Report

2022 TAF TSI IMPLEMENTATION STATUS REPORT OF THE EUROPEAN UNION AGENCY FOR RAILWAYS

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Document History

Version	*Date*	*Comments*
0.1	12/05/2022	1st draft for the TAF TSI Implementation Cooperation Group (ICG) comments
1.0	15/05/2023	Major release
2.0	05/06/2023	Inclusion of ICG members' comments and splitting of the report into two separate

		documents, namely status report (Degree of implementation) and KPI report.

Contents

Abbreviations

Abbreviation	Definition
CEF	Connecting Europe Facility
CI	Common Interface
CND	Consignment Note Data
DI	Degree of Implementation
EC	European Commission
ERA	European Union Agency for Railways (also referred to as Agency)
ERFA	European Rail Freight Association
ETA	Estimated Time of Arrival
GCU	General Contract for Use of Wagons
IM	Infrastructure Manager
INEA	Innovation and Networks Executive Agency
JSG	Joint Sector Group
KPI	Key Performance Indicator
NCP	National Contact Point
NAE	National Allocation Entity
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
RU-P	Passenger Railway Undertaking
TAF	Telematics Applications for Freight

Abbreviation	Definition
TCM	Train Composition Message
NI	New Identifier
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
UIP	International Union of Wagon Keepers
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 9th March 2022	Minutes	9.03.2022

Reference legislation

Ref. N°	Document Reference	Title	Last Issue
[1]	Left blank intentionally		

Ref. N°	Document Reference	Title	Last Issue
[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) 2021/1153 of the European Parliament and of the Council of 7 July 2021 establishing the Connecting Europe Facility and repealing Regulations (EU) No 1316/2013 and (EU) No 283/2014	14.07.2021

Table of Figures

1.   EXECUTIVE SUMMARY (Degree of Implementation reporting)

This TAF TSI implementation report 2022 summarizes the results received via the European rail Joint Sector Group (JSG) Reporting Tool in November/December 2022 and thus shows the status of implementation by the end of 2022.

For this reporting session a total of 786 invitations were sent out and 325 responses were received from 26 countries across Europe, resulting to an overall response rate of 41,3 %.

Together with responses taken from the 2021 reporting session, a total of 475 company responses were taken into consideration, which represents a rise of above 1 % and the highest data set ever. Additional responses came mainly from RUs-F and WKs and especially Poland, Germany, Czech Republic, Slovakia and Italy managed a very high participation.

All TAF TSI functions are included in this 2022 report.

72 questions in 17 question groups is a big amount of questions. But not all companies must answer all questions and could do it now in their native language, as the questionnaire was translated into 19 European languages with the help and support of the National Contact Points and the European rail Joint Sector Group.

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

- Most IMs reported to have completed the initial upload of Primary Location Codes on their network. Update, maintenance and use of codes are not part of this report.

- 368 companies in the reporting are identified by Company Code, which means a small rise for all types of companies compared to the previous reporting session.

- The target implementation date for processing the alphanumeric CC is 2026. Therefor the progress of the projects within all types of companies is still at a low level.

- For the Common Interface a positive trend is visible for all types of companies.

- The number of all types of companies having introduced New Identifiers has increased compared to previous years - still on a low level of full implementation.

- The number of IMs and RUs-F having introduced Path Request messages has increased. 78 companies are in the process of implementing this function.

- Like the Path Request function, the implementation of the Path Details function remains on a positive trend.

- 2/3 of the companies reported not implementing Train Ready messages based on TAF/TAP standard but using domestic solutions. 51 RUs-F reported complete implementation of the function.

- The Train Running Information is widely used in operations management; however, IMs report a lower implementation as in previous reporting. In addition, 29 companies which have not yet complete implementation use the Train Information System (TIS) a common sector tool managed by RNE.

- Evolution of Train Running Interruption Message has a negative trend on IMs and RUs-F implementation, mainly declaring process or technical reasons.

- Implementation of Train Running Forecast is still on a low level with a slight positive trend for RUs-F.

- Implementation of Train Composition Message is ongoing at a good pace (+ 6 % versus 2020) especially at RUs-F.

- With 217 company feedback 59 report already full implementation of the Consignment Note Data function.

- Implementation is positively ongoing for the TAF Wagon Movement messages, and 54 companies report complete implementation.

- Shipment ETA function is reported to be finished by 50 companies or an increase from 18 % to 23 % with a higher participation in the current reporting session.

- A large number WKs fulfil the Rolling Stock Reference Database functionality via the common sector tool RSRD2. There are 116 WKs having RSRD in production by the end of 2022.

The feedback from companies about reasons for not yet started the implementation of TAF TSI has decreased from 1537 to 1336, with only very little shift between the reasons. Dedicated information sessions should be initiated as a mitigation measure. ERA will indicate NCPs those companies in their respective countries to support the raise of awareness of TAF/TAP requirements.

Overall, the 2022 report has very similar results as the 2021 report with only little changes in the different functions and only the addition of questions about the implementation of the alphanumeric Company Codes represents a major difference.

For the first time in the history of TAF TSI implementation reporting, the European rail Joint Sector Group has 2022 also delivered a Key Performance Indicator (KPI) report. This report (delivered as a separate working document report to EC) includes insights on the most implemented TAF TSI functions, namely

- Primary and Subsidiary Location Codes (PLC/SLC)

- Common Interface Implementation (CI)

- Train Running Information (TRI)

- Rolling Stock Reference Database (RSRD).

2. INTRODUCTION

This 2022 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 Strategic Statement 2 & 3 of the Agency Single Programming Document for 2023-2025. 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.

- 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:
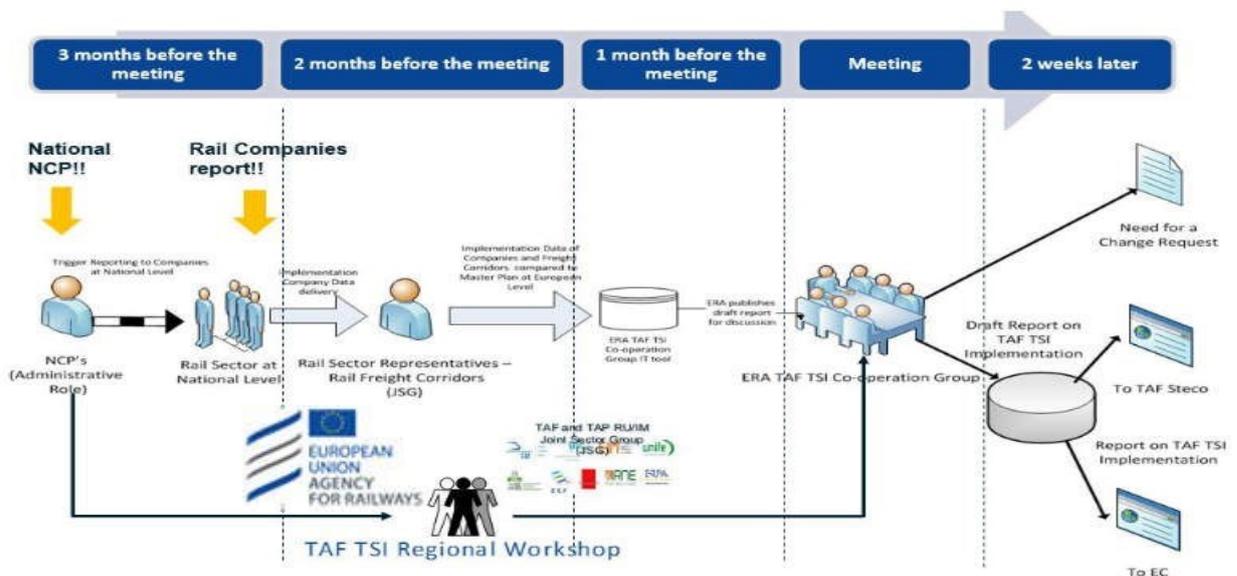
Figure 1: Agency TAF TSI Implementation Cooperation Group process.

