received from 27 countries across Europe, resulting to an overall response rate of 39 %.

Together with few responses taken from the 2019 reporting session, a total of 399 company responses were taken into consideration, which represents a rise of above 40 % and the highest data set ever. Additional responses came mainly from RUs-F and RUs-P and especially Poland, Czech Republic and Germany managed a very high participation.

Questions for five more functions were added to the questionnaire. Since all TAF TSI functions are now included, this 2020 report can be considered as the first complete report on all TAF functions.

68 questions in 17 question groups is a big amount of questions. But not all companies must answer all questions and could do it for the first time in their native language, as the questionnaire was translated into 14 European languages with the help and support of ERA staff and the National Contact Points.

Looking at the different TAF TSI functions, the following facts can be observed:

- Most IMs reported to have completed the Primary Location Codes on their network.
- Around 82 % of companies are identified by Company Code.
- For the Common Interface a positive trend is reported by the RUs-F, while full implementation for IMs and WK has not made any progress.
- Less than 30 % of all companies have started the implementation of New Identifiers.
- More than 60 % of the IMs and 50 % of the RUs-F have started the implementation of Path Request.
- Implementation of Path Details is reported at 57 % by IMs and 52 % by RUs-F.
- About 53 % of IMs and RUs-F started implementing the Train Ready function using the respective TAF message and 36 companies reported to have fully implemented this function by the end of 2020.
- The Train Running Information is widely used in operations management and 24 IMs and 47 RUs-F reported full implementation.
- Evolution of Train Running Interruption Message is positive on a low level for IMs and RUs-F.
- The first reporting on Train Running Forecast function shows that around 40 % of the companies have started and 15 % have completed the implementation.
- Implementation of Train Composition Message is ongoing for most RUs-F and IMs, but full implementation has only reached about 30 % for RUs-F and IMs.
- 72 RUs-F companies have started implementing the Consignment Note Data function, out of which 24 declare having finished this task.
- About 45 % of RUs-F companies have started implementation of Wagon Movement messages.
- First feedback about Shipment ETA function report that about 40 % of the RUs-F have started implementation and 12 % have finished already.
- A large number WKS fulfil the Rolling Stock Reference Database functionality via the common sector tool RSRD². There are 89 WKS having RSRD in production.

Many new companies participating in the 2020 reporting session gave information, why they did not yet start implementation of several TAF TSI functions. 'Budget constraints' and 'insufficient awareness' were mentioned most by the companies. The evolution of insufficient awareness of TAF/TAP requirements is steadily growing since 2017 to the maximum value of 26 % in 2020. Dedicated information sessions should be initiated as a mitigation measure. ERA should indicate NCPs those companies in their countries in order to raise awareness of TAF/TAP requirements.

The Degree of Implementation (DI) for the different TAF functions in the present report shows generally a mixed development:

- positive trends for IM functions PLC, TCM and CC and for RUs-F functions CC, TR, TRIM, CND and WM
- no change for RUs-F function TRI and for Wks function CC
- negative trends for IM functions CI, TR, TRI, TRIM, for RUs-F functions CI, TCM and WK functions CI and RSRD.

For the functions NI, PR, PD, TRF and ETA no trend exists, as they are reported for the first time.

Only a part of the companies invited to participate to the survey deliver feedback. Consequently, the Degree of Implementation relative to invitations is always considerably lower than the Degree of Implementation relative to responses. It is likely, that the Degree of Implementation as set out in this report is not exact, but it gives a good indication.

Information from the companies regarding the usage of common tools are not further investigated and only the company self-declaration for each TAF Function is considered in the reporting.

2. INTRODUCTION

This 2020 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 became the 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:

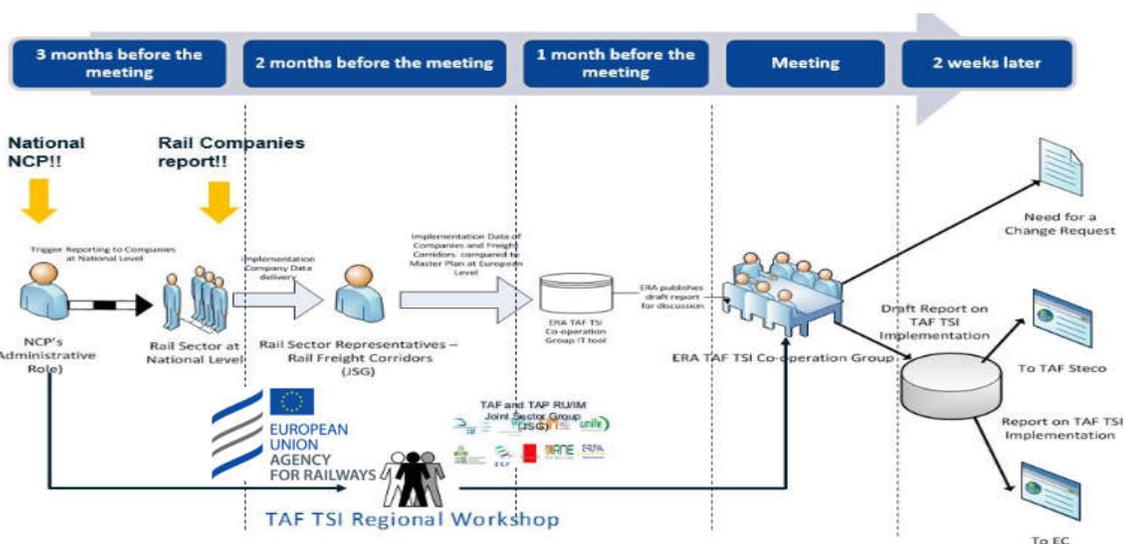


Figure 1: Agency TAF TSI Implementation Cooperation Group process.

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 CEF¹ [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.

This report summarised the results received via the JSG Reporting Tool² during the 2020 reporting session lasting from 16 November 2020 to 11 December 2020 and thus shows the status of implementation by 31 December 2020. Diagrams in the following chapters of this report show results per RU/IM function summarised in an anonymous way.

Table 1 gives an overview about the history of reporting periods.

Report session	Reporting period	Number of questions³
1st Report	01.07.2014 – 31.12.2014	21
2nd Report	01.01.2015 – 30.06.2015	40
3rd Report	01.07.2015 – 31.12.2015	42
4th Report	01.01.2016 – 30.06.2016	53
5th Report	01.07.2016 – 31.12.2016	57
6th Report TAF/1st Report TAP	01.01.2017 – 30.06.2017	91
7th Report TAF/2nd Report TAP	01.07.2017 – 31.12.2017	65
8th Report TAF/3rd Report TAP	01.01.2018 – 30.06.2018	66
9th Report TAF/4th Report TAP	01.07.2018 – 31.12.2018	59
2019 Report TAF and TAP	01.01.2019 – 31.12.2019	52
2020 Report TAF and TAP	01.01.2020 – 31.12.2020	68

Table 1: Reporting periods

¹ <https://ec.europa.eu/inea/en/connecting-europe-facility>

² The JSG uses the tool 'EUSurvey' for collecting the data and managing the survey about TAF and TAP RU/IM implementation. 'EUSurvey' is supported by the European Commission's ISA programme, which promotes interoperability solutions for European public administrations.

³ Please note, the questions in the TAF and TAP RU/IM questionnaire are context specific. The number of questions to be responded, depend on the type of company and is not the total number listed in the table 1.

The '2020 TAF/TAP TSI Implementation Report' questionnaire contains seventeen question groups, fifteen of which are about the current implementation of TAF and TAP TSI functions:

TAF/TAP TSI functions for RU/IM communication to be implemented/reported per type of company		Type of company				
		IM	RU-F	RU-P	WK	AB
TAF/TAP TSI function	Primary Location Codes (PLC)	X				
	Company Code (CC)	X	X	X	X	X
	Common Interface (CI)	X	X	X	X	X
	New Identifiers (NI) - <i>new</i>	X	X	X	X	X
	Path Request (PR) - <i>new</i>	X	X	X		X
	Path Details (PD) - <i>new</i>	X	X	X		X
	Train Ready (TR)	X	X	X		
	Train Running Information (TRI)	X	X	X		
	Train Running Interrupted Message (TRIM)	X	X	X		
	Train Running Forecast (TRF) - <i>new</i>	X	X	X		
	Train Composition Message (TCM)	X	X			
	Consignment Note Data (CND)		X			
	Wagon Movement (WM)		X			
	Shipment ETA (ETA) - <i>new</i>		X			
	Rolling Stock Reference Database (RSRD)				X	

Table 2: TAF/TAP TSI functions as reported per type of company

Two more general question groups intend to find out the actual situation and intentions of companies:

- Company information
- Common Sector Tools in use

The 2020 version is the first complete questionnaire containing messages of all RU/IM functions mandated by the TAF and TAP TSIs and set out in the TAF and TAP masterplan. The questionnaire was translated into fourteen European languages with the help of the NCPs. The participating companies could choose their native language for replying to the survey.

This report was drafted with the kind contribution of the European rail sector's TAF Implementation Reporting Group (IRG). As a result, it was endorsed at the European rail Joint Sector Group meeting on 18 February 2021 and as such published accordingly. It was presented to the ERA TAF TSI Implementation Cooperation Group on 11 March 2021 (3).

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 15th 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 684 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. Because of the Covid pandemic situation it was not possible to get for 2020 reliable market share figures of the individual contributing rail actors (RUs, IMs, WKs) per member state. For this reason this 2020 report does not contain GIS intelligent maps per each individual function with their estimated implementation deadlines. For the same reason it is possible that the trends listed in the Chapter 7 are also impacted.

The scope of the present 2020 report is to inform about the deployment of the TAF functions listed in above Table 2.

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 (PM²). 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.

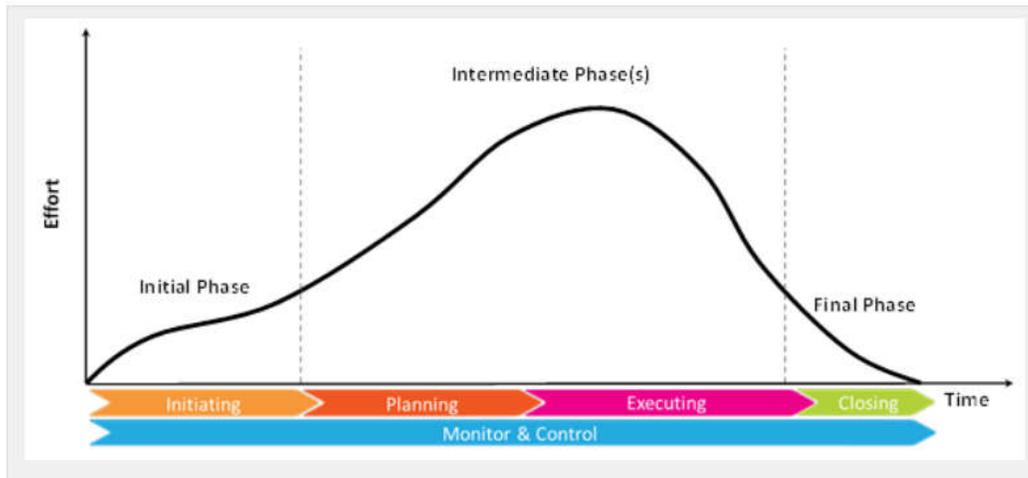


Figure 2: PM² project lifecycle.

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 2020 REPORTING SESSION

4.1. Responses to the survey

The number of companies 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, number of invitations and responses has grown again to a new record high.

The 2020 report includes 191 responses provided via the JSG reporting tool and 75 WKs submitted by UIP using RSRD². Feedback to the survey did increase by 30 % compared to 2019.

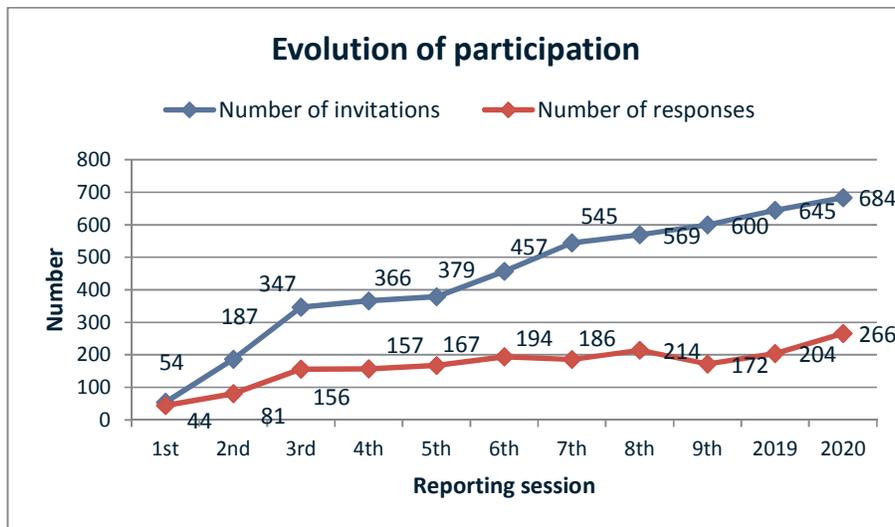


Diagram 1: Evolution of participation over time

Hence, the response rate, calculated as number of responses in relation to number of invitations, has grown to 38,9 % (see diagram 2).

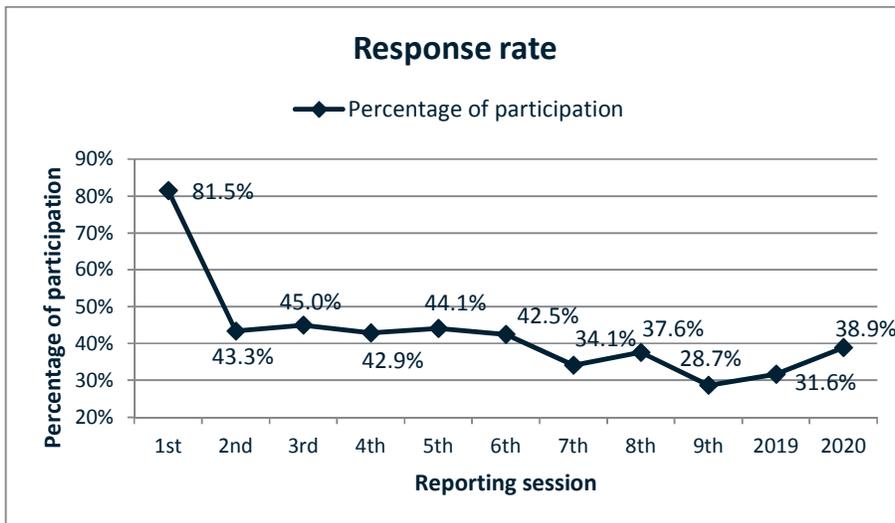


Diagram 2: Evolution of response rate over time

Diagram 3 displays the distribution of all 266 responses per country. The feedback comprises 23 EU Member States plus Norway, Switzerland, Turkey and United Kingdom.

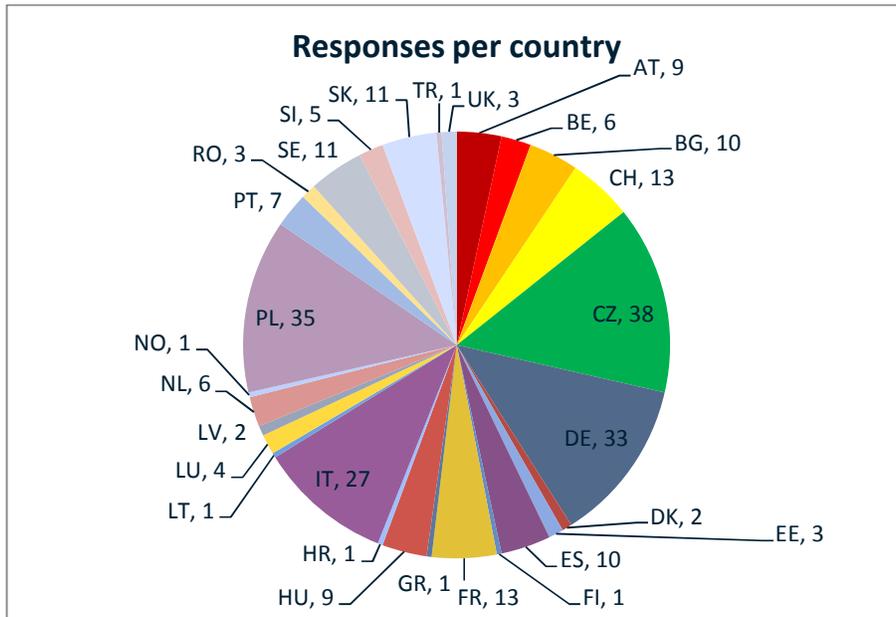


Diagram 3: Number of responses per country

Diagram 4 shows the distribution and the development of responses per country. The total number of responses in the 2020 reporting period is 266, which is 62 more than in the last session.