The Agency has to inform the EC about the results of this monitoring and has to advise the EC (and the possible follow up instance of the TAF Steering Committee) 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 CINEA Executive Agency.

The CEF[1] [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.

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[1] https://ec.europa.eu/inea/en/connecting-europe-facility

This report summarised the results received via the JSG Reporting Tool[2] during the 2022 reporting session lasting from 10 November 2022 to 09 December 2022 and thus shows the status of implementation by 31 December 2022. Diagrams in the following chapters of this report show results per RU/IM function summarised in an anonymous way[3].

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

Report session	Reporting period	Number of questions[5]
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
2021 Report TAF and TAP	01.01.2021 – 31.12.2021	68
2022 Report TAF and TAP	01.01.2022 – 31.12.2022	72

Table 1: Reporting periods

The '2022 TAF/TAP TSI Implementation Report' questionnaire contains seventeen question groups, fifteen of which are about the current implementation of TAF and TAP TSI functions:

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[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 2.

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)	X	X	X	X	X
	Path Request (PR)	X	X	X		X
	Path Details (PD)	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)	X	X	X		
	Train Composition Message (TCM)	X	X			
	Consignment Note Data (CND)		X			
	Wagon Movement (WM)		X			
	Shipment ETA (ETA)		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 2022 questionnaire contains 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 19 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 23 February 2023 and as such published accordingly. It was presented to the ERA TAF TSI Implementation Cooperation Group on 8 March 2023 (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 786 thanks to the information delivered by the National Contact Points (NCPs)**. Once the data is collected, the raw data is delivered to the Agency.

The scope of the present 2022 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:

    o Feasibility Study

    o Business Case

    o 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:

    o Resource Planning

    o Project Work Planning (Working Break Down Structure) o Migration

    Planning o Outsourcing Plan o 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:

    o Procurement

    o Executing

    o Testing (User Acceptance and system Integration) o

    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.
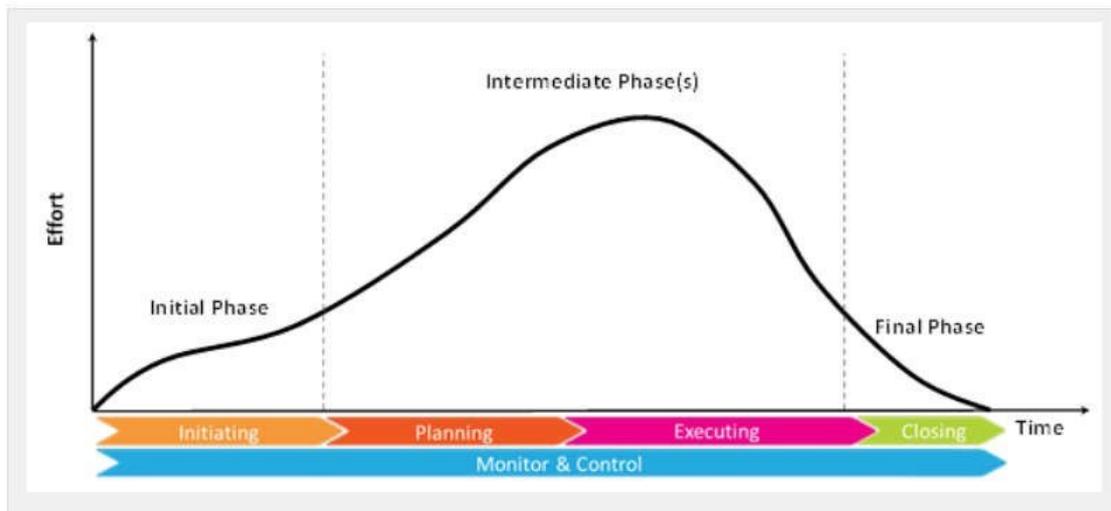
Figure 2: PM2 project lifecycle.

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%;

- 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:

  o   Project not launched: No data

  o   Initiating Phase accomplished: 0% =< DI < 25%.

  o   Planning Phase accomplished: 25% =< DI < 50%.

  o   Executing Phase accomplished: 50% =< DI < 100%.

  o   Closing & Production accomplished: DI = 100%.

4. PARTICIPATION IN THE 2022 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 to a new record high.

The 2022 report includes 245 responses provided via the JSG reporting tool and 80 WKs submitted by UIP using RSRD[2]. Feedback to the survey remained at the same level as 2021.
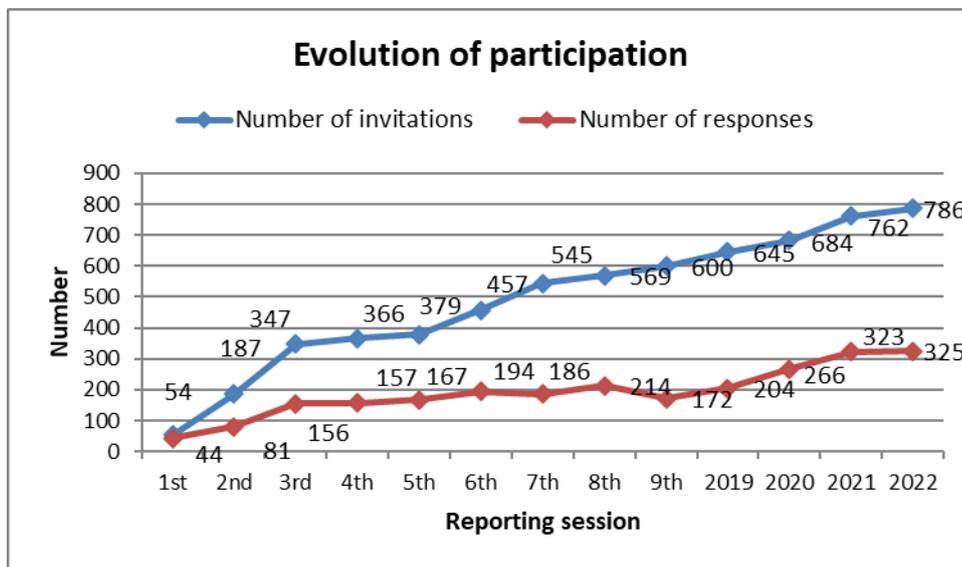
Diagram 1: Evolution of participation over time

Hence, the response rate, calculated as number of responses in relation to number of invitations, has slightly went down to 41,3 % (see diagram 2).
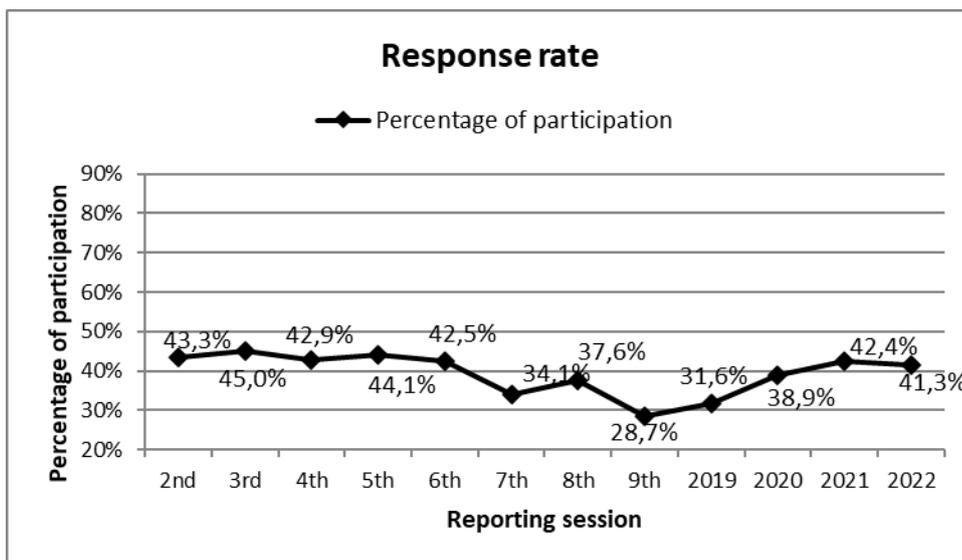
Diagram 2: Evolution of response rate over time

Diagram 3 displays the distribution of all 325 responses per country. The feedback comprises 23 EU Member States plus Serbia, Switzerland and Turkey.
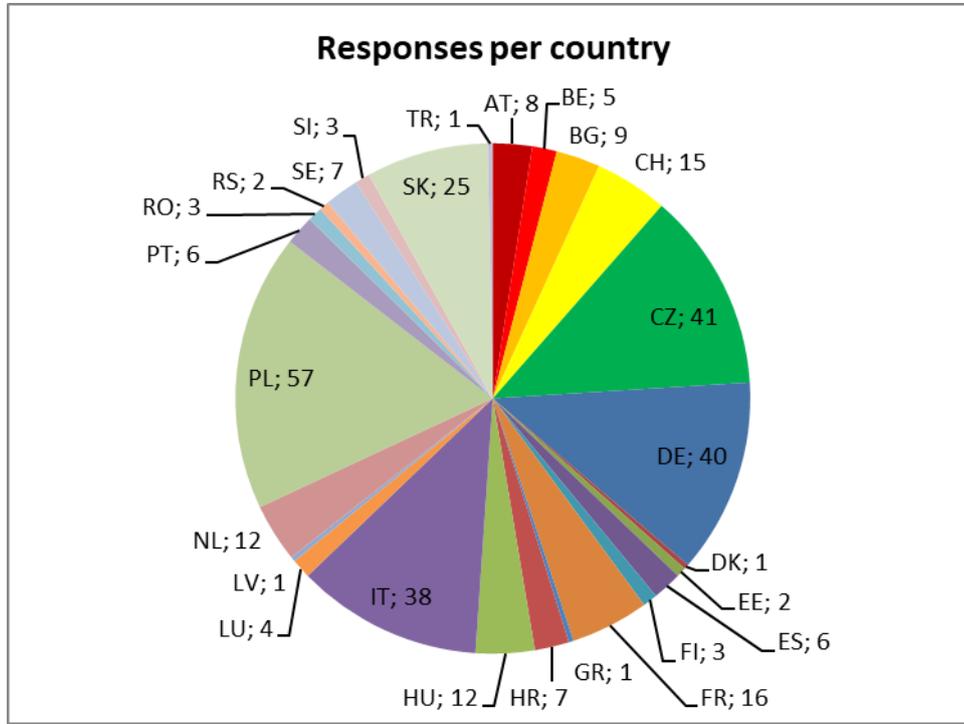
Diagram 3: Number of responses per country

Diagram 4 shows the distribution and the development of responses per country. The total number of responses in the 2022 reporting period is 325, which is 2 more than in the last session.
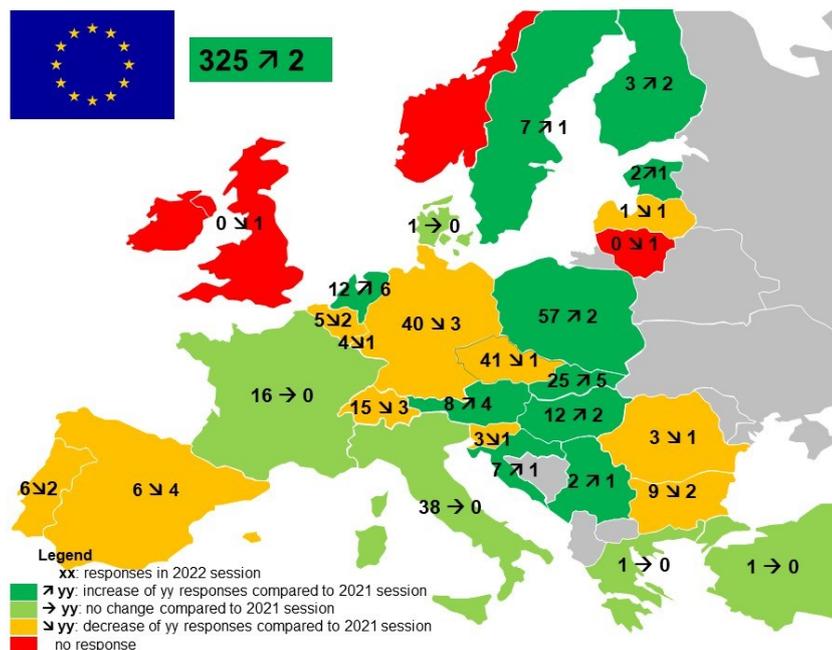
Diagram 4: Evolution of responses per country

4.2 Participation per company type

Some companies in this survey have multiple roles, such as RU and WK at the same time. Therefore, the total number of responses displayed in diagram 1 (325 companies) and listed in Annex 2 is lower than the total number of company types shown in diagram 5 hereafter (373 companies).

Compared to the previous survey, participation shows a mixed development. It has grown for IMs and RUs-F and has fallen for ABs, RUs-P and WKs.

Annex 2 'Responses contact list 2022' to this report gives a detailed overview about the companies per country having replied to the 2022 session of TAF and TAP TSI implementation monitoring. Please note, that there are entities which have reported on behalf of several companies.
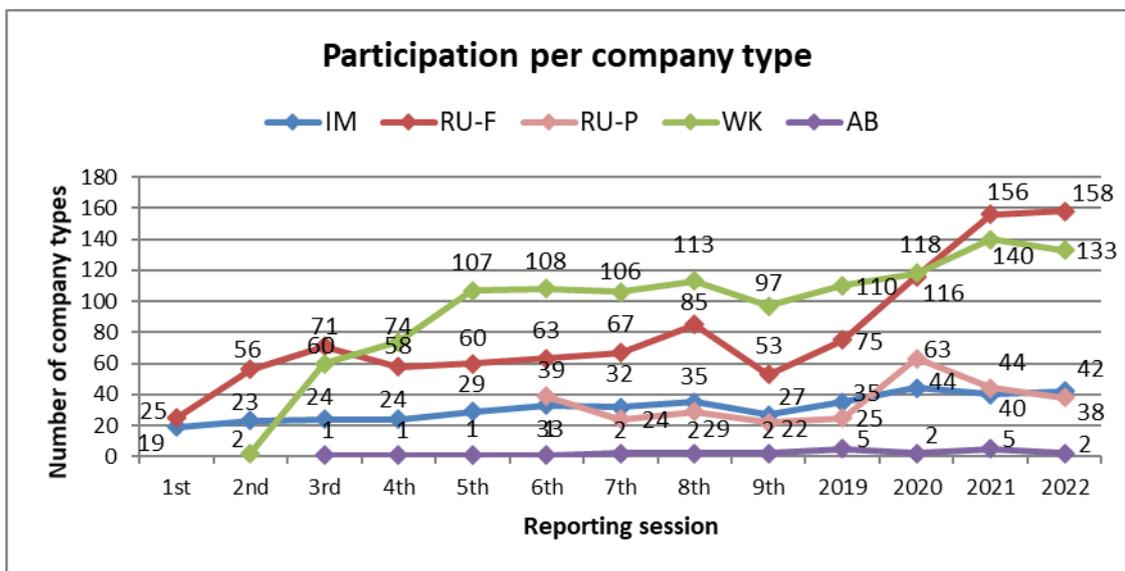
Diagram 5: Evolution of participating per company type over time

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, 104 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 (475) with their allocation to the following reporting sessions:
- Companies only reporting to the 2021 reporting session (top with light colour)
- Companies reporting to both 2021 and 2022 reporting session (middle with normal colour)
- New companies reporting to the 2022 reporting session only (bottom with dark colour)

The data included in this report thus represents the data since January 2021.