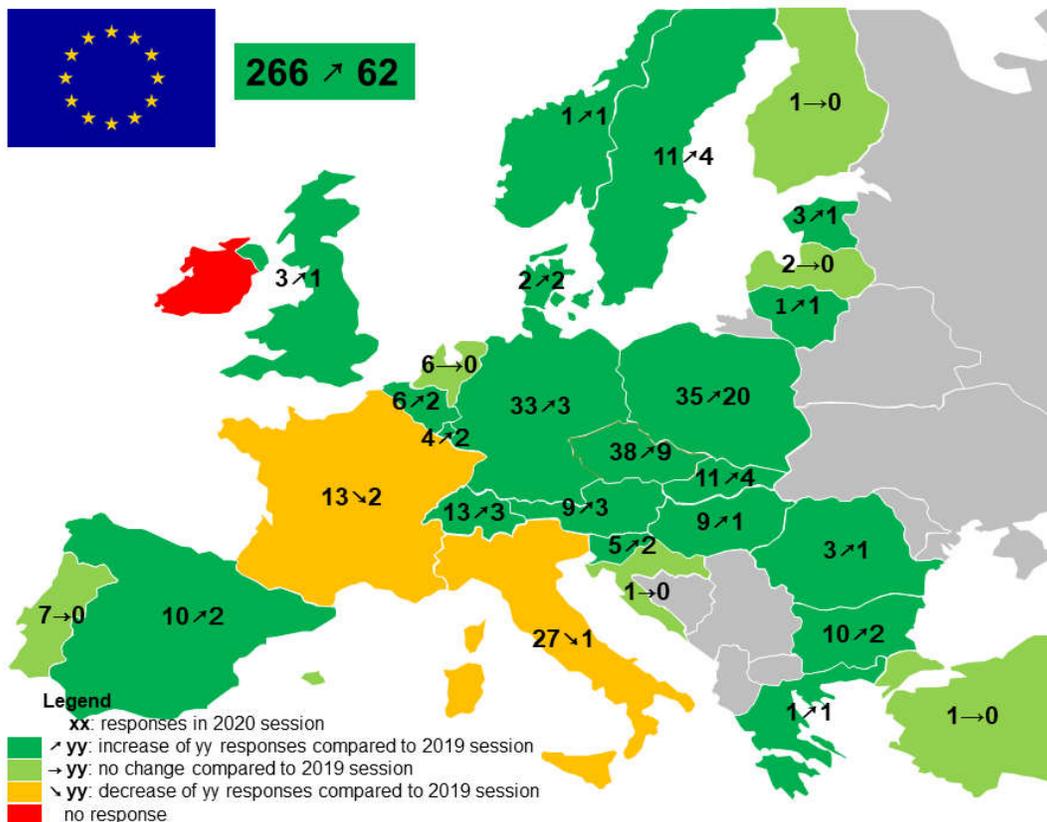


Diagram 4: Evolution of responses per country

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 (266 companies) and listed in Annex 2 is lower than the total number of company types shown in diagram 5 hereafter (343 companies).

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

Annex 2 'Responses contact list 2020' to this report gives a detailed overview about the companies per country having replied to the 2020 session of TAF and TAP TSI implementation monitoring. Please note, that there are entities which have reported on behalf of several companies.

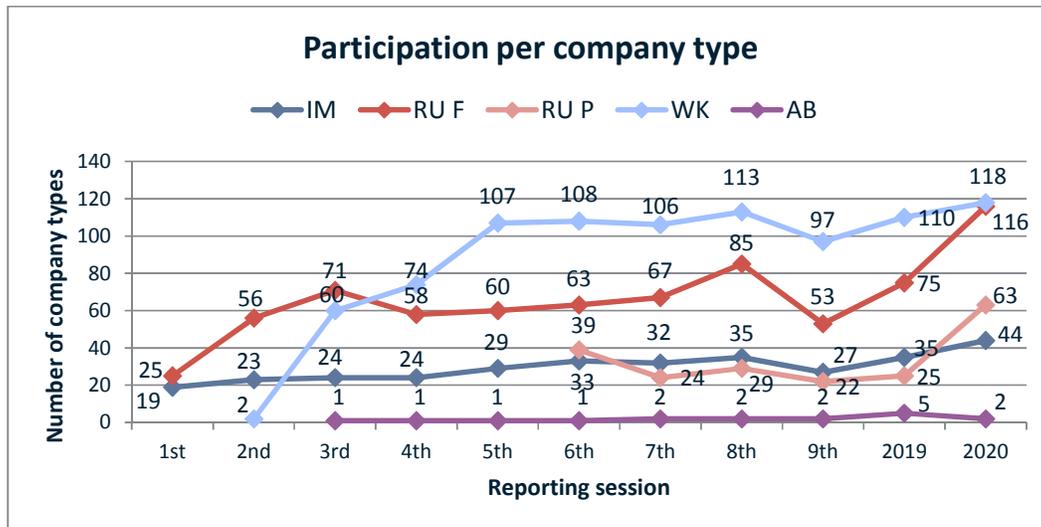


Diagram 5: Evolution of participating per company type over time

5. DATA BASIS FOR EVALUATION

Feedback from ABs represents less than 1 per cent of the total number of responses. Hence, ABs are not further considered in the evaluation of the data.

To establish a wider sector representation, 58 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. As such it is considered to give a better view on the real implementation. However, since such adjustment has been applied from the 7th reporting session, one shall be careful when comparing with earlier results.

Diagram 6 displays the total number of types of company (399) with their allocation to the following reporting sessions:

- Companies only reporting to the 2019 reporting session (top with light colour)
- Companies reporting to both 2019 and 2020 reporting session (middle with normal colour)
- New companies reporting to the 2020 reporting session only (bottom with dark colour)

The data included in this report thus represents the data since January 2019.

The number of companies taken over from the last reporting is relatively low (58) while the number of new companies in the present session is relatively high (109).

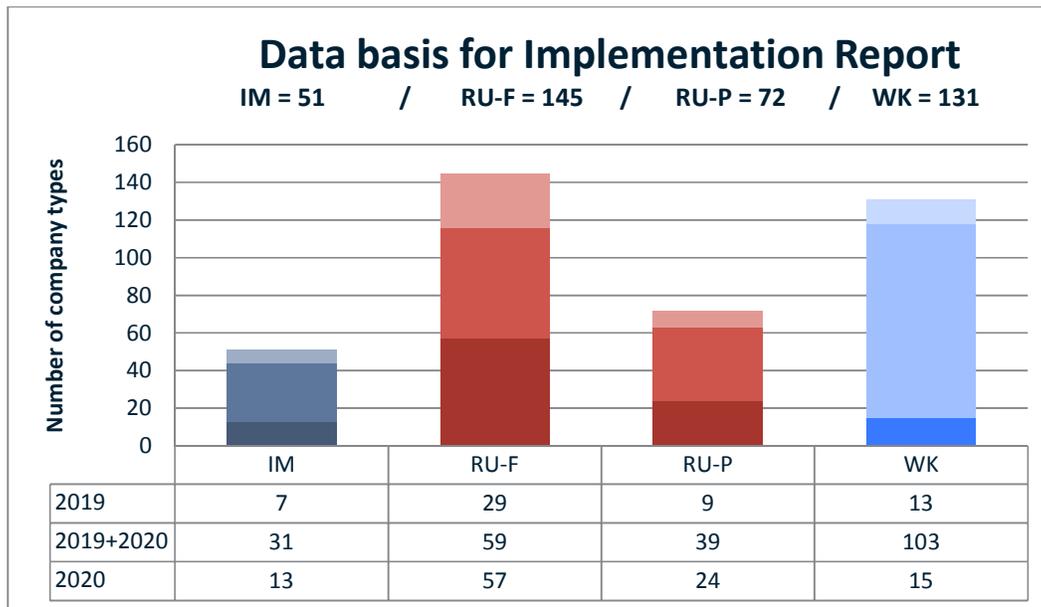


Diagram 6: Number of types of company per reporting session

Annex 3 ‘Responses contact list 2019’ to this report lists the companies per country having replied to the 2019 session of TAF and TAP TSI implementation monitoring and not to the present one.

Since the seventh reporting session by the end of 2017, the data from the previous survey were included in the next reporting session. Diagram 7 displays the total number of companies included in the reporting session as data basis for further evaluation.

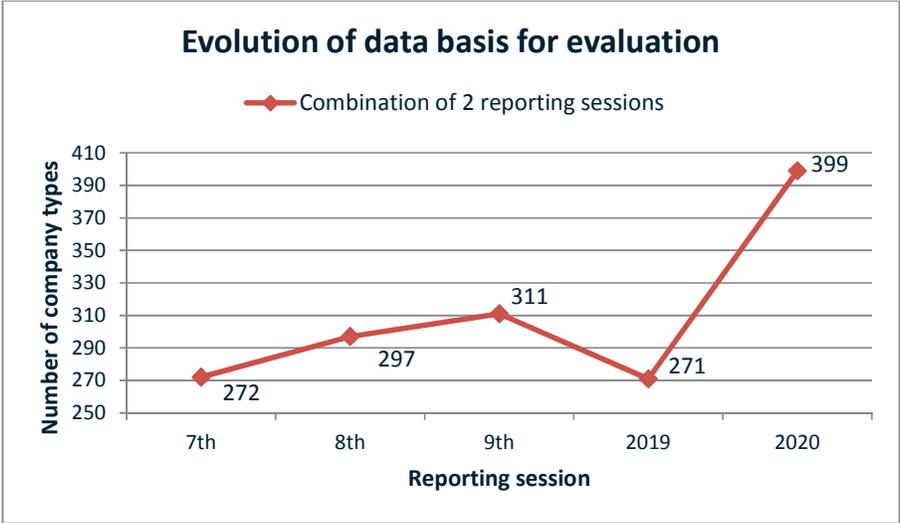


Diagram 7: Number of types of company per reporting session

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 must be reported 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 29 IMs with complete implementation. 7 out of 51 IMs in the evaluation are considered with data from the previous survey.

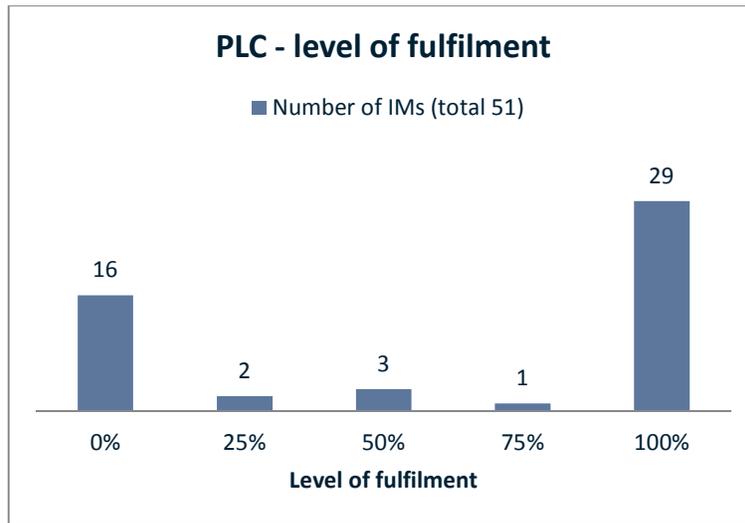


Diagram 8: Common Reference Files - Primary Location Codes (PLC)

Diagram 9 shows the pace of increase of complete implementation of PLC slowing down compared to the previous growth between 7th and 9th reporting sessions. The diagram also shows the higher number of IM responses.

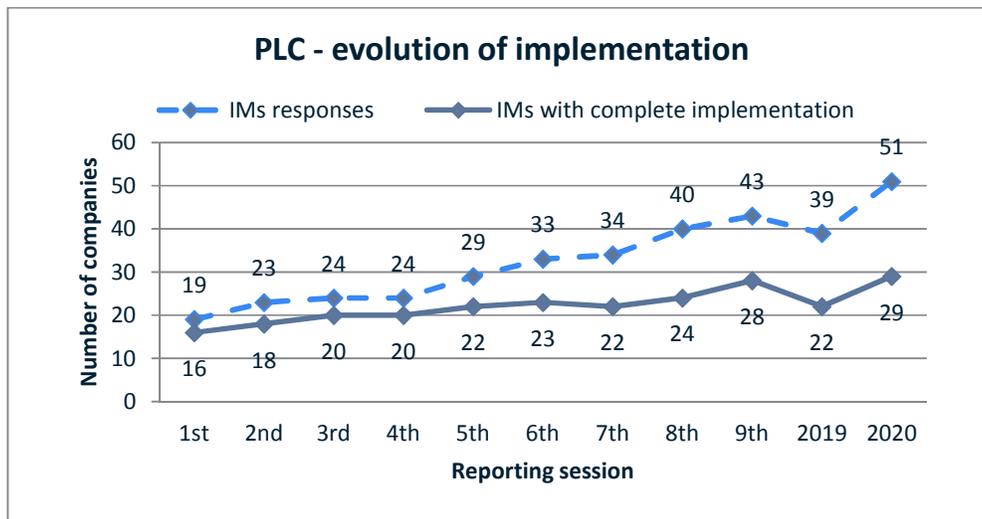


Diagram 9: Evolution of responses and implementation for PLC

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 (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.

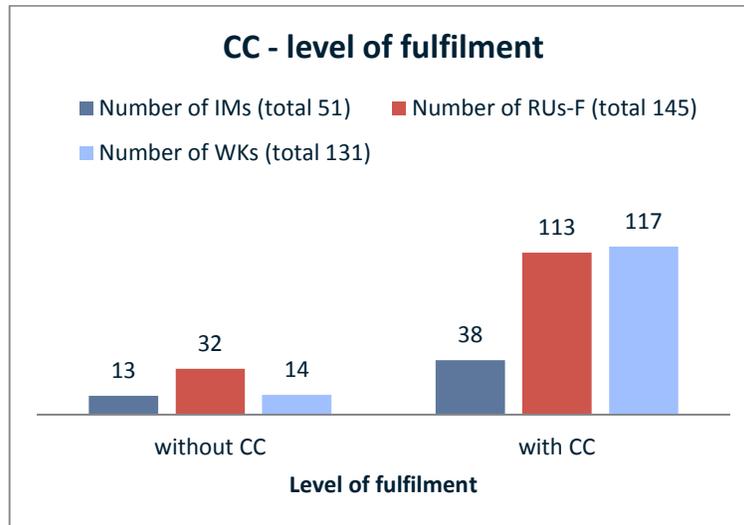


Diagram 10: Common Reference Files - Company Codes (CC)

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

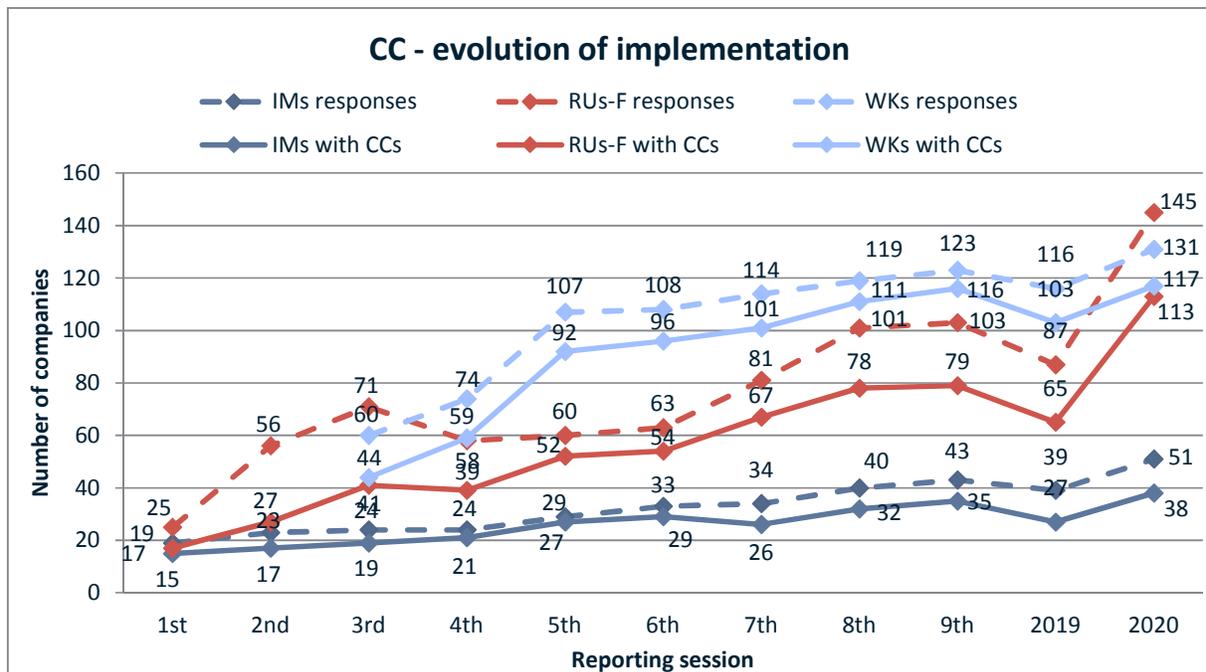


Diagram 11: Evolution of responses and implementation for Company Codes

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.