This time, the number of companies taken over from the last reporting (104) as well as the number of new companies in the present session (104) both are relatively high.

Data basis for Implementation Report
IM = 48 / RU-F = 217 / RU-P = 56 / WK = 154

	IM	RU-F	RU-P	WK
2021	6	59	18	21
2021+2022	33	93	24	117
2022	9	65	14	16
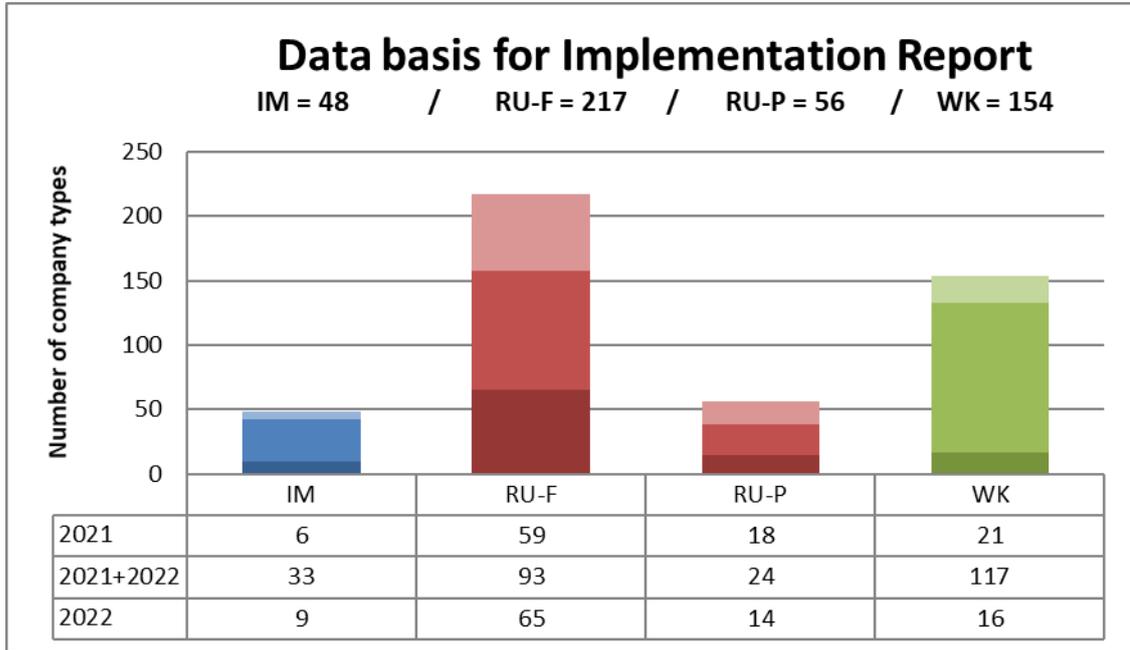
Diagram 6: Number of types of company per reporting session

Annex 3 'Responses contact list 2021' to this report lists the companies per country having replied to the 2021 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.

Evolution of data basis for evaluation
Combination of 2 reporting sessions
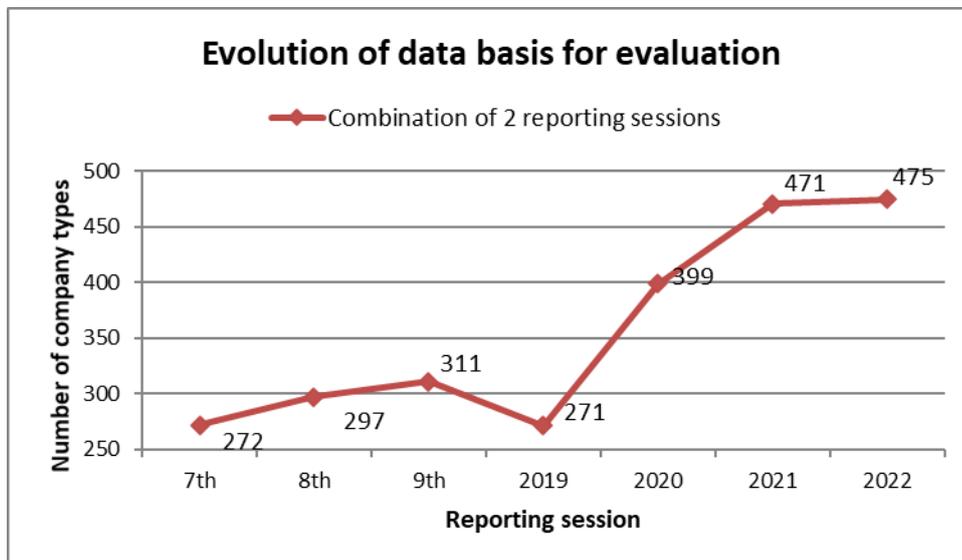
Diagram 7: Number of types of company per reporting session

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 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 30 IMs with complete implementation. 6 out of 48 IMs in the evaluation are considered with data from the previous survey.
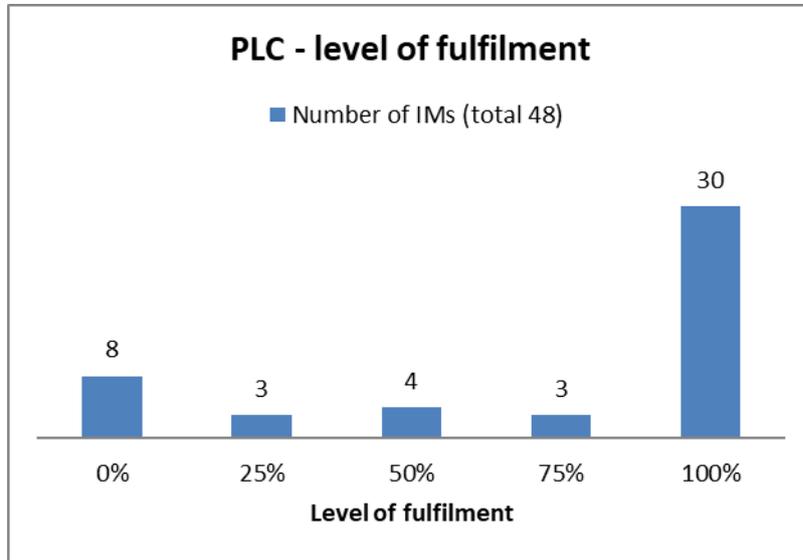
Diagram 8: Common Reference Files - Primary Location Codes (PLC)

Diagram 9 shows a similar situation as in the last reporting year.
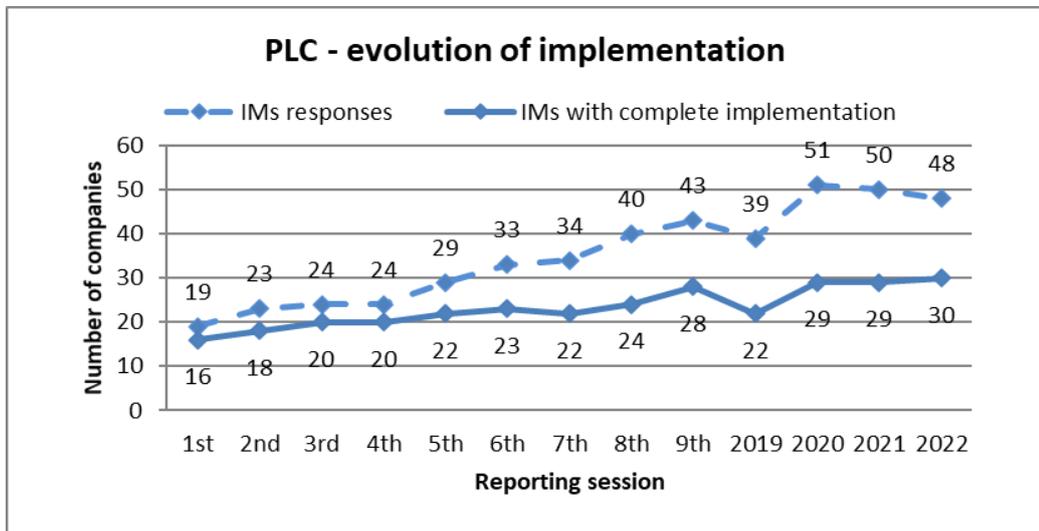
Diagram 9: Evolution of responses and implementation for PLC

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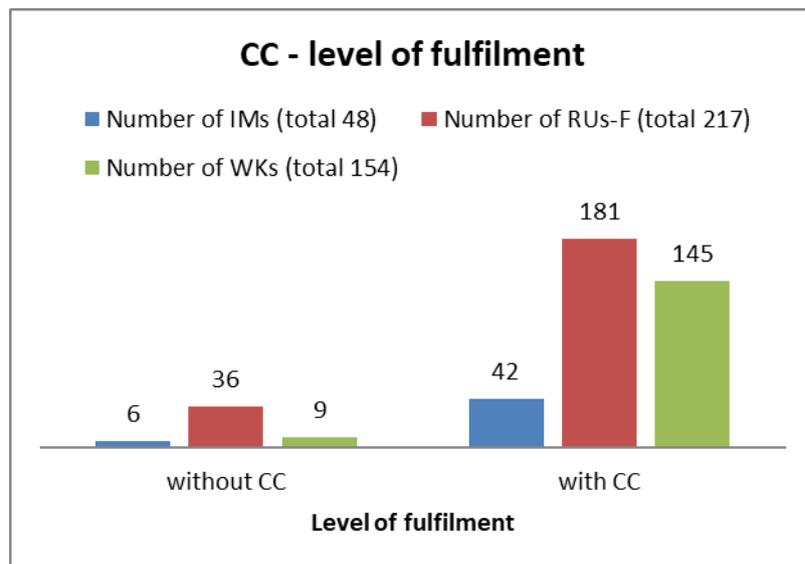
Diagram 10: Common Reference Files - Company Codes (CC)

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.
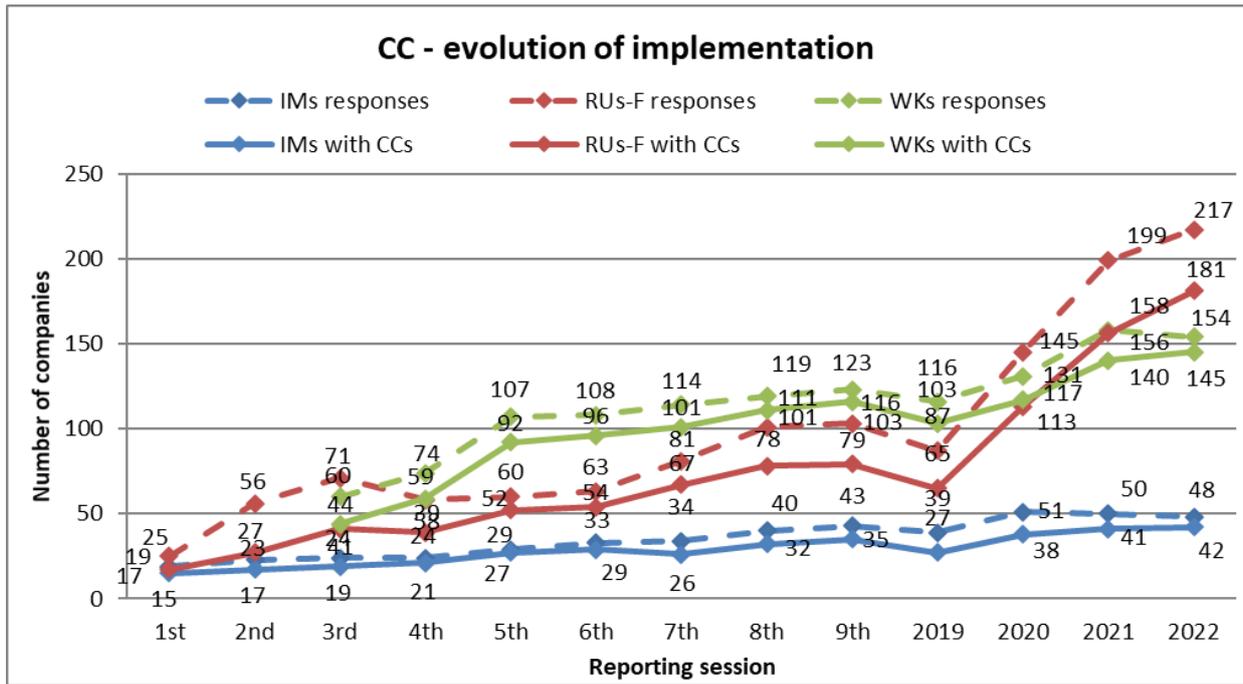
Diagram 11: Evolution of responses and implementation for Company Codes

The legal provisions of the TAF TSI require the use of alphanumeric CCs from 01.01.2026.

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

Diagram 12 below shows the current status of ability of companies processing alphanumeric CCs in their IT applications.
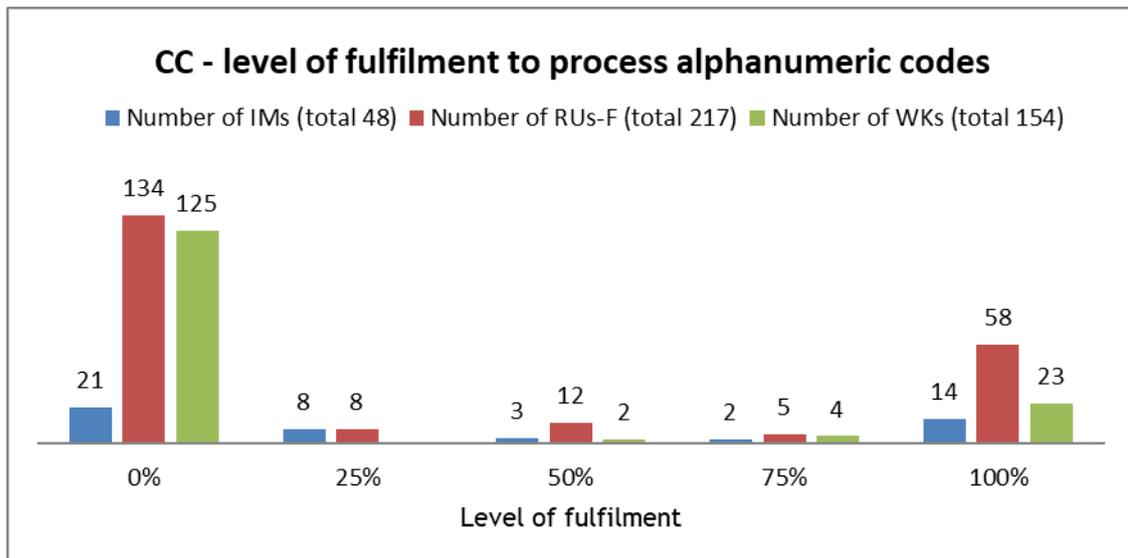
Diagram 12: Alphanumeric Company Codes (CC)