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, 39 RUs-F and 13 Wks. RSRD² has not yet implemented the CI. Wks using RSRD² therefore form part of the 25% level.

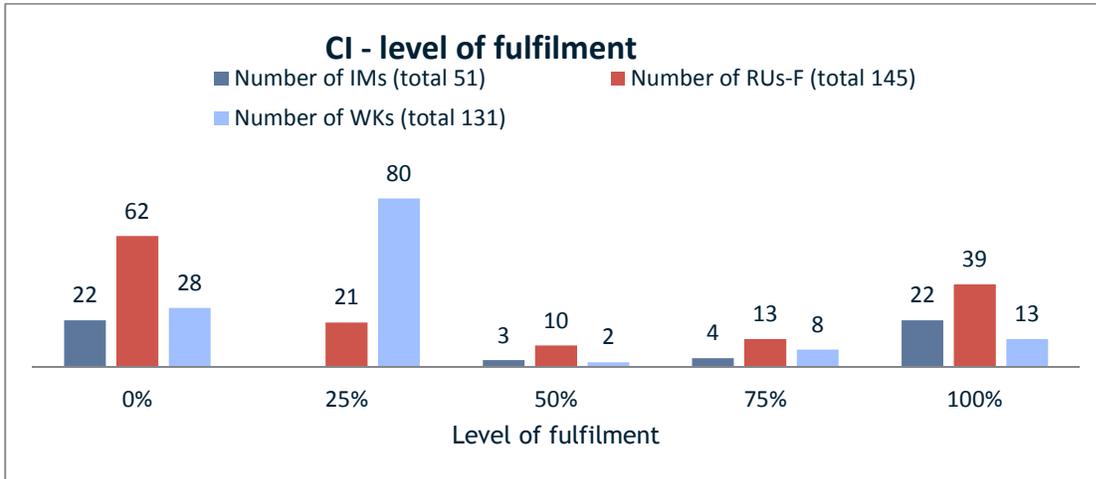


Diagram 12: Common Reference Files – Common Interface (CI)

Diagram 13 shows the development of complete implementation of the CI and the number of responses per company type. There is a positive evolution of CI in production for RUs-F and a stagnation for IMs and Wks up to December 2020.

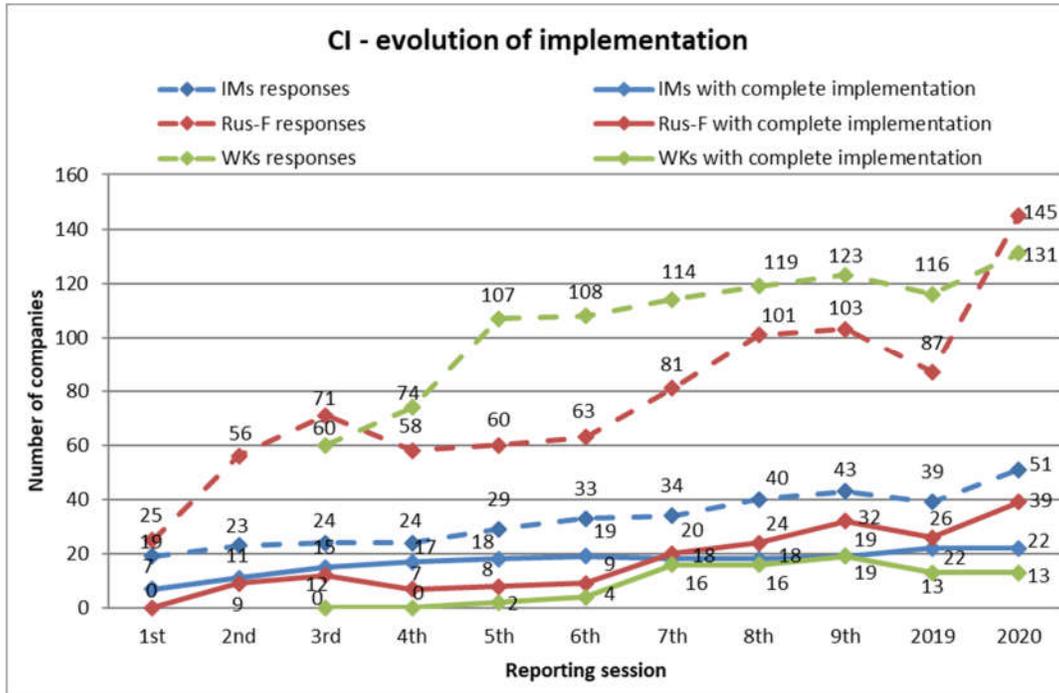


Diagram 13: Evolution of responses and implementation for Common Interface

5.4. New Identifiers (all companies)

The Target Implementation Milestone for realisation of the New Identifiers (NI) according to the TAF TSI Masterplan was 2020.

This function is reported for the first time in 2020 and therefore no data is available from the previous year. Consequently, no evolution of implementation is reported for NI.

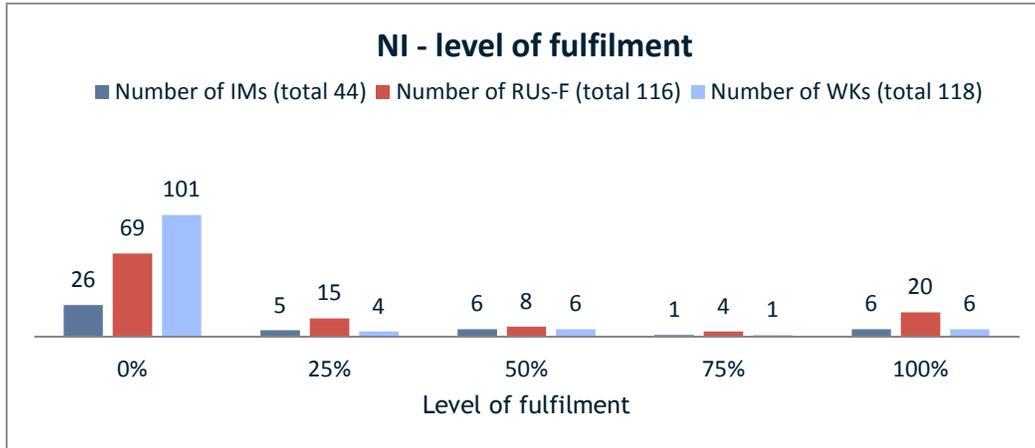


Diagram 14: New Identifiers (NI)

Diagram 15 gives an impression about the state of implementation of NI by IMs in countries across Europe. The IMs having the longest network have been taken as relevant for the country. The current planned end date is indicated in different colours for IMs still in development.

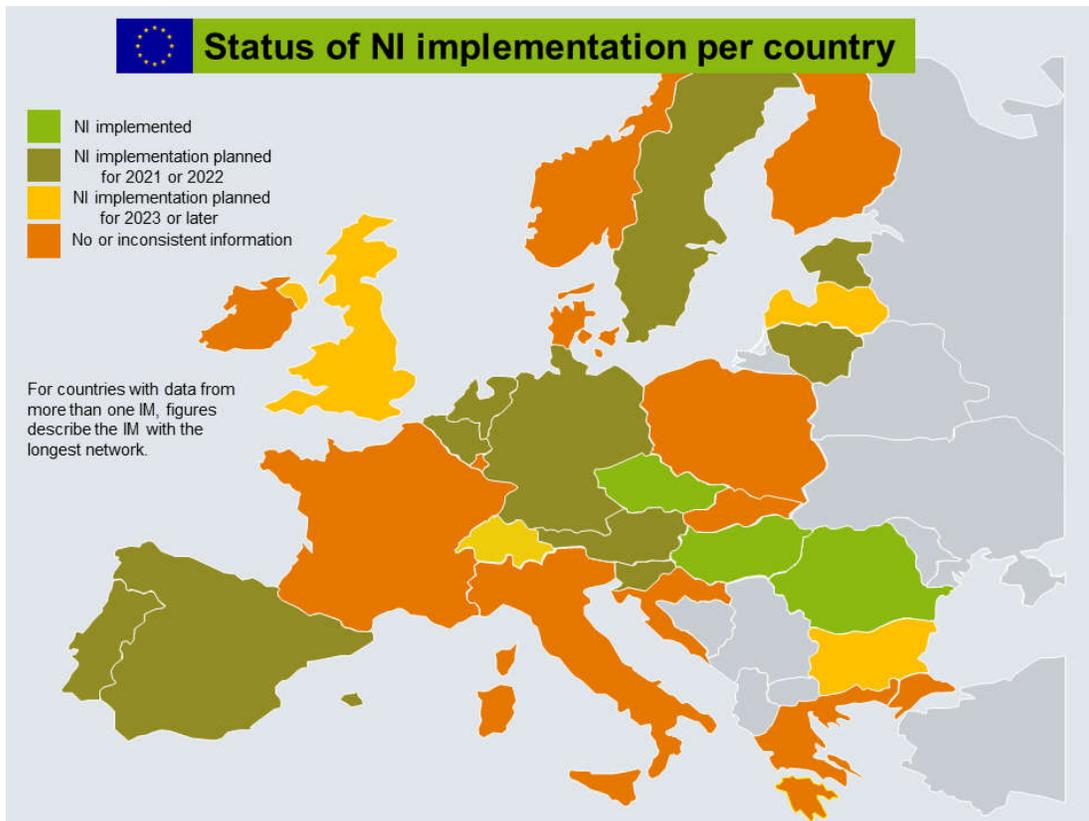


Diagram 15: Implementation of NI of IMs across European countries

5.5. Path Request (IMs and RUs-F)

The Target Implementation Milestone for realisation of the Path Request (PR) according to the TAF TSI Masterplan was 2017.

This function is reported for the first time in 2020 and therefore no data is available from the previous year. Consequently, no evolution of implementation is reported for PR.

The level of fulfilment of diagram 16 shows 11 IMs and 24 RUs-F with 100% implementation of the PR message.

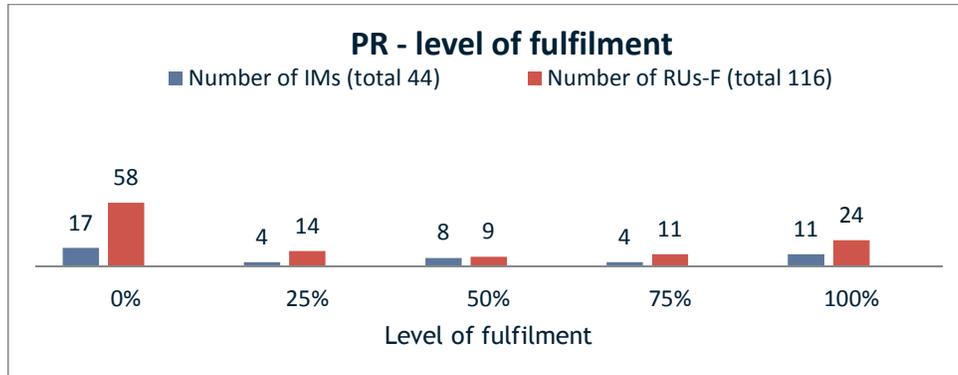


Diagram 16: Path Request (PR)

Diagram 17 gives an impression about the state of implementation of PR by IMs in countries across Europe. The IMs having the longest network have been taken as relevant for the country. Different colours indicate the current planned end date for IMs being still in development.

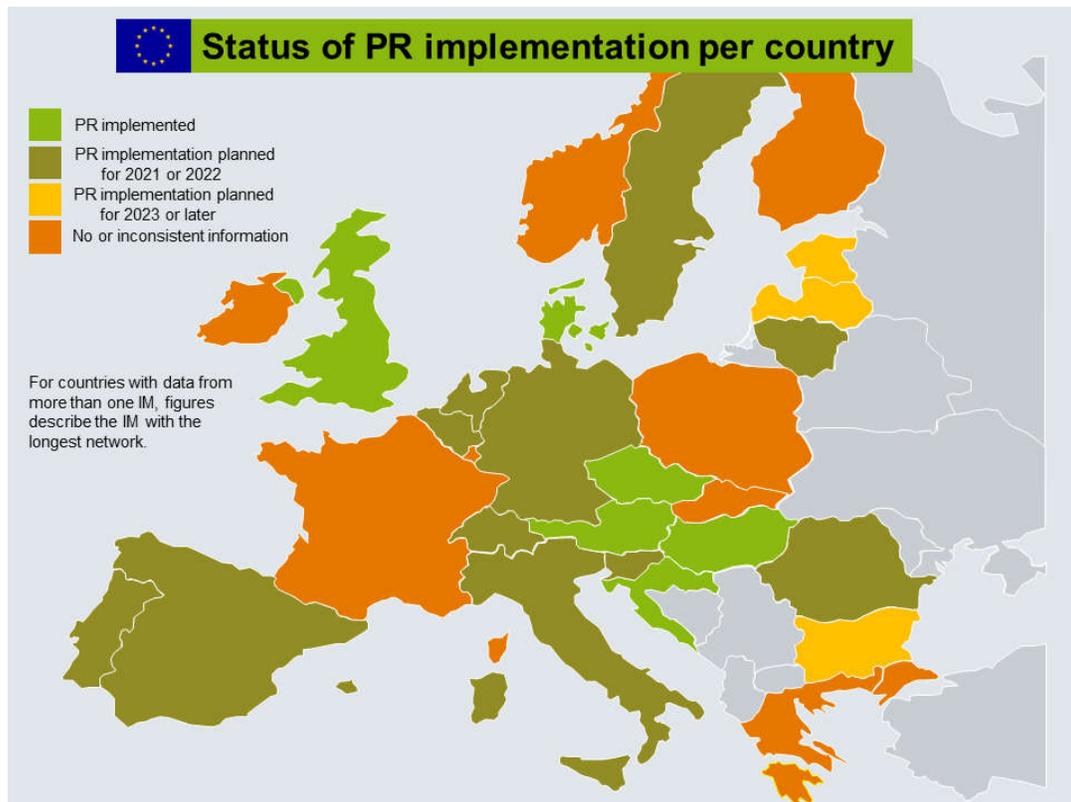


Diagram 17: Implementation of PR of IMs across European countries

5.6. Path Details (IMs and RUs-F)

The Target Implementation Milestone for realisation of the Path Details (PD) according to the TAF TSI Masterplan was 2017.

This function is reported for the first time in 2020 and therefore no data is available from the previous year. Consequently, no evolution of implementation is reported for PD.

The level of fulfilment of diagram 18 shows 7 IMs and 26 RUs-F with 100% implementation of the PD message.

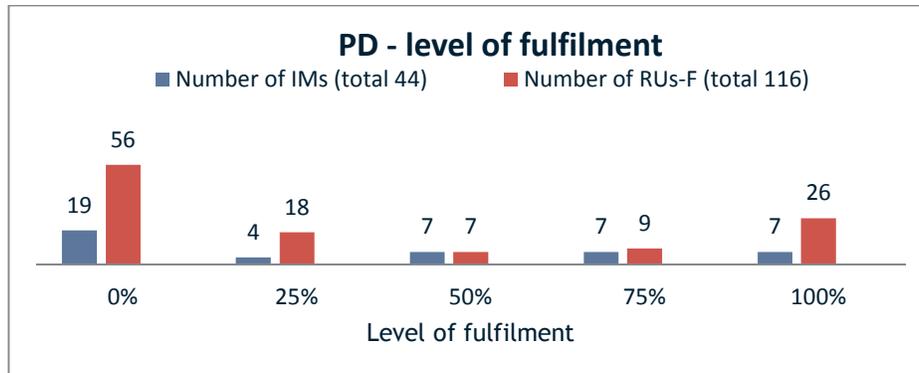


Diagram 18: Path Details (PD)

Diagram 19 gives an impression about the state of implementation of PD by IMs in countries across Europe. The IMs having the longest network have been taken as relevant for the country. Different colours indicate the current planned end date for IMs being still in development.