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 13 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 24 IMs, 74 RUs-F and 30 WKs. RSRD[2] has not yet implemented the CI. WKs using RSRD[2] therefore form part of the 25% level.
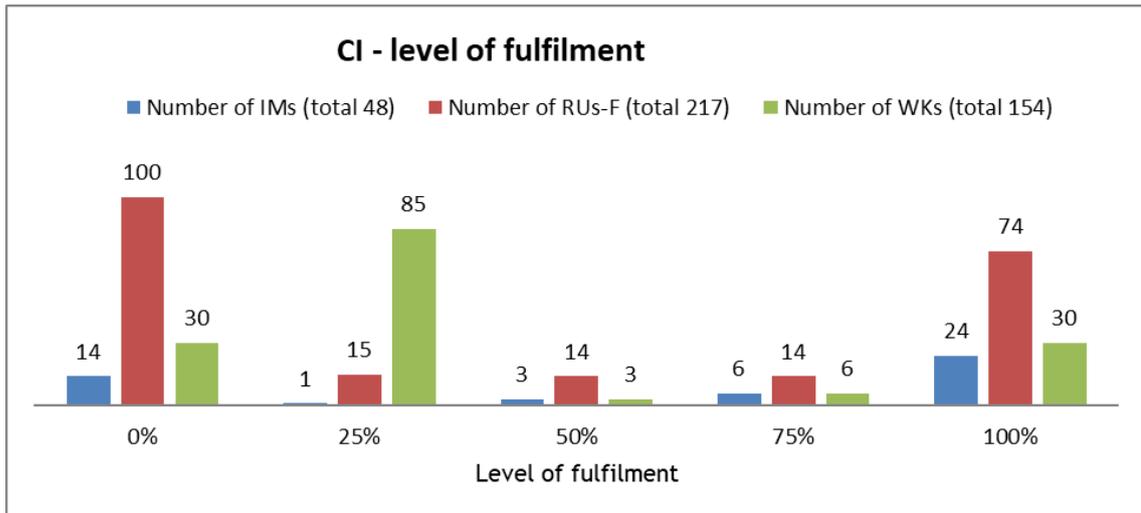
Diagram 13: Common Reference Files – Common Interface (CI)

Diagram 14 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 all types of companies up to December 2022.
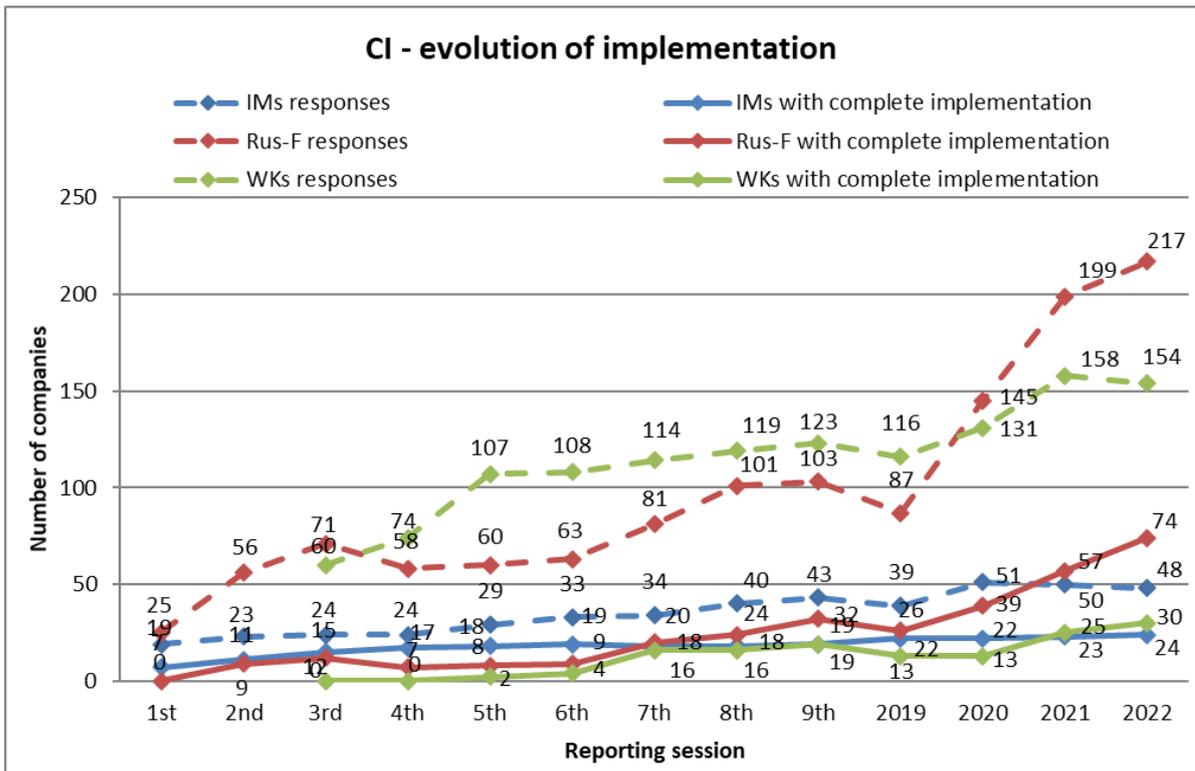
Diagram 14: Evolution of responses and implementation for Common Interface

6.4 New Identifiers (all companies)

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

The bar chart below (diagram 15) illustrates most companies not having yet implemented the NI function.
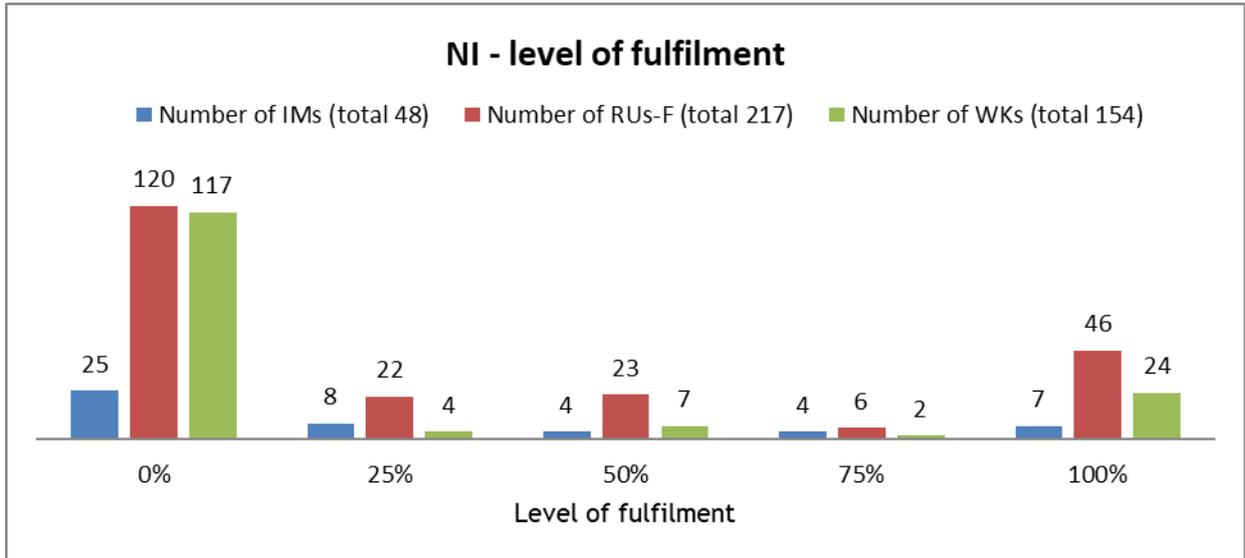
Diagram 15: New Identifiers (NI)

The number of all types of companies having introduced NIs has increased according to diagram 15.
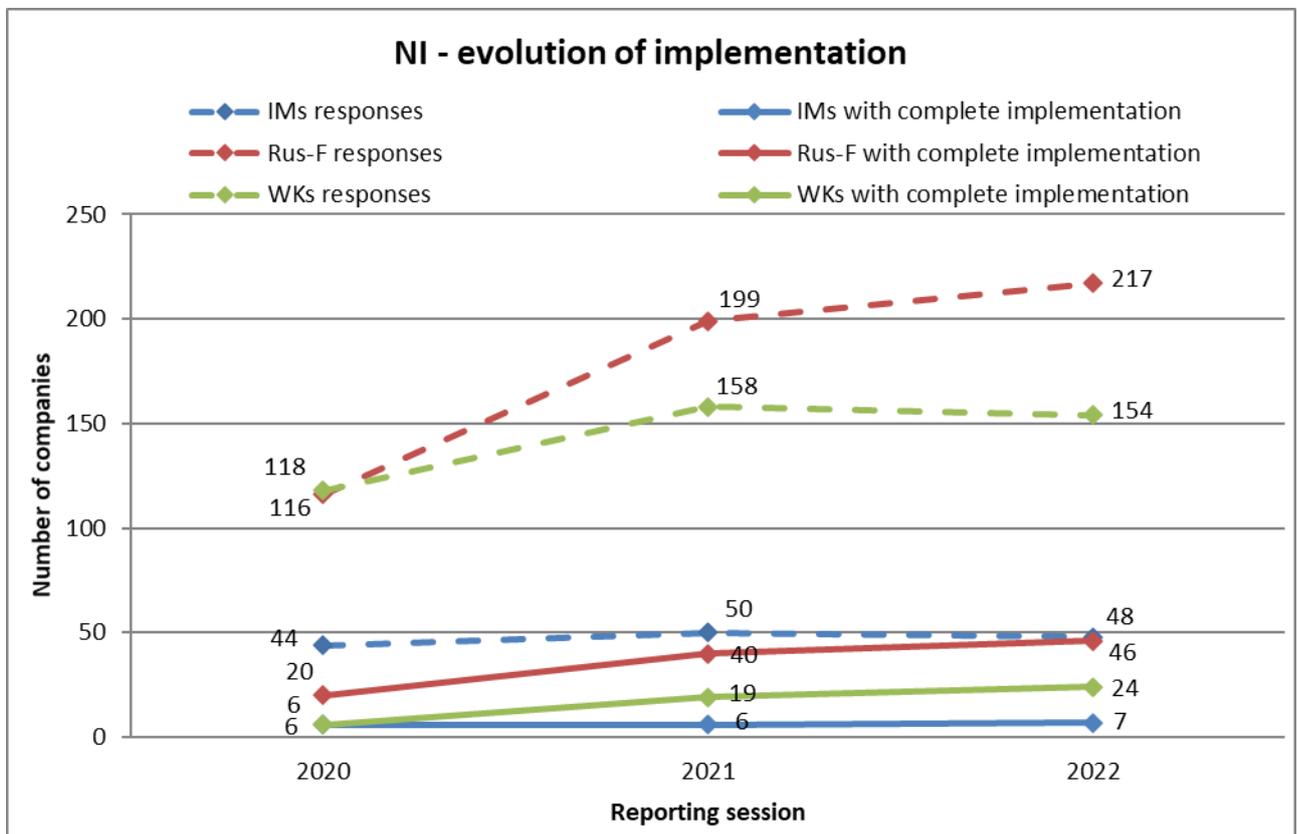
Diagram 16: Evolution of responses and implementation for New Identifiers

6.5 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.

The level of fulfilment of diagram 17 shows 12 IMs and 70 RUs-F with 100% implementation of the PR message.
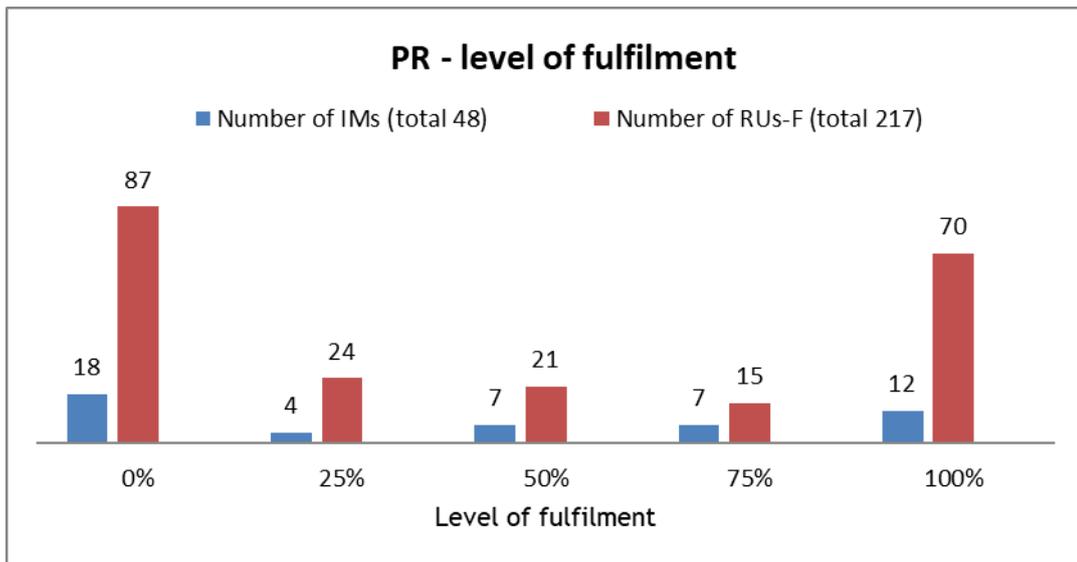
Diagram 17: Path Request (PR)

The number of IMs and RUs-F having introduced PR messages has increased according to diagram 18.
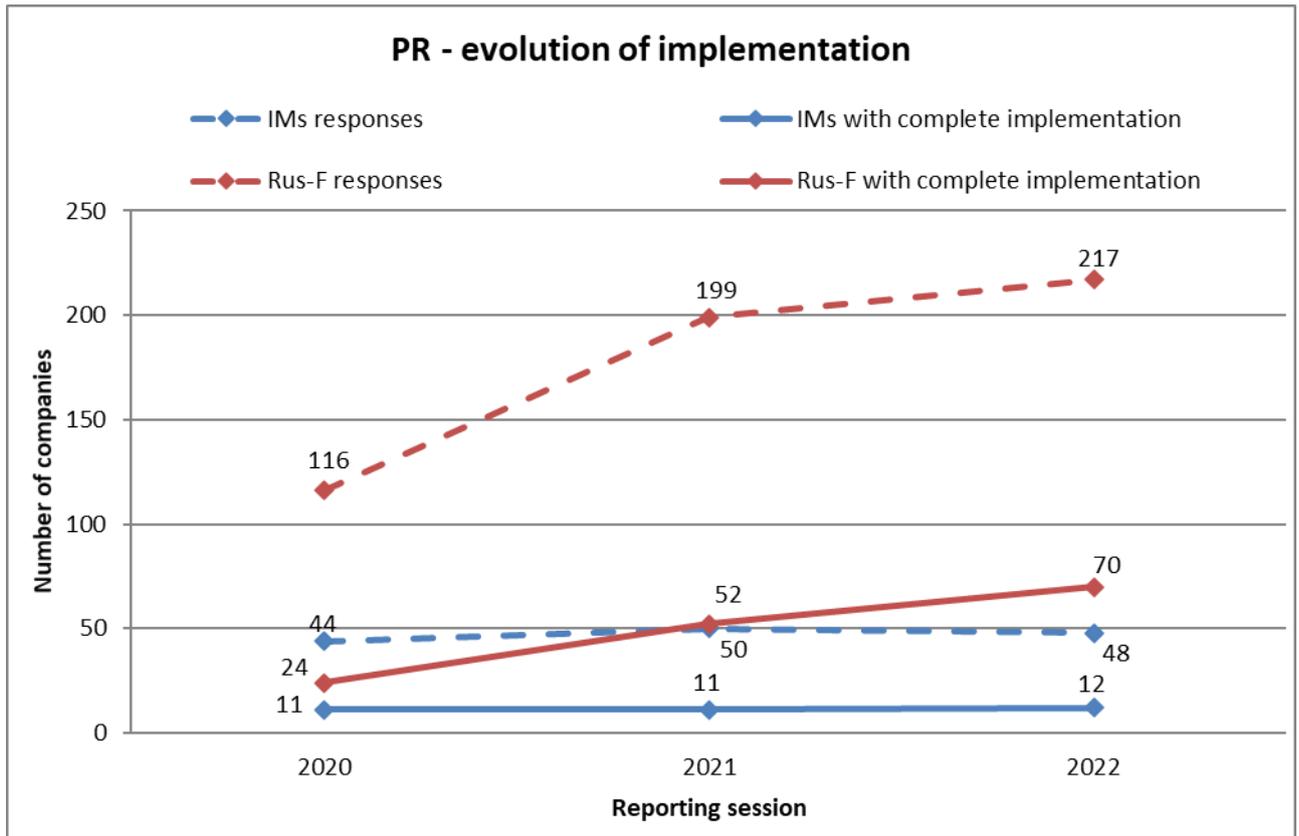
Diagram 18: Evolution of responses and implementation for Path Request