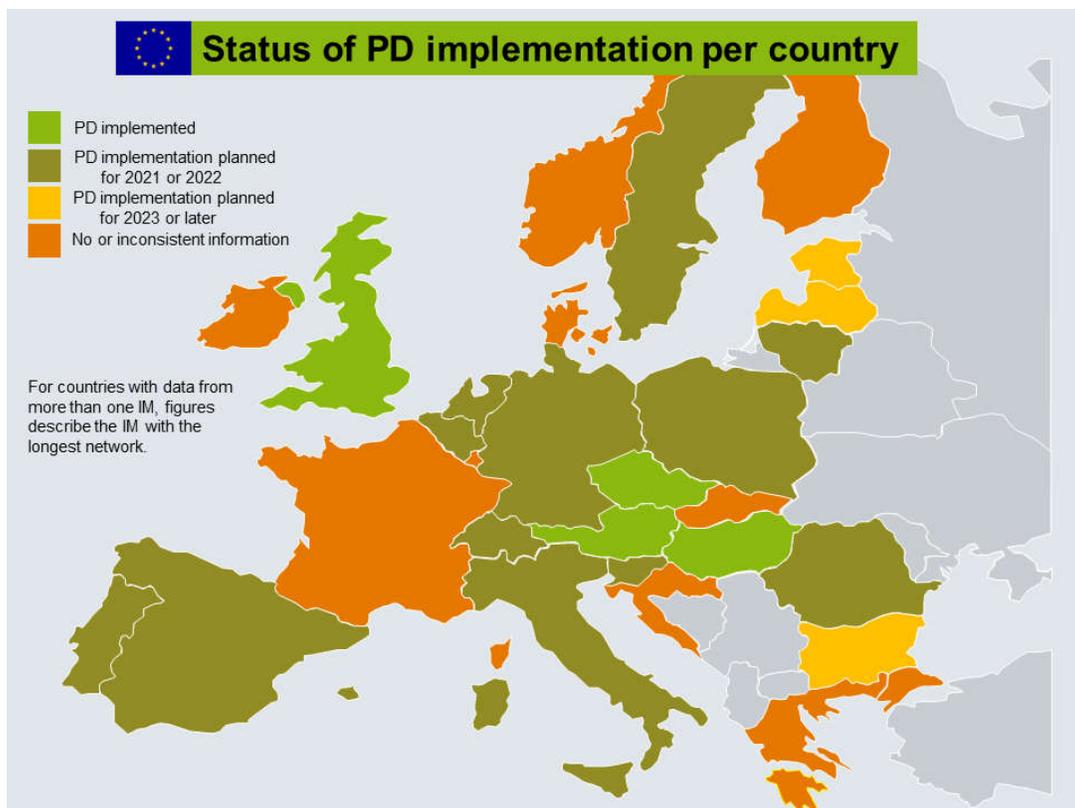


Diagram 19: Implementation of PD of IMs across European countries

5.7. 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, which is like the previous reporting period (diagram 20). Companies using other means of implementation in accordance with the TSIs remain out of consideration.

Regardless of the higher participation in the 2020 survey, the share of TAF/TAP messages for TR implementation remains quite similar.

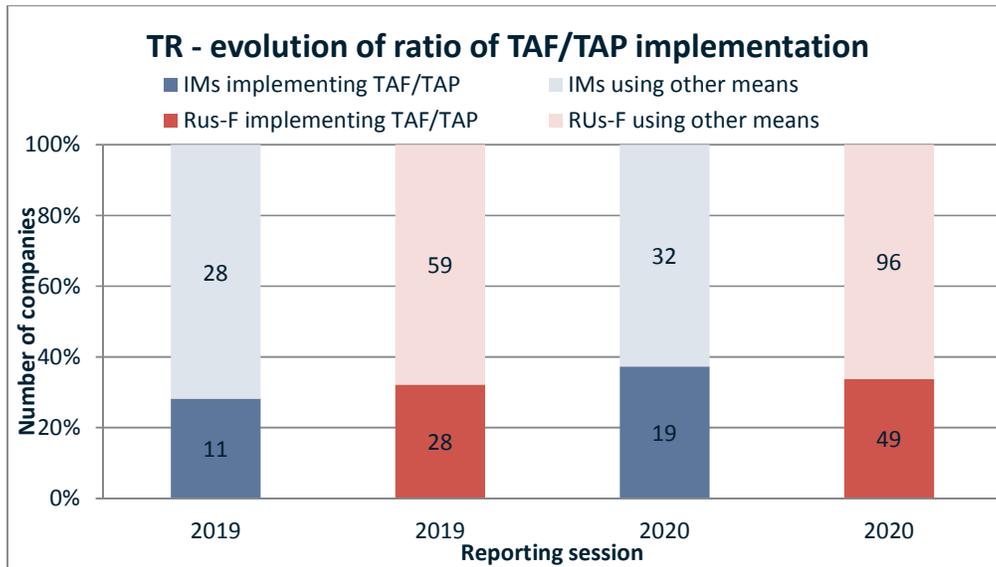


Diagram 20: Train Ready (TR)

The level of fulfilment of diagram 21 shows 9 IMs and 27 RUs-F with 100% implementation of the TR message.

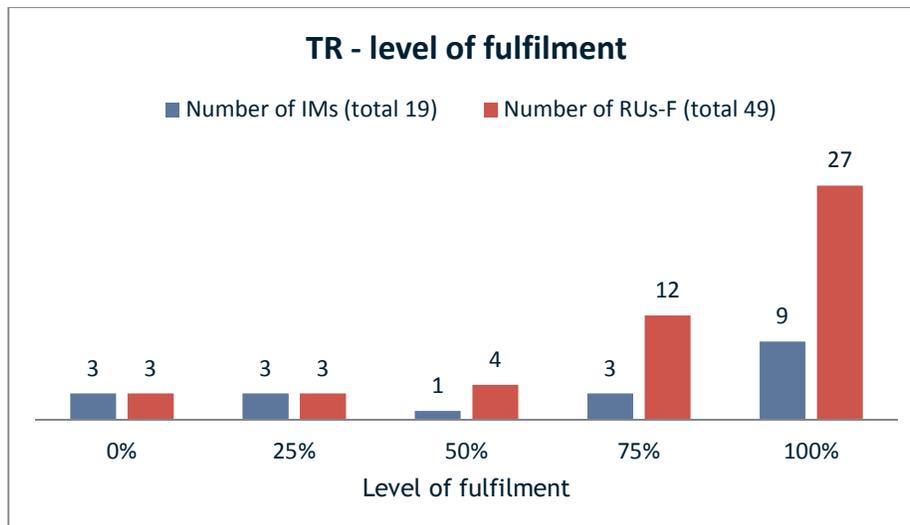


Diagram 21: Train Ready (TR)

The development of complete implementation and the number of responses per company type of the TAF message TR since 2019, when it was reported for the first time, is shown in diagram 22. There is a positive evolution of TR in production for IMs and RUs-F up to December 2020.

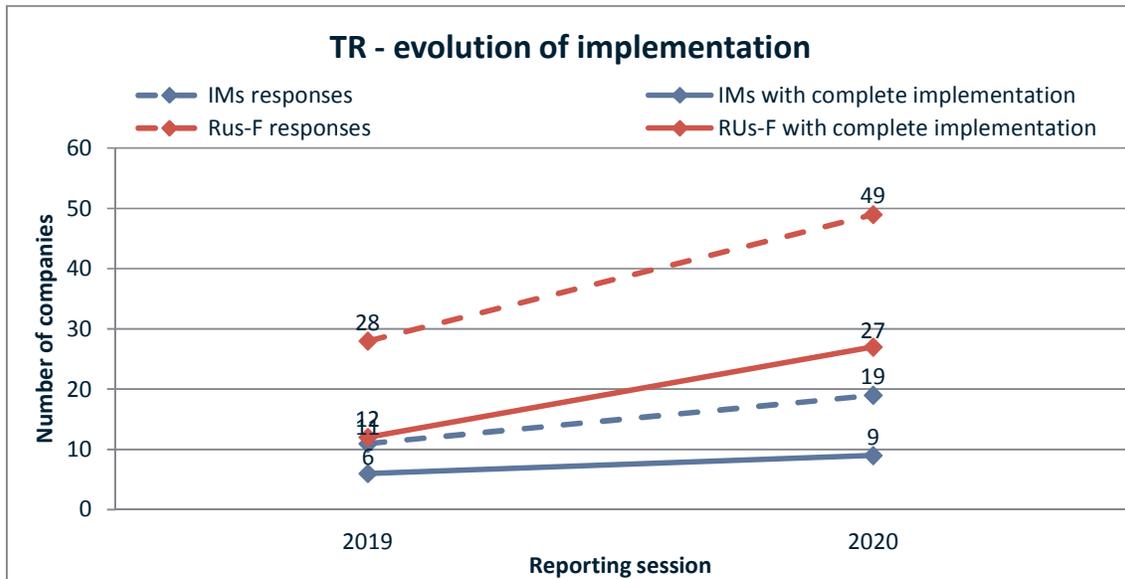


Diagram 22: Evolution of responses and implementation for Train Ready

5.8. 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 % fulfilment. TAF messages sent or received by Common Interface are counted as 100 % fulfilment.

Diagram 23 indicates 24 IMs and 47 RUs-F with 100 % level of fulfilment. 6 IMs and 22 RUs declared to use TIS but have not yet started implementing TRI according to their feedback to the survey.

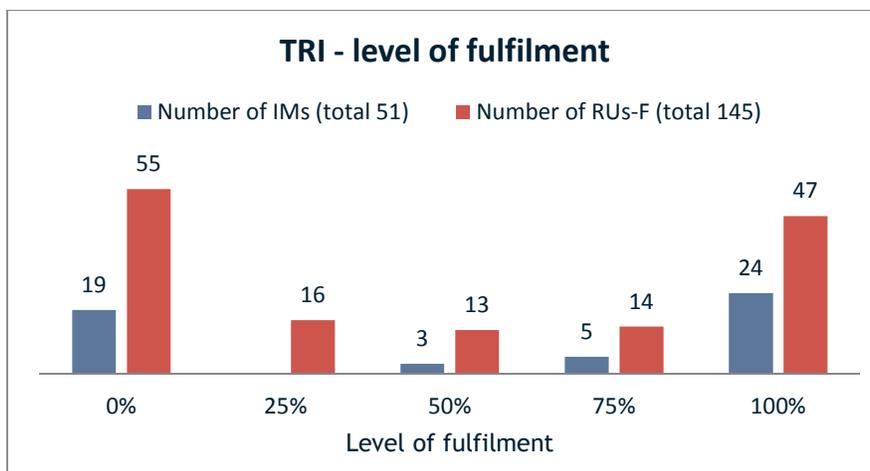


Diagram 23: Train Running Information (TRI)

Regarding diagram 24, the number of IMs and RUs-F having implemented completely the TRI increased in comparison to the previous reporting session at a higher level of participation.

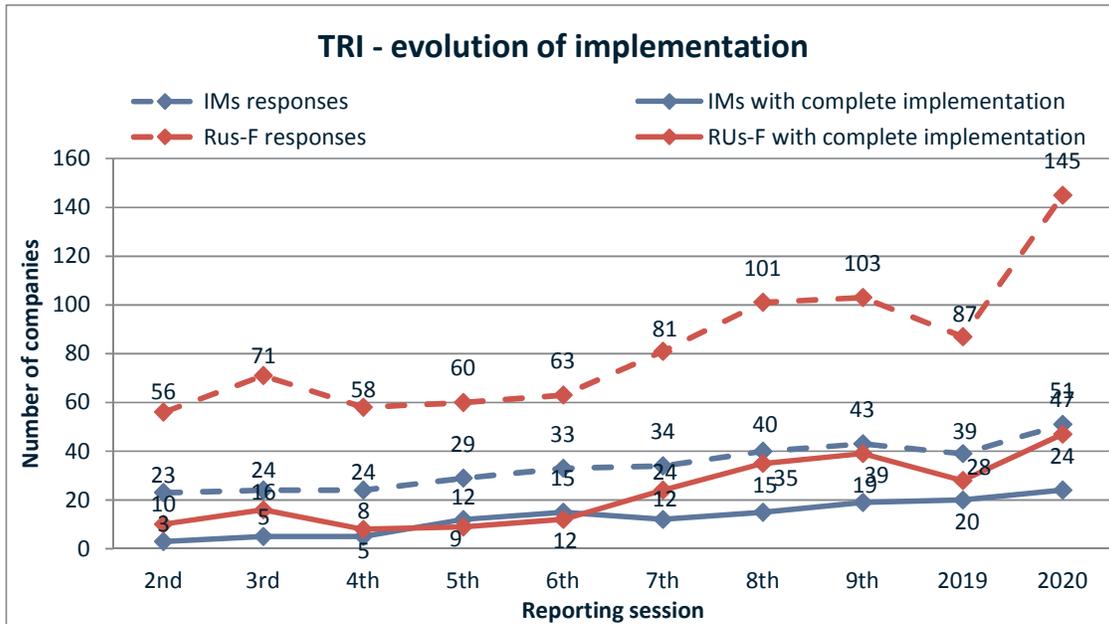


Diagram 24: Evolution of responses and implementation for Train Running Information

Diagram 25 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 is indicated.

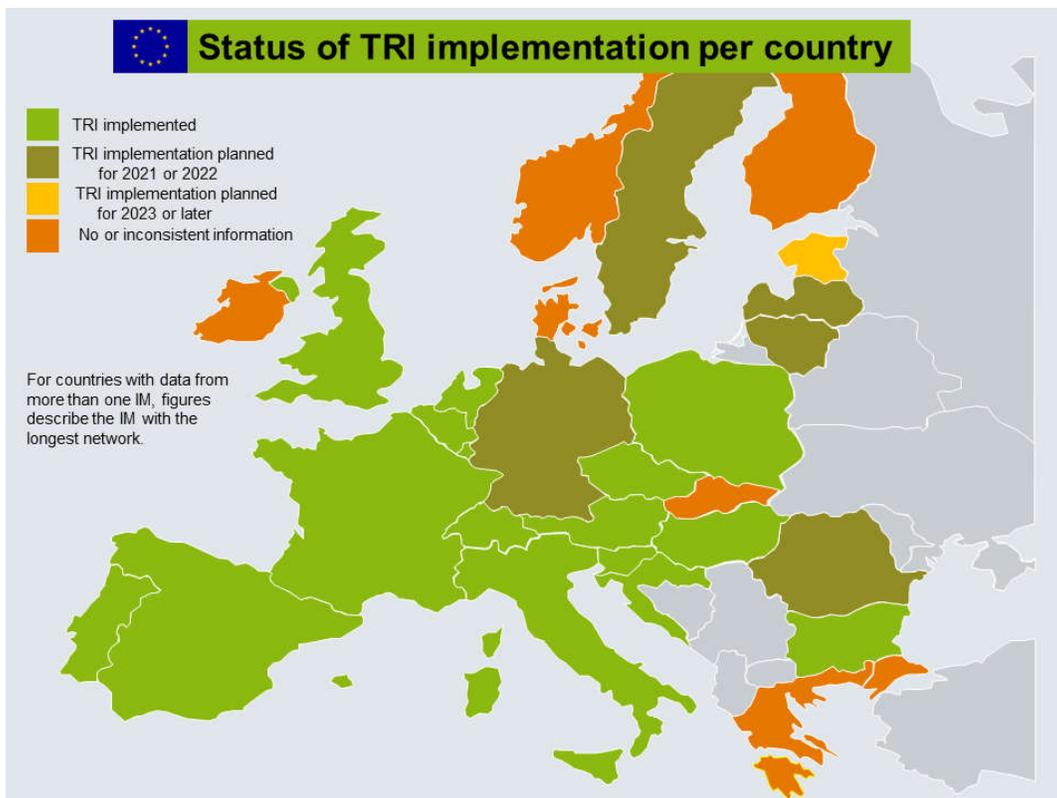


Diagram 25: Implementation of TRI of IMs across European countries

5.9. 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.

The level of fulfilment of diagram 26 shows 14 IMs and 23 RUs-F with complete implementation of the TRIM message. However, most companies have not yet started implementation.

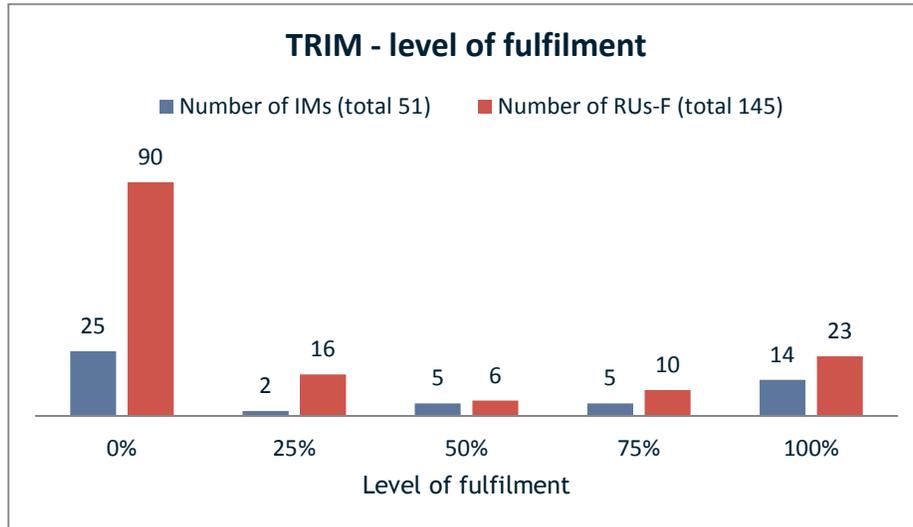


Diagram 26: Train Running Interrupted Message (TRIM)

Diagram 27 indicates the positive evolution of implementation for TRIM at a relative low level compared to the number of participating companies.

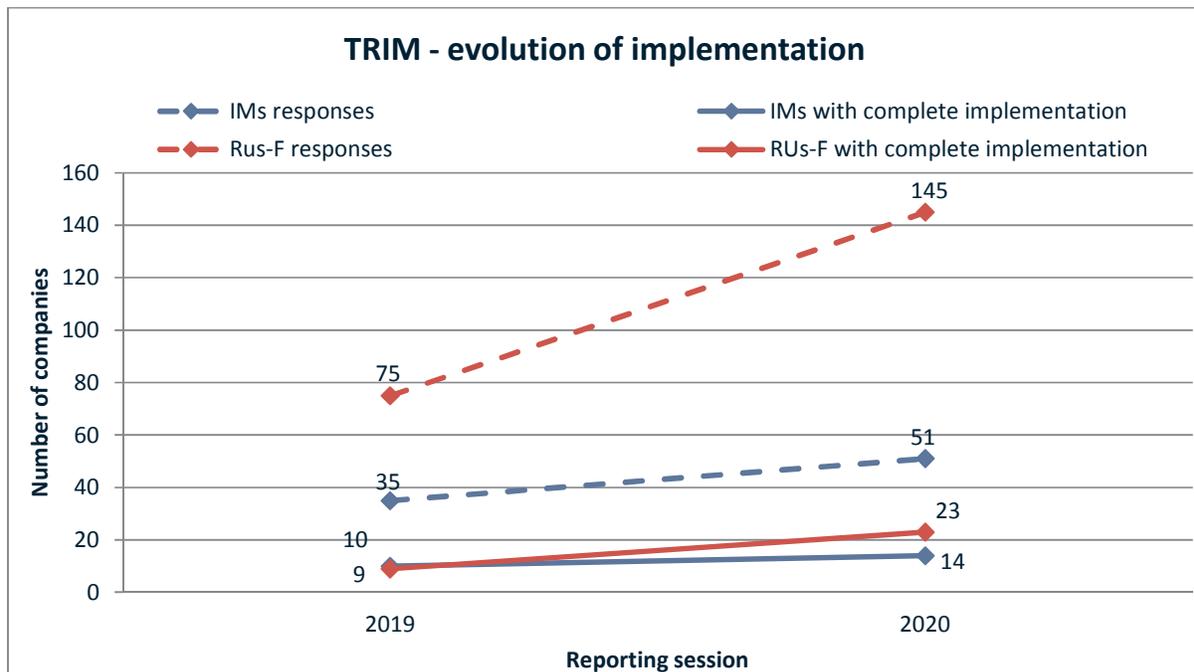


Diagram 27: Evolution of responses and implementation for Train Running Interrupted Message

5.10. Train Running Forecast (IMs and RUs-F)

The Target Implementation Milestone for realisation of the Train Running Forecast (TRF) according to the TAF TSI Masterplan was 2017.

'Train Running Forecast' is reported for the first time in this report and therefore no data is available from the previous year. Consequently, no evolution of implementation is reported for TRF.

TRF is reported to be fully implemented end of 2020 by 11 IMs and 14 RUs-F.

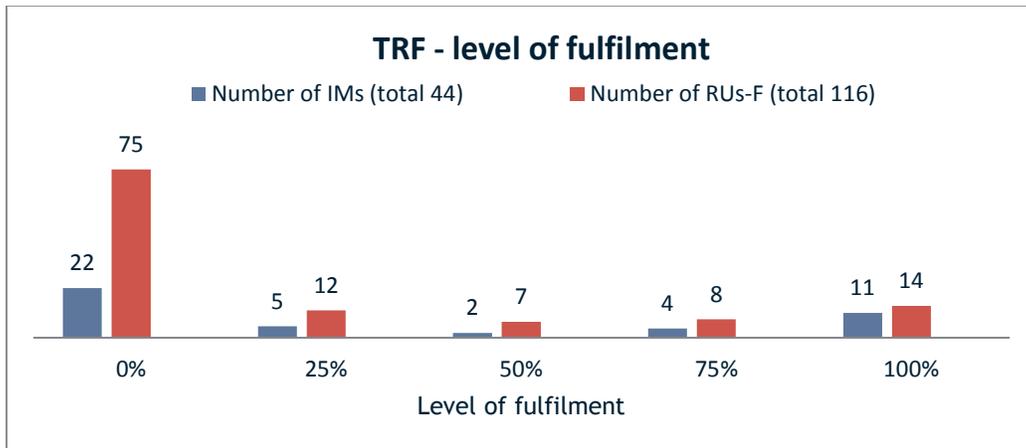


Diagram 28: Train Running Forecast (TRF)

5.11. 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. 15 IMs and 41 RUs-F have implemented TCM completely.

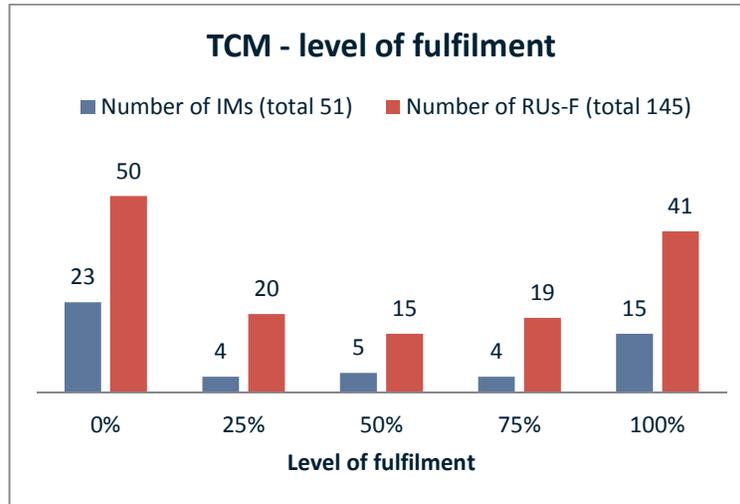


Diagram 29: Train Composition Message (TCM)

Figures show an increase in terms of complete implementation of TCM since last reporting session. 41 RUs-F out of 145 which replied to the survey have completely implemented the TCM while 15 out of 51 IMs have finished their duty.

In order to reflect national parameters which might have influence on the interoperability of train composition messages, the national parameters will be stored from 2022 in a human readable table format in annexes to the Implementation Status Report. The machine readable format (XML) of those parameters will be also published at the Agency’s public website⁴. Precondition is an outcome of the relevant railway sector expert groups elaborating governance of national parameters. Outcome is expected in March 2022.

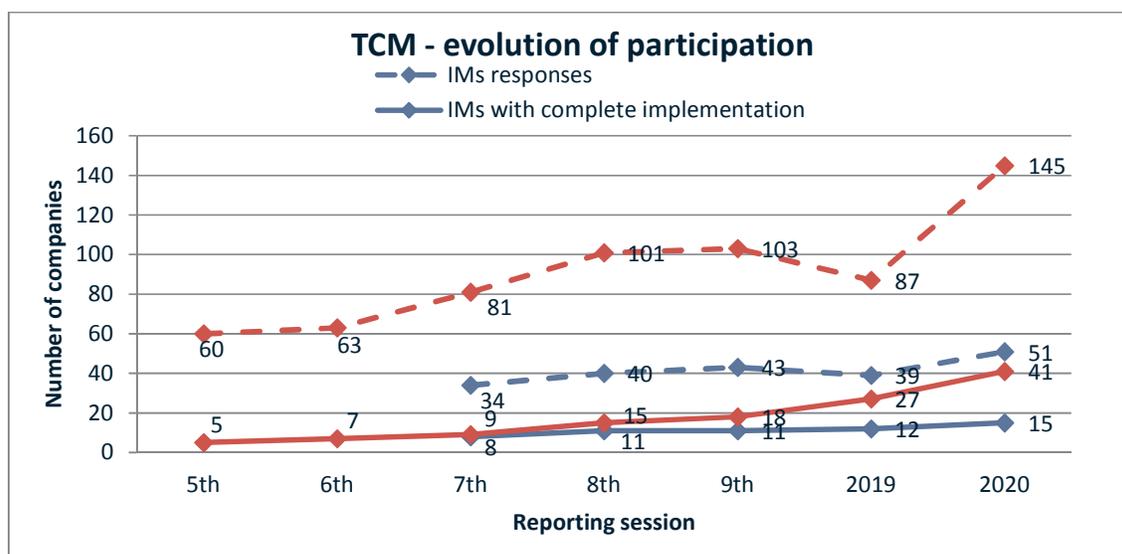


Diagram 30: Evolution of responses and implementation for Train Composition Message (TCM)

⁴ <https://www.era.europa.eu/content/technical-documents>

5.12. 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.

ORFEUS (Open Rail Freight EDI User System) is a common sector tool managed by Raildata, which allows to exchange consignment data.

Diagram 32 indicates only 24 RUs-F out of 145 having finished implementation of CND. 9 companies declared in the questionnaire using ORFEUS, but not having implemented CND completely.

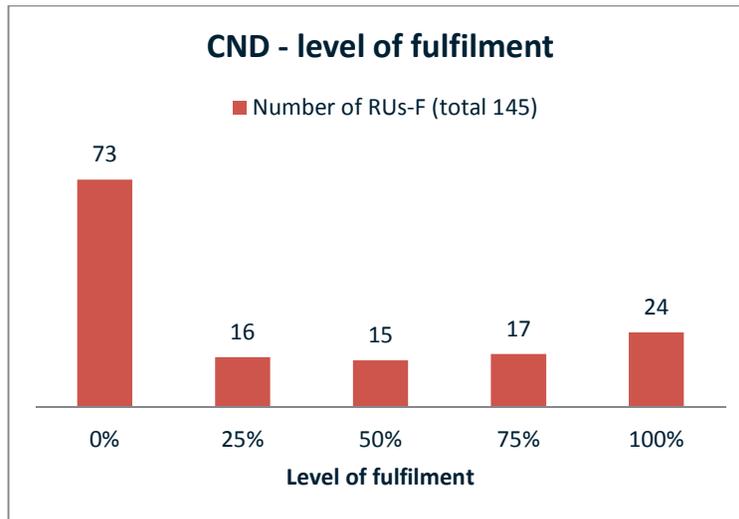


Diagram 32: Consignment Note Data (CND)

Both, the evolution of responses and the evolution of implementation for CND increases quite significantly for 2020 (diagram 33).

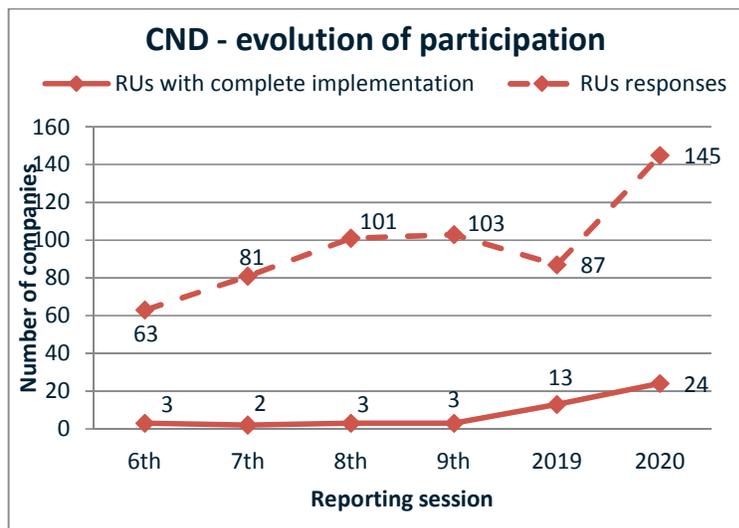


Diagram 33: Evolution of responses and implementation for Consignment Note Data (CND)

5.13. 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.

The common sector tool ISR ensures exchange of movement information for wagons in international traffic through a central platform.

Responses to this questionnaire indicate 20 RUs-F having completed the WM function from a total of 145 companies. 11 RUs-F declared using the Common Sector Tool ISR but not having implemented WM completely.

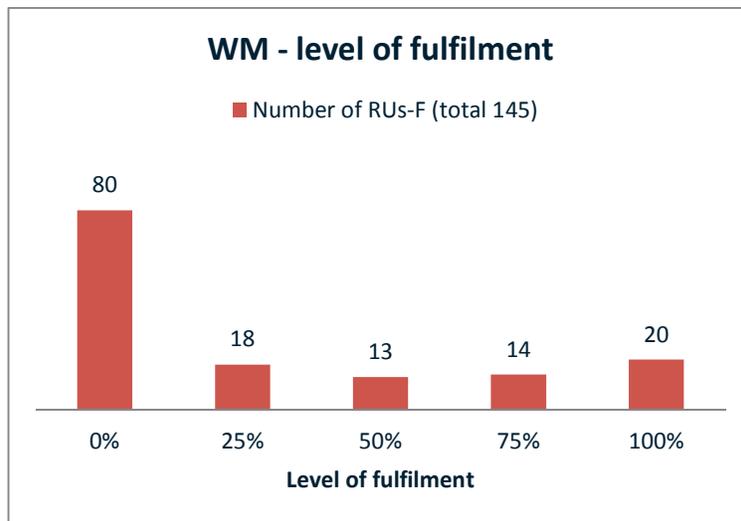


Diagram 34: Wagon Movement (WM)

The implementation for WM shows a significant positive evolution for 2020 (diagram 35).

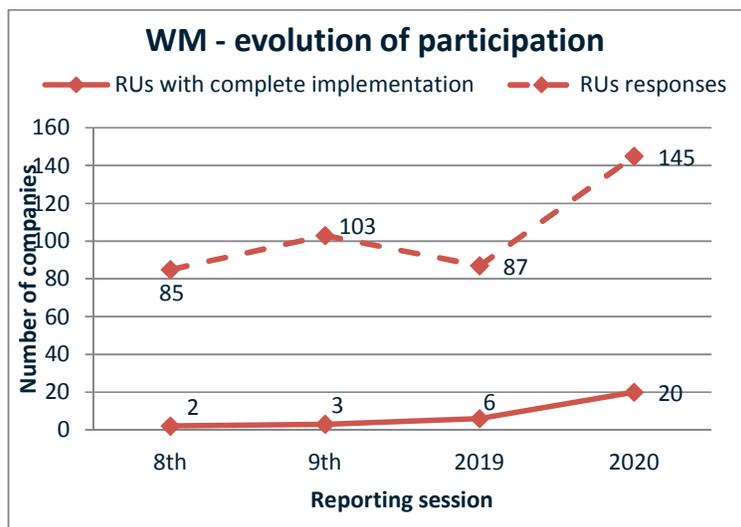


Diagram 35: Evolution of responses and implementation for Wagon Movement (WM)

5.14. Shipment ETA (RUs-F)

The Target Implementation Milestone for realisation of the Shipment ETA function (ETA) according to the TAF TSI Masterplan was 2018.

The 'Shipment ETA' function (ETA) is relevant for RUs-F only. Even if there are several IMs that will realise this function on behalf of their customers, they are not considered in the present report.

'Shipment ETA' is reported for the first time in this report and therefore no data is available from the previous year. Consequently, no evolution of implementation is reported for Shipment ETA.

14 RUs-F out of a total of 116 RUs-F declare to have implemented this function by the end of 2020 is shown in diagram 36.

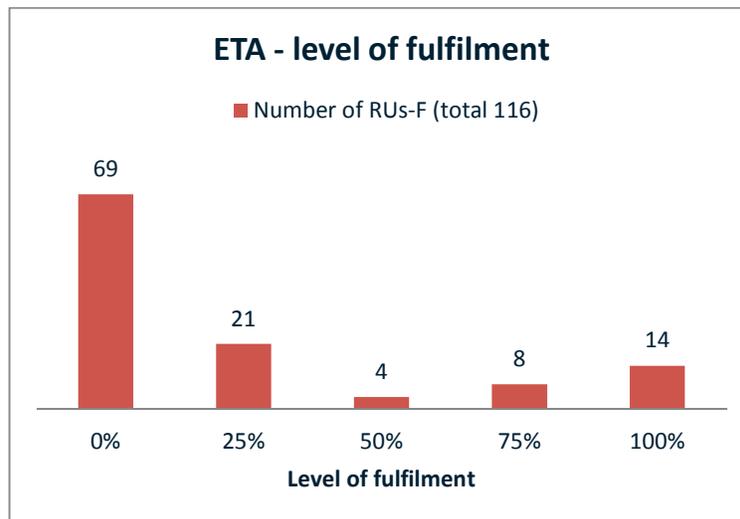


Diagram 36: Shipment ETA

5.15. 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 RSRD². Information delivered by UIP for RSRD² means 100% of fulfilment. 89 WKS have implemented this function, out of which 75 WKS thanks to RSRD².

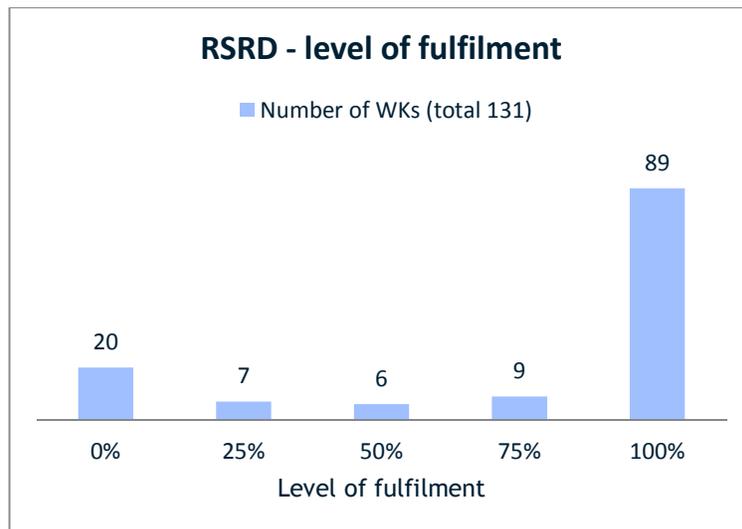


Diagram 37: Rolling Stock Reference Database

Like better participation to the survey, the evolution of implementation remains growing compared to the previous report (see diagram 38).

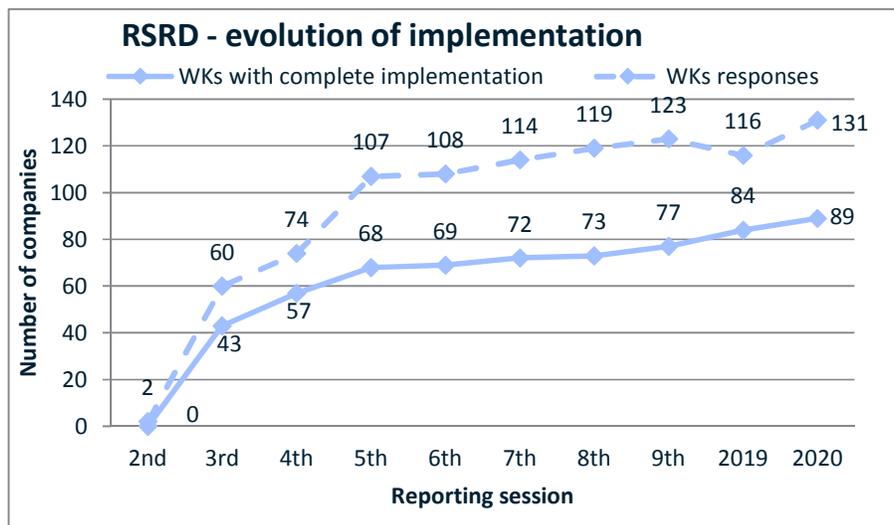


Diagram 38: Evolution of responses and implementation for RSRD

5.16. 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 39 gives a summary of the total number of reasons mentioned in the questionnaire.

Feedback regarding reasons for not implementing went up about three times (from 357 reasons in 2019 to 1047 reasons in 2020) in total, which is completely in line with the increased participation of new companies in the actual survey.

Compared to the last reporting session ‘budget constraints’ and ‘insufficient awareness’ have increased most.

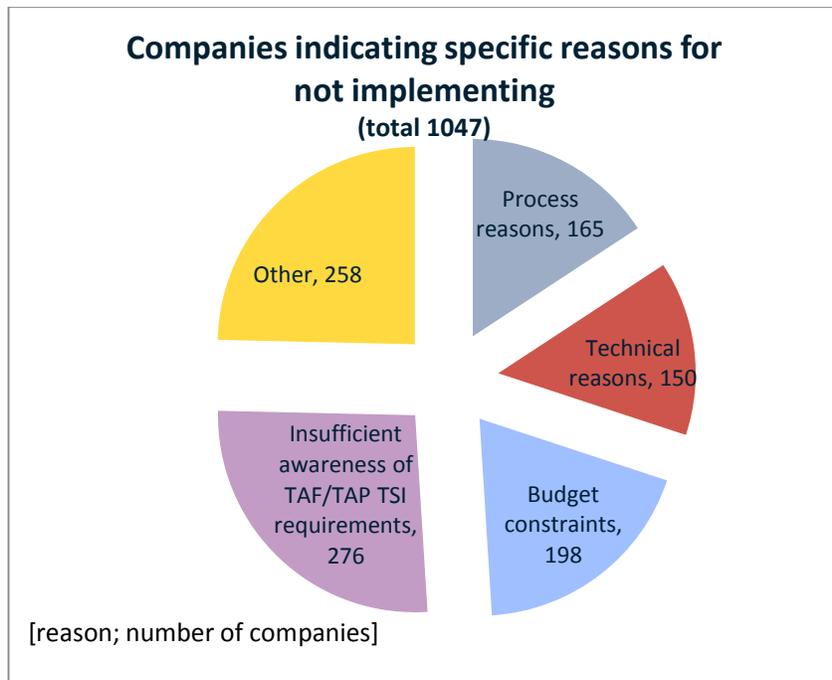


Diagram 39: Reasons for not starting implementation of TAF/TAP TSI functions

Diagram 40 shows the distribution of the responses to the various TAF/TAP functions. The number indicates how many companies have not yet started implementing this function and gave reasons for not yet doing so.

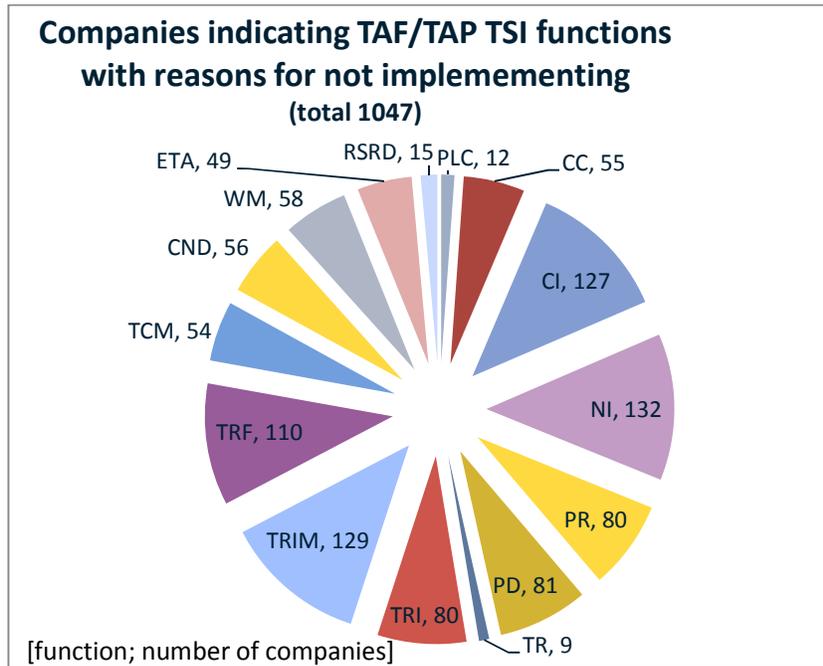


Diagram 40: TAF/TAP functions with reasons for not starting implementation

Diagram 41 gives a closer look to the development of ‘Insufficient awareness of TAF/TAP TSI requirements’ over time.

The percentage given in diagram 41 as a blue 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 by 20 % since the 6th reporting session to the maximum value of 26 % last year. Dedicated information sessions should be initiated as a mitigation measure.

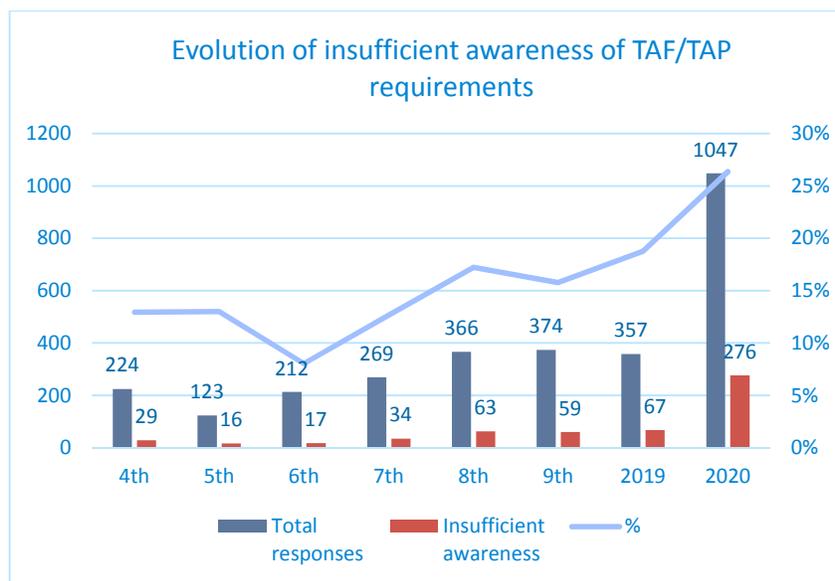


Diagram 41: Evolution of insufficient awareness of TAF/TAP requirements

5.17. 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 42 and 43 show the DI for planning and operation functions to be implemented by IMs. Implementation of these functions show a mixed trend relative to the last report. The NI, PR and PD functions are all reported for the first time reaching a degree of implementation of 14 % (NI), 25 % (PR) and 16 % (PD).

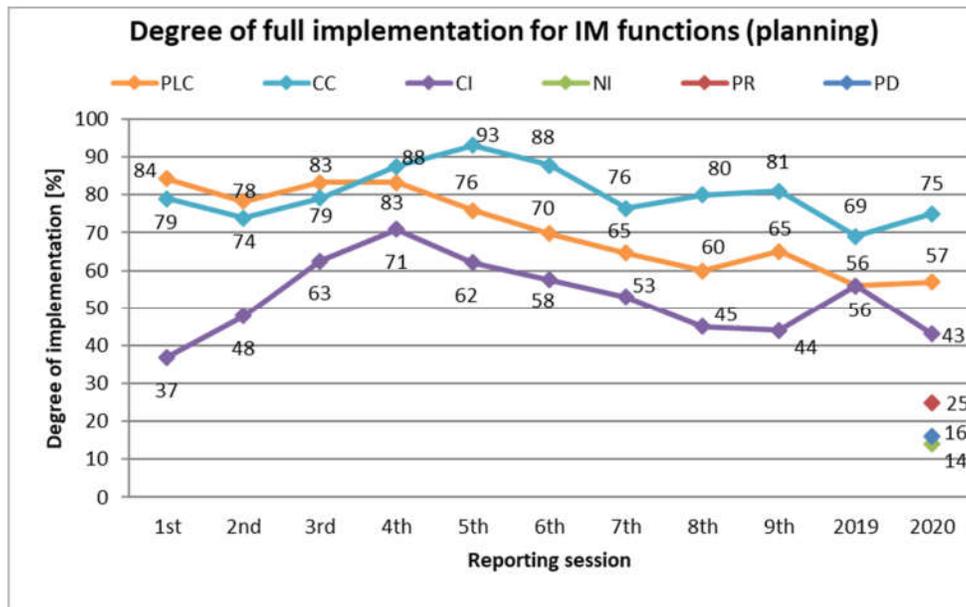


Diagram 42: Reported DI for IM functions (planning)

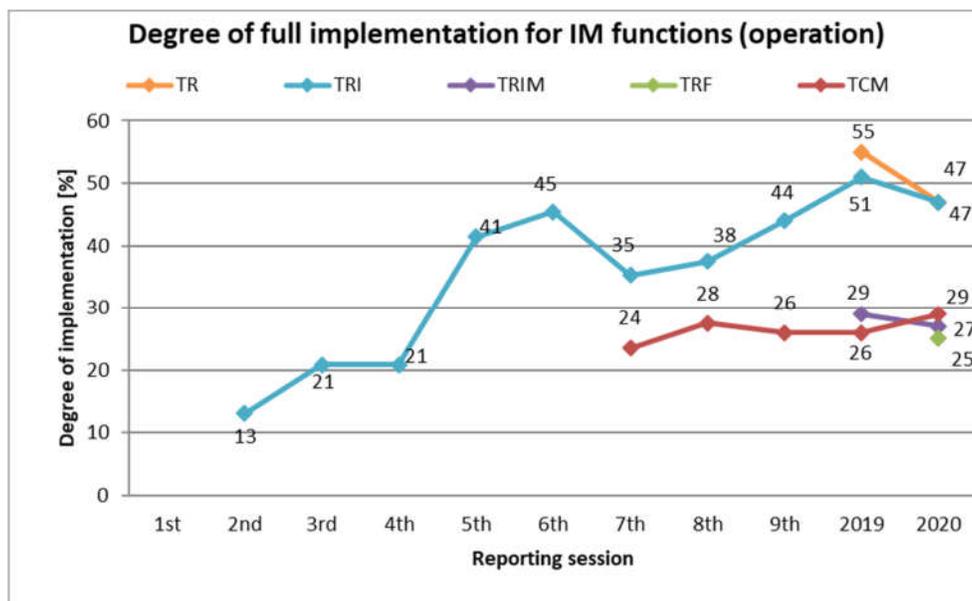


Diagram 43: Reported DI for IM functions (operation)

Diagram 44 and 45 indicate 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 78 % as well as the TR function at 55 %. 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 17 % (NI), 21 % (PR) and 22 % (PD) for planning functions and 12 % (TRF and ETA) for operational functions.

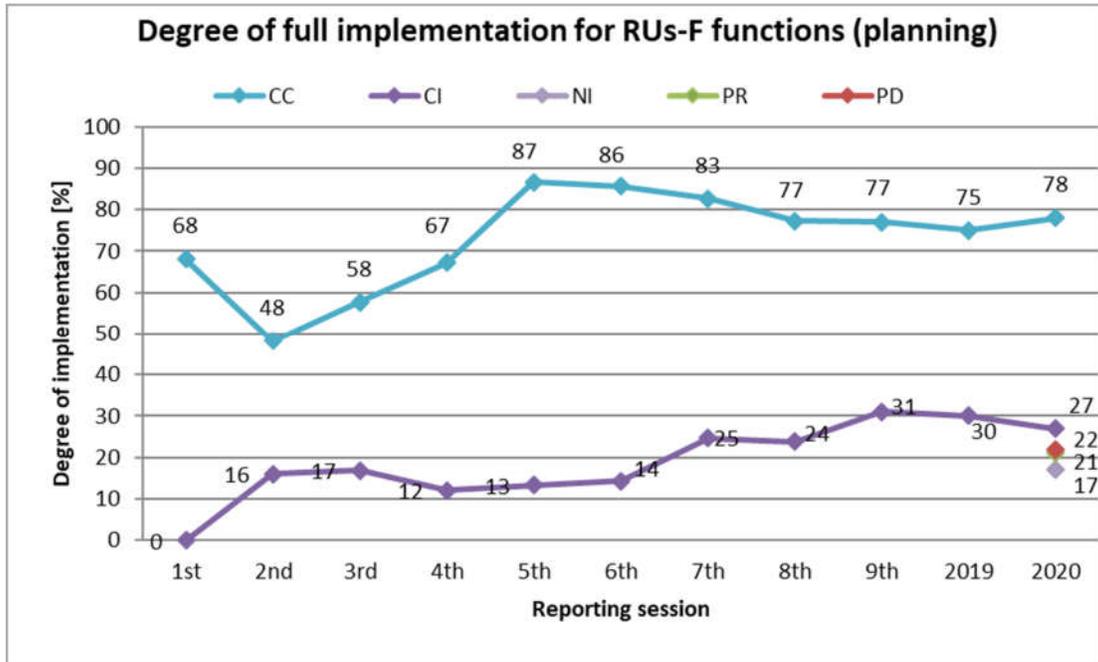


Diagram 44: Reported DI for RUs-F functions (planning)

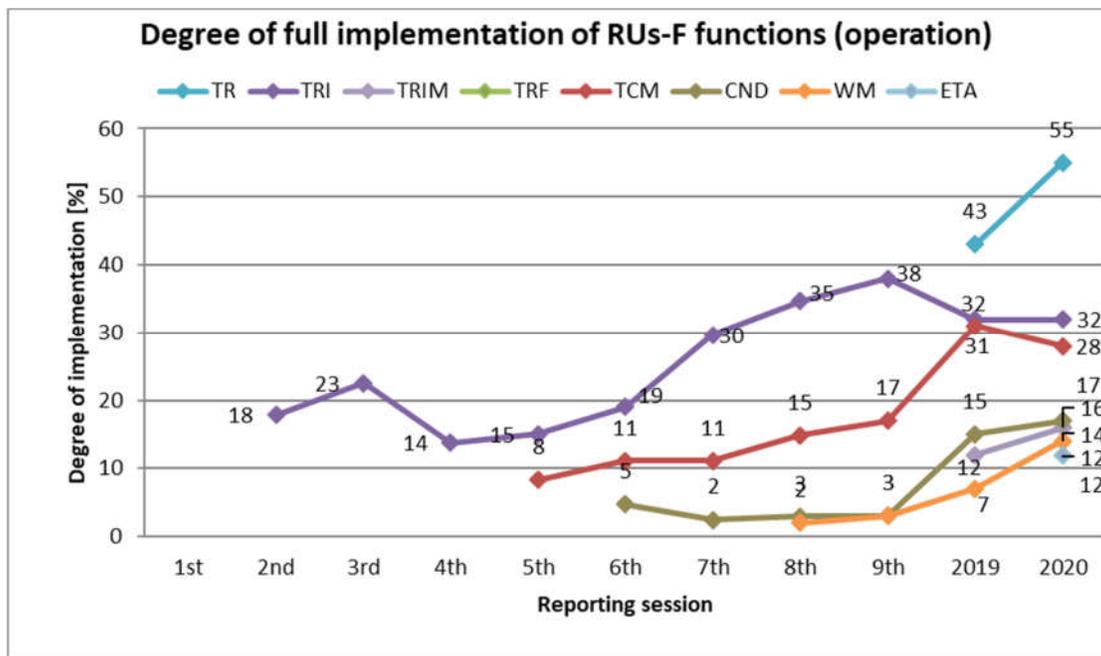


Diagram 45: Reported DI for RUs-F functions (operation)

Diagram 46 shows the reported DIs for the WK functions in the present report. NI is reported for the first time having a DI of 5 % in 2020.

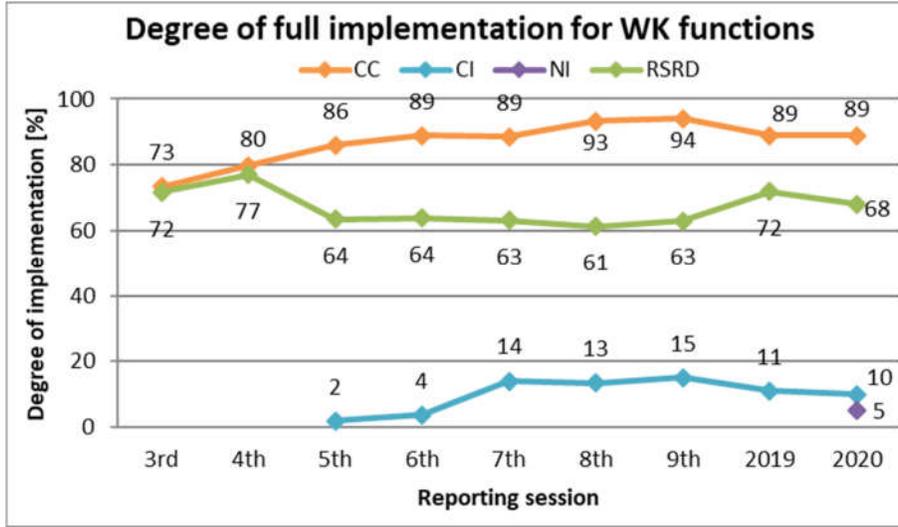


Diagram 46: Reported DI for WK functions

6. 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 risen from 387 to 557 and are summarised in diagram 47.

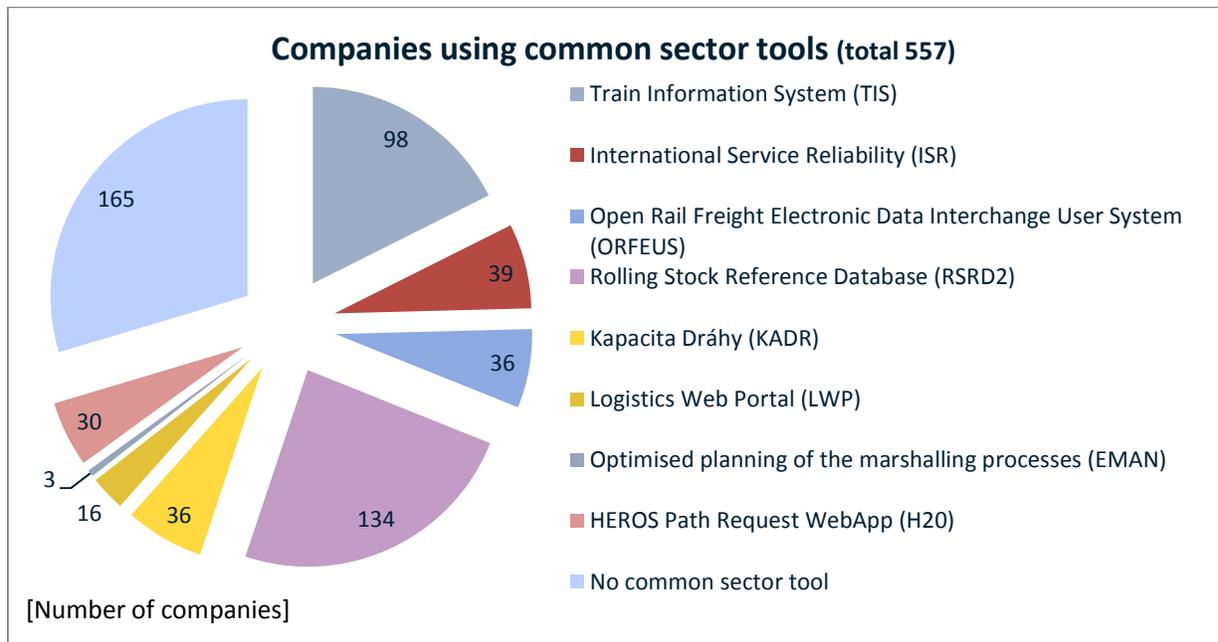


Diagram 47: Common sector tools in use

In line with the increase of the total number of companies, the use of all common sector tools went up.

RSRD² and TIS both stay the most used Common Sector Tools for TAF TSI functions.

7. CONCLUSION AND FINDINGS

The number of companies having responded to the 2020 questionnaire is, as always, significantly lower than the number of companies having been invited. The response rate of 39 % of the current reporting session is quite a good rate regarding the high number of invitations.

There might be different reasons for this positive trend:

- Companies could select to answer the questionnaire in their native language
- Reduction of survey frequency to once a year
- Pandemic crisis giving more time to fill in a questionnaire
- Increased involvement of NCPs and of Sector Organization in the reporting session

Since the last report one year ago, invitations and responses have grown to a new record high. 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. Hence, a total number of 399 responses have been evaluated in this report. This is the highest number since beginning of TAF/TAP monitoring. This includes 58 companies taken over from the 2019 reporting and 109 companies reporting for 2020.

Regarding reasons for not having started implementation compared to the last reporting session, 'budget constraints' and 'insufficient awareness' were mentioned most by the companies. The evolution of insufficient awareness of TAF/TAP requirements is steadily growing since 2017 to the maximum value of 26 % in 2020. **Dedicated information sessions should be initiated as a mitigation measure.**

The Degree of Implementation (DI) as set out in diagrams 42 to 46 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.

In order to have a better overview for DI, functions were split in planning and operation. Planning functions for IM and RU newly include NI, PR and PD. For IMs the TRF was added to operation functions and for RUs TRF and ETA have been added.

The DI for the different TAF functions in the present report shows generally a mixed development:

- positive trends for IM functions PLC, TCM and CC
- positive trends for RUs-F functions CC, TR, TRIM, CND and WM
- no change for RUs-F function TRI
- no change for Wks function CC
- negative trends for IM functions CI, TR, TRI and TRIM
- negative trends for RUs-F functions CI and TCM
- negative trends for WK functions CI and RSRD

For the functions NI, PR, PD, TRF and ETA no trend exists as they are reported for the first time.

Degree of implementation of CC has the highest value for all types of companies.

For some TAF TSI functions there is a strong need to precisely define the compliance with TAF TSI regulation. For example, for the NI, PR and PD functions, 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.

RSRD² and TIS remain the most used common sector tools following feedback to this survey.

7.1. Functions to be reported in the next report

During the TAF TSI Implementation Cooperation Group meeting held on 11 March 2021, it was agreed to report in 2021 about the same functions as reported in 2020.

It was also agreed that number of reporting languages will be increased in the JSG Reporting Tool to further improve reporting response rates

Having regarded foreseen migration of the Company Code to alphanumerical format as from 1st of January 2026, it was further agreed that in the 2021 report the reporting entity will have the possibility to report progress on implementation of this change in its IT solutions. This will enable early implementation monitoring and additionally support migration strategy laid down in the corresponding Agency opinion⁵.

Agency proposes also that in the 2021 report the reporting entity will have the possibility to report the soft compliance for TAF implementation according to the new compliance provisions of the amended TAF TSI (see chapter 4.2 of the ERA recommendation 006REC1128 at https://www.era.europa.eu/library/era-recommendations_en).

Furthermore, if a reporting entity indicated in above chapter 6 that it uses a given sector tool for the implementation of a corresponding TAF function, then the degree of implementation for that function will be set to 100%.

7.2. Calendar for next reporting

In the frame of the TAF TSI Implementation Cooperation Group meeting held on 11 March 2021, it was agreed the following schedule to report about the implementation of TAF TSI functions and RU-IM Communication for TAP TSI (2021 Reporting wave): 15.11.2021 - 10.12.2021

	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			15	10			
■ 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 2021 Reporting wave

⁵ ERA/OPI/2020-14 Opinion of the European Union Agency for Railways to the European Commission regarding Change of company code to 4-letter-alphanumeric format

ANNEX 1: Responses contact list 2020

Nr.	Member State	Type of Company	Company name	Reporting Entity
1	AT	IM	ÖBB Infrastruktur AG	
2	AT	IM, RU-F, RU-P, WK	Graz-Köflacher Bahn und Busbetrieb GmbH	
3	AT	RU-F	Cargo Service GmbH	
4	AT	RU-F	ecco-rail GmbH	
5	AT	RU-F	LTE Austria GmbH	
6	AT	RU-F	Raaberbahn Cargo	
7	AT	RU-F	RTS Rail Transport Service GmbH	
8	AT	RU-F, RU-P, WK	Rail Cargo Austria	
9	AT	WK	Felbermayr Transport- und Hebetchnik GmbH & Co KG	RSRD ²
10	BE	IM	INFRABEL	
11	BE	RU-F	DB Cargo Belgium	
12	BE	RU-F, RU-P, WK	Lineas N.V.	
13	BE	RU-P	THI Factory SA	
14	BE	WK	Lineas SA/NV	RSRD ²
15	BE	WK	Mosolf Automotive Railway GmbH	RSRD ²
16	BG	IM	NRIC (National Railway Infrastructure Company)	
17	BG	RU-F	"Българска железопътна компания" ЕАД	
18	BG	RU-F	"ТБД-Товарни превози" ЕАД	
19	BG	RU-F	MMIRL	
20	BG	RU-F	PORTRAIL LTD	
21	BG	RU-F	Rail Cargo Carrier - Bulgaria Ltd	
22	BG	RU-F	TSV EAD	
23	BG	RU-F	БУЛМАРКЕТ РЕЙЛ КАРГО ЕООД	
24	BG	RU-F	ЕКСПРЕС СЕРВИЗ ООД	
25	BG	RU-F, RU-P, WK	DB Cargo Bulgaria EOOD	
26	CH	IM	BLS-Netz AG	
27	CH	IM	SBB AG Infrastruktur	
28	CH	IM	Schweizerische Südostbahn AG	
29	CH	RU-F	BLS Cargo AG	
30	CH	RU-F	SBB Cargo International AG	SBB Cargo International

Nr.	Member State	Type of Company	Company name	Reporting Entity
31	CH	WK	Diversified Investments SA	RSRD ²
32	CH	WK	HASTAG (Zürich) AG	RSRD ²
33	CH	WK	MITRAG AG	RSRD ²
34	CH	WK	Osterwalder St. Gallen AG	RSRD ²
35	CH	WK	Osterwalder Transport AG	RSRD ²
36	CH	WK	SBB Cargo AG	RSRD ²
37	CH	WK	TRANSWAGGON AG	RSRD ²
38	CH	WK	VTG Aktiengesellschaft	RSRD ²
39	CZ	IM	Správa železnic, státní organizace	
40	CZ	IM, RU-F	TSS Grade a.s.	
41	CZ	IM, RU-F, RU-P	KŽC Doprava, s.r.o.	
42	CZ	RU-F	Cargo Motion s.r.o.	
43	CZ	RU-F	EUROVIA CS, a.s.	
44	CZ	RU-F	HSL-Logistik s.r.o.	HSL Logistik Group
45	CZ	RU-F	LTE Logistik a Transport Slovakia s.r.o.	LTE Group
46	CZ	RU-F	Rabbit Rail s.r.o.	
47	CZ	RU-F	Sokolovská uhelná, právní nástupce, a.s.	
48	CZ	RU-F	TCHAS ŽD	
49	CZ	RU-F	Vítkovická doprava a.s	
50	CZ	RU-F, RU-P	CityRail, a.s.	
51	CZ	RU-F, RU-P, WK	ČD Cargo, a.s.	
52	CZ	RU-F, RU-P, WK	České dráhy, a.s.	
53	CZ	RU-F, RU-P, WK	DBV-ITL, s.r.o.	
54	CZ	RU-F, RU-P, WK	LOKO TRANS s.r.o	
55	CZ	RU-F, RU-P, WK	PKP CARGO INTERNATONAL a.s.	PKP Cargo International
56	CZ	RU-P	Die Länderbahn CZ s.r.o.	
57	CZ	RU-P	Leo Express	
58	CZ	WK	Česká republika - Správa státních hmotných rezerv	
59	CZ	WK	Českomoravský cement, a.s.	
60	CZ	WK	DIAMO, státní podnik	RSRD ²
61	CZ	WK	EP Cargo Invest	
62	CZ	WK	Ermewa GmbH	RSRD ²

Nr.	Member State	Type of Company	Company name	Reporting Entity
63	CZ	WK	Ermewa SA	RSRD ²
64	CZ	WK	Felbermayr Transport- und Hebetchnik spol.s.r.o.	RSRD ²
65	CZ	WK	KOS Trading, akciová společnost	RSRD ²
66	CZ	WK	Lafarge Cement, a.s.	RSRD ²
67	CZ	WK	Liberty Ostrava a.s.	RSRD ²
68	CZ	WK	Lovochemie, a.s.	RSRD ²
69	CZ	WK	NH-TRANS, SE	
70	CZ	WK	Railco a.s.	
71	CZ	WK	RYKO PLUS spol. s r.o.	RSRD ²
72	CZ	WK	ŠKODA AUTO a.s.	RSRD ²
73	CZ	WK	Spolek pro chemickou a hutní výrobu, akciová společnost	
74	CZ	WK	V.K.S. Vagon Komercc Speed, spol. s r.o.	RSRD ²
75	CZ	WK	Vápenka Čertovy schody a.s.	
76	CZ	WK	VÁPENKA VITOŠOV s.r.o.	
77	DE	IM	DB Netz AG	
78	DE	IM	Häfen und Güterverkehr Köln AG	
79	DE	RU-F	boxXpress.de GmbH	
80	DE	RU-F	DAHER PROJECTS GmbH	
81	DE	RU-F	SBB Cargo Deutschland GmbH	SBB Cargo International
82	DE	RU-F, RU-P, WK	DB Cargo AG	
83	DE	RU-P	DB Regio AG	
84	DE	RU-P	Die Länderbahn GmbH DLB	
85	DE	WK	AlzChem Trostberg GmbH	RSRD ²
86	DE	WK	Aretz GmbH und Co. KG	RSRD ²
87	DE	WK	BASF SE	RSRD ²
88	DE	WK	DAHER PROJECTS GmbH	RSRD ²
89	DE	WK	ERR European Rail Rent GmbH	RSRD ²
90	DE	WK	Euro Waggon GmbH	RSRD ²
91	DE	WK	GATX Rail Austria GmbH	RSRD ²
92	DE	WK	GATX Rail Germany GmbH	RSRD ²
93	DE	WK	ITL Eisenbahngesellschaft mbH	RSRD ²

Nr.	Member State	Type of Company	Company name	Reporting Entity
94	DE	WK	Kombiverkehr Deutsche Gesellschaft für kombinierten Güterverkehr mbH & Co. KG	RSRD ²
95	DE	WK	Logistik Service GmbH	RSRD ²
96	DE	WK	MFD Rail GmbH	RSRD ²
97	DE	WK	Mosolf Automotive Railway GmbH	
98	DE	WK	On Rail - Gesellschaft für Eisenbahnausrüstung und Zubehör mbH	RSRD ²
199	DE	WK	On Rail Gesellschaft für Vermietung und Verwaltung von Eisenbahnwaggons mbH	RSRD ²
100	DE	WK	Petrochem Mineralöl-Handels-GmbH	RSRD ²
101	DE	WK	Railco a.s.	RSRD ²
102	DE	WK	Schröder & Klaus GmbH & Co. KG	RSRD ²
103	DE	WK	TRANSWAGGON GmbH	RSRD ²
104	DE	WK	Tyczka Gase GmbH	RSRD ²
105	DE	WK	voestalpine Track Solutions Königsborn GmbH	RSRD ²
106	DE	WK	Vossloh Logistics GmbH	RSRD ²
107	DE	WK	VTG Schweiz GmbH	RSRD ²
108	DE	WK	WASCOSA AG Luzern	RSRD ²
109	DE	WK	Zürcher Bau GmbH	RSRD ²
110	DK	IM	Banedanmark	
111	DK	IM	Øresundsbro Konsortiet	
112	EE	IM	Edelaraudtee AS	
113	EE	IM	Eesti Raudtee AS	
114	EE	RU-F, RU-P	AS Gorail	
115	ES	IM	ADIF	
116	ES	RU-F	Captrain España	
117	ES	RU-F	Renfe Mercancías	
118	ES	RU-F	TRACCION RAIL, S.A.U.	
119	ES	RU-F	Transfesa	
120	ES	RU-F	TRANSITIA RAIL, S.A.	
121	ES	RU-F, RU-P	FERROVIAL RAILWAY, S. A.	
122	ES	WK	Ferrocarrils de la Generalitat de Catalunya	RSRD ²
123	ES	WK	Sociedad de estudios y explotacion de material auxiliar de transportes S.A.	RSRD ²

Nr.	Member State	Type of Company	Company name	Reporting Entity
124	ES	WK	VTG Rail Europe GmbH Sucursal en España	RSRD ²
125	FI	RU-F, RU-P	VR-Group Ltd	
126	FR	IM	SNCF Réseau	
127	FR	RU-F	Europorte	
128	FR	RU-F	FRET SNCF SAS	
129	FR	RU-P	SNCF Voyageurs	
130	FR	WK	ATIR-RAIL	RSRD ²
131	FR	WK	EVS S.A.	RSRD ²
132	FR	WK	Lotras srl	RSRD ²
133	FR	WK	Millet SAS	RSRD ²
134	FR	WK	SOCOMAC	RSRD ²
135	FR	WK	STVA S.A.	RSRD ²
136	FR	WK	Transportes Ferroviarios Especiales S.A.	RSRD ²
137	FR	WK	VTG France SAS	RSRD ²
138	FR	WK	VTG Rail Europe GmbH	RSRD ²
139	GR	RU-F	PEARL	
140	HR	IM	HŽ Infrastruktura	
141	HU	AB	VPE - Vasúti Pályapacitás-elosztó Kft.	
142	HU	IM	GYSEV Zrt.	
143	HU	IM	MÁV Zrt. / Hungarian State Railways Co.	
144	HU	RU-F	LTE Hungária Kft.	
145	HU	RU-F	MÁV FKG Felépítménykarbantartó és Gépjavító Korlátolt Felelősségű Társaság	
146	HU	RU-F	MMV Magyar Magánvasút Zrt.	
147	HU	RU-F, RU-P, WK	Rail Cargo Hungaria Zrt.	
148	HU	RU-P	MÁV-START Zrt	
149	HU	WK	Felbermayr Immo Sp.z.o.o.	RSRD ²
150	IT	IM	Ente Autonomo Volturno	
151	IT	IM	Ferrovie del Gargano s.r.l., Gestore Infrastruttura	
152	IT	IM	Ferrovie dello Stato Italiane - Rete Ferroviaria Italiana S.p.A.	
153	IT	IM	Ferrovie Emilia Romagna s.r.l.	
154	IT	IM	Ferrovie Emilia Romagna S.r.l.	

Nr.	Member State	Type of Company	Company name	Reporting Entity
155	IT	IM	Infrastrutture Venete S.r.l.	
156	IT	IM	La Ferroviaria Italiana S.p.A.	
157	IT	IM, RU-F, RU-P, WK	FERROVIE UDINE CIVIDALE	
158	IT	RU-F	Captrain Italia	
159	IT	RU-F	DB Cargo Italia S.r.l.	
160	IT	RU-F	EVM Rail S.r.l.	
161	IT	RU-F	FuoriMuro Servizi Portuali e Ferroviari srl	
162	IT	RU-F	GTS Rail	
163	IT	RU-F	Hupac SpA	
164	IT	RU-F	Inrail Spa	
165	IT	RU-F	TX Logistik Transalpine GmbH - Sede secondaria italiana	
166	IT	RU-P	Busitalia Sita Nord S.r.l.	
167	IT	RU-P	Italo - Nuovo Trasporto Viaggiatori S.p.A.	
168	IT	RU-P	SAD - Trasporto Locale SpA	
169	IT	RU-P	Sistemi Territoriali SpA	
170	IT	RU-P	Trasporto Ferroviario Toscano S.p.A.	
171	IT	RU-P	Trenitalia SpA	
172	IT	RU-P	Trenord srl	
173	IT	RU-P	TRENTINO TRASPORTI SPA	
174	IT	WK	Giovanni Ambrosetti Auto Logistica S.p.A	RSRD ²
175	IT	WK	Mercitalia Intermodal SpA	
176	IT	WK	Società Italiana Trasporti Ferroviari Autoveicoli S.p.A.	RSRD ²
177	LT	IM, RU-F, RU-P, WK	JSC "Lithuanian Railways"	
178	LU	AB	Administration des chemins de fer (ACF)	
179	LU	IM	CFL (IM)	
180	LU	RU-F, RU-P, WK	CFL cargo	
181	LU	RU-P	Société Nationale des Chemins de Fer Luxembourgeois (SNCFL)	
182	LV	IM	VAS Latvijas dzelzceļš - LDz	
183	LV	RU-F, RU-P, WK	SIA LDZ Cargo (LDZ Cargo)	
184	NL	IM	ProRail	
185	NL	RU-F	Shunter Tractie BV	
186	NL	RU-F, RU-P	Railexperts BV	

Nr.	Member State	Type of Company	Company name	Reporting Entity
187	NL	RU-F, RU-P, WK	Strukton Rail Equipment BV	
188	NL	RU-P	Connexion Openbaar Vervoer N.V.	
189	NL	WK	Sim Boerema BV	
190	NO	RU-F	CargoNet AS	
191	PL	IM	PKP POLSKIE LINIE KOLEJOWE S.A.	
192	PL	IM, RU-F	PCC INTERMODAL	
193	PL	IM, RU-F, WK	MAJKOLTRANS SP. Z O.O.	
194	PL	IM, RU-P	PKP Szybka Kolej Miejska w Trójmieście Sp. z o. o.	
195	PL	RU-F	Captrain Polska Sp. z o.o.	
196	PL	RU-F	Cargo Przewozy Towarowe Transport	
197	PL	RU-F	CD CARGO POLAND Sp z o. o.	
198	PL	RU-F	CIECH Cargo Sp.z o. o.	
199	PL	RU-F	CTL Logistics sp. z o.o.	
200	PL	RU-F	Freightliner PL	
201	PL	RU-F	Inter Cargo Sp. z o.o	
202	PL	RU-F	LOTOS Kolej Sp. z o.o.	
203	PL	RU-F	LTE Polska	
204	PL	RU-F	PROTOR Spółka z ograniczoną odpowiedzialnością Spółka komandytowa	
205	PL	RU-F	Przedsiębiorstwo Robót Torowych "TORREMS" sp. z o.o.	
206	PL	RU-F	Rail Cargo Carrier - Poland Sp. z o.o.	
207	PL	RU-F	Trainspeed Sp. z o.o.	
208	PL	RU-F	WISKOL Spółka z ograniczoną odpowiedzialnością, spółka komandytowa	
209	PL	RU-F, RU-P	NKN Usługi Kolejowe Sp. z o.o.	
210	PL	RU-F, RU-P, WK	CEMET S.A.	
211	PL	RU-F, RU-P, WK	Grupa Azoty "KOLTAR" Sp. z o.o.	
212	PL	RU-F, RU-P, WK	JSW Logistics Spółka z ograniczoną odpowiedzialnością	
213	PL	RU-F, RU-P, WK	OLREN Koltrans S.A.	
214	PL	RU-F, RU-P, WK	PKP Energetyka S.A.	
215	PL	RU-F, RU-P, WK	Pomorskie Przedsiębiorstwo Mechaniczno - Torowe sp. z o.o.	
216	PL	RU-F, RU-P, WK	Przedsiębiorstwo Budownictwa Specjalistycznego „Transkol” Sp. z o.o.	

Nr.	Member State	Type of Company	Company name	Reporting Entity
217	PL	RU-F, RU-P, WK	Transchem Sp. z o.o.	
218	PL	RU-F, RU-P, WK	Zakład Inżynierii Kolejowej Sp. z o.o.	
219	PL	RU-F, RU-P, WK	ZUE S.A.	
220	PL	RU-P	"Koleje Mazowieckie - KM" sp. z o.o.	
221	PL	RU-P	Koleje Śląskie	
222	PL	RU-P	Koleje Wielkopolskie Sp. z o.o.	
223	PL	RU-P	Łódzka Kolej Aglomeracyjna Sp. z o.o.	
224	PL	WK	GATX Rail Poland Sp. z o.o.	RSRD ²
225	PL	WK	Tankwagon Sp. z o. o.	RSRD ²
226	PT	IM	Infraestruturas de Portugal	
227	PT	RU-F	Takargo	
228	PT	RU-P	CP - Comboios de Portugal EPE	
229	PT	RU-P	FERTAGUS,S.A.	
230	PT	WK	ADP Fertilizantes, S.A.	RSRD ²
231	PT	WK	CIMPOR - Serviços de Apoio à Gestão de Empresas, S.A.	RSRD ²
232	PT	WK	Takargo, Transporte de Mercadorias, S.A.	RSRD ²
233	RO	IM	CFR	
234	RO	RU-F	DB Cargo Romania	
235	RO	WK	TOUAX Rail Ltd.	RSRD ²
236	SE	IM	Inlandsbanan AB	
237	SE	IM	Trafikverket	
238	SE	IM, RU-F	Svensk Tågkraft AB. Nässjö Järnvägsfastigheter AB	
239	SE	IM, RU-F, RU-P, WK	Tågakeriet i Bergslagen AB	
240	SE	RU-F	CFL cargo Sverige AB	
241	SE	RU-F	Hector Rail AB	
242	SE	RU-F	TX Logistik AB	
243	SE	RU-F, RU-P, WK	Green Cargo	
244	SE	RU-P	Vy Tåg AB	
245	SE	WK	Stena Recycling AB	RSRD ²
246	SE	WK	TRANSWAGGON AB	RSRD ²
247	SI	IM	SŽ Infrastruktura, d.o.o.	
248	SI	RU-F	SŽ-Tovorni promet, d. o. o, Podružnica Rijeka	

Nr.	Member State	Type of Company	Company name	Reporting Entity
249	SI	RU-F	Ten Rail d.o.o.	
250	SI	RU-F, RU-P, WK	SŽ Tovorni promet d.o.o.	
251	SI	WK	Adria kombi d.o.o.	RSRD ²
252	SK	RU-F	BULK TRANSSHIPMENT SLOVAKIA, a.s.	
253	SK	RU-F	Hornonitrianske bane zamestnanecká a.s.	
254	SK	RU-F	HSL-Logistik s.r.o.	HSL Logistik Group
255	SK	RU-F	LTE Logistik a Transport Slovakia s.r.o.	LTE Group
256	SK	RU-F	ZSSK CARGO	
257	SK	RU-F, RU-P, WK	PKP CARGO INTERNATONAL a.s.	PKP Cargo International
258	SK	WK	BUDAMAR LOGISTICS, a.s.	
259	SK	WK	Cargo Wagon, a.s.	RSRD ²
260	SK	WK	Duslo, a.s.	RSRD ²
261	SK	WK	Felbermayr Slovakia s.r.o.	RSRD ²
262	SK	WK	NACCO S.A.S.	RSRD ²
263	TR	WK	TRANSWAGGON Vagon Isletmeleri Ltd. Sti.	RSRD ²
264	UK	IM	Network Rail Infrastructure Limited	
265	UK	RU-F	EUROTRANS Sp. z o.o. w Małaszewiczach Dużych	
266	UK	RU-F, RU-P, WK	DB Cargo UK	

ANNEX 2: Responses contact list 2019

Nr.	Member State	Type of Company	Company name	Reporting Entity
1	AT	RU-F	Wiener Lokalbahnen Cargo GmbH	
2	BG	RU-F	„TBD-Tovarni prevozi“ JSC	
3	BG	RU-F	BDZ Cargo	
4	BG	RU-F	EXPRESS SERVICE OOD	
5	BG	RU-P	BDZ-Passengers	
6	CH	RU-F	SBB CARGO AG	
7	CH	RU-F	WRS Widmer Rail Services AG	WRS Deutschland
8	CH	RU-P	SBB AG, Division Personenverkehr	
9	CH	WK	SBB CARGO AG	
10	CZ	IM	UNIPETROL Doprava s.r.o.	Unipetrol Group
11	CZ	RU-F	GJW Praha spol. s r.o.	
12	CZ	RU-F	Ostravská dopravní společnost - Cargo,a s.	
13	CZ	RU-F	SLEZSKOMORAVSKÁ DRÁHA a.s.	
14	CZ	RU-F	UNIPETROL Doprava s.r.o.	Unipetrol Group
15	CZ	WK	ArcelorMittal Ostrava, a.s.	
16	CZ	WK	Coal Services a.s.	
17	CZ	WK	KOS Trading a. s.	
18	CZ	WK	RYKO PLUS spol. s r.o.	
19	CZ	WK	Státní podnik DIAMO	
20	DE	IM	SWS Seehafen Stralsund GmbH	
21	DE	RU-F	WRS Deutschland	WRS Deutschland
22	EE	AB	Operal AS	
23	EE	IM	Estonian Railways	
24	EE	WK	Operal AS	
25	ES	RU-F	ACCIONA RAIL SERVICES S.A	
26	ES	RU-F	CONTINENTAL RAIL, S.A.U.	
27	ES	RU-F	Logitren Ferroviaria	
28	ES	RU-P	CONTINENTAL RAIL, S.A.U.	
29	FR	RU-F	VFLI	

Nr.	Member State	Type of Company	Company name	Reporting Entity
30	FR	WK	SNCF MOBILITES MATERIEL	
31	HU	WK	Záhony-Port Zrt	
32	HZ	RU-F	Transagent Rail	
33	IT	IM	FERROVIENORD	
34	IT	RU-F	Adriafer s.r.l.	
35	IT	RU-F	Dinazzano Po SpA	
36	IT	RU-F	Ferrovie del Gargano	
37	IT	RU-F	Mercitalia Rail S.r.L.	
38	IT	RU-F	MERCITALIA SHUNTING e TERMINAL	
39	IT	RU-F	Rail Traction Company	
40	IT	RU-F	Sistemi Territoriali SpA	
41	IT	RU-P	Arriva Italia Rail s.r.l.	
42	IT	RU-P	Ente Autonomo Volturmo	
43	IT	RU-P	FERROVIE UDINE - CIVIDALE	
44	IT	RU-P	MERCITALIA SHUNTING e TERMINAL	
45	IT	RU-P	Trasporto Passeggeri Emilia Romagna SpA	
46	IT	WK	Ambrogio Trasporti	
47	IT	WK	Mercitalia Rail S.r.L.	
48	IT	WK	SITFA SpA	
49	NL	RU-F	SPITZKE Spoorbouw BV	
50	NL	RU-F	VolkerRail	
51	PL	IM	PRZEDSIĘBIORSTWO BUDOWNICTWA SPECJALISTYCZNEGO	
52	PL	RU-F	Inter Cargo	
53	PL	RU-F	Kolej Bałtycka S.A.	
54	PL	RU-P	PKP Szybka Kolej Miejska w Trójmieście Sp. z o. o.	
55	PL	WK	CIECH Cargo Sp.z o.o.	
56	PT	RU-F	Medway - Operador Ferroviário e Logístico de Mercadorias, SA	
57	SE	IM	Øresundsbro Konsortiet	
58	SK	IM	UNIPETROL Doprava s.r.o.	Unipetrol Group
59	SK	RU-F	UNIPETROL Doprava s.r.o.	Unipetrol Group