6.6 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.

The level of fulfilment of diagram 19 shows 15 IMs and 74 RUs-F with 100% implementation of the PD message.
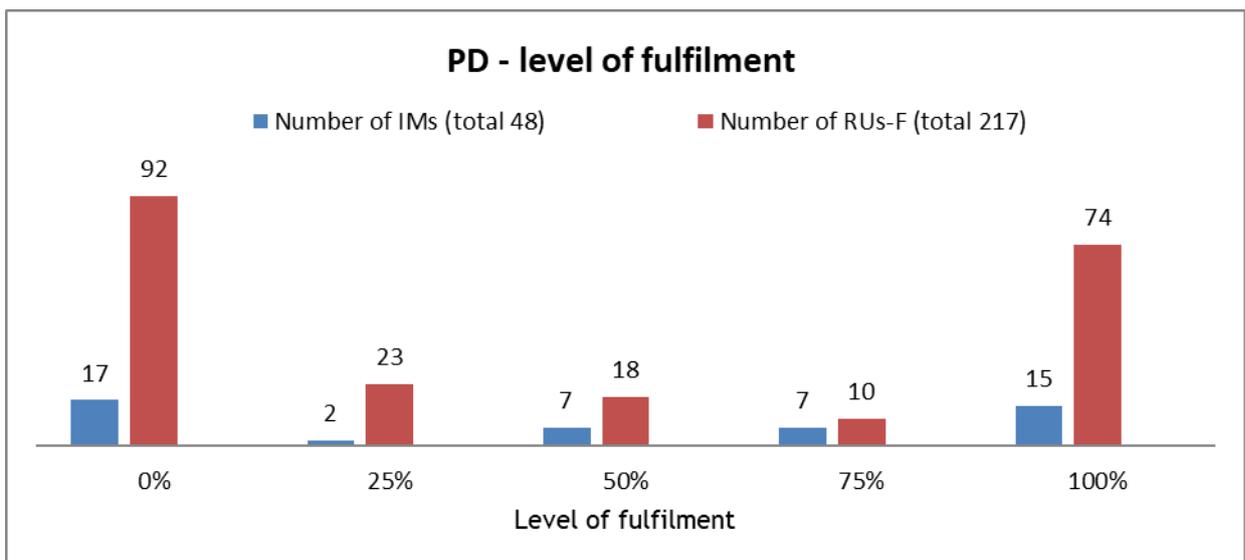
Diagram 19: Path Details (PD)

The number of IMs and RUs-F having introduced PD messages has increased according to diagram 20.
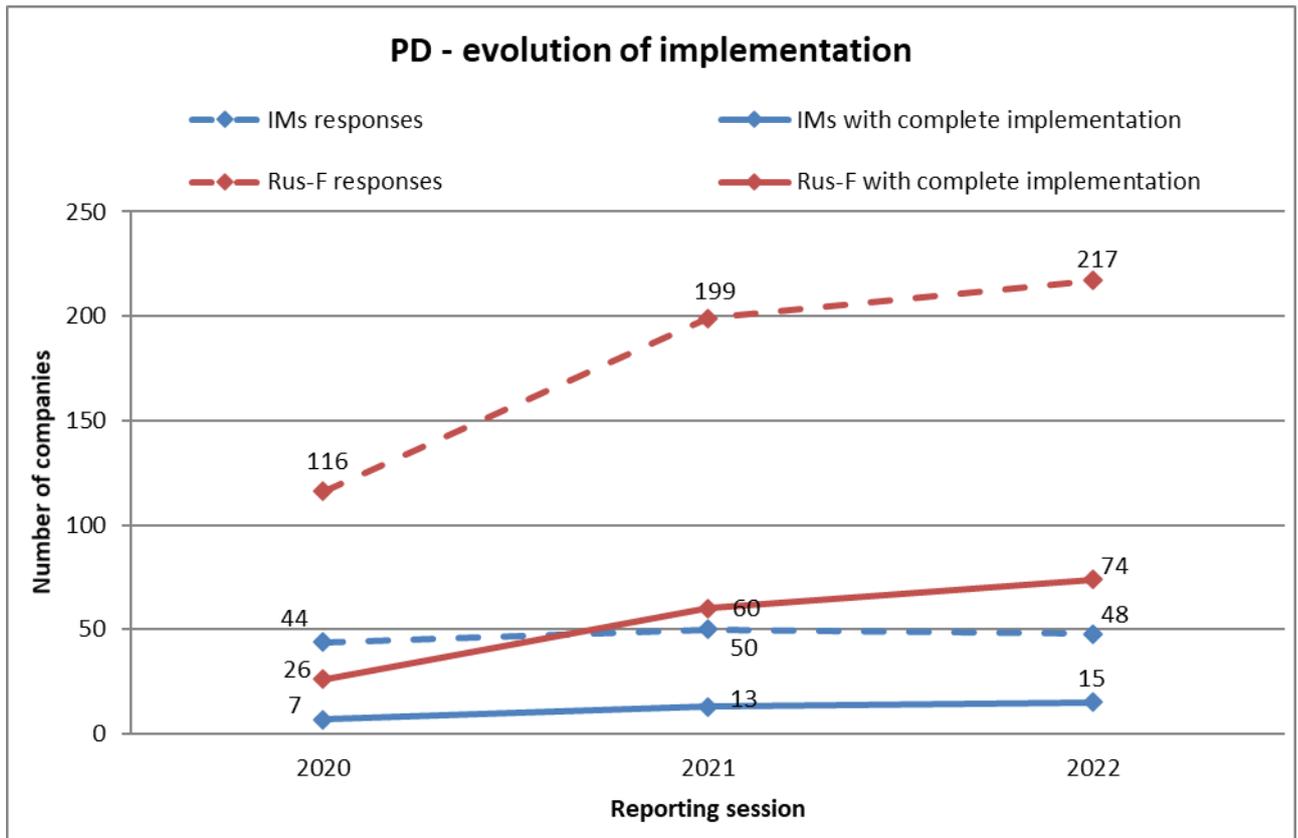
Diagram 20: Evolution of responses and implementation for Path Details

6.7 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 21). Companies using other means of implementation in accordance with the TSIs remain out of consideration.

Regardless of the different participation in the 2021 survey, the share of TAF/TAP messages for TR implementation remains quite similar.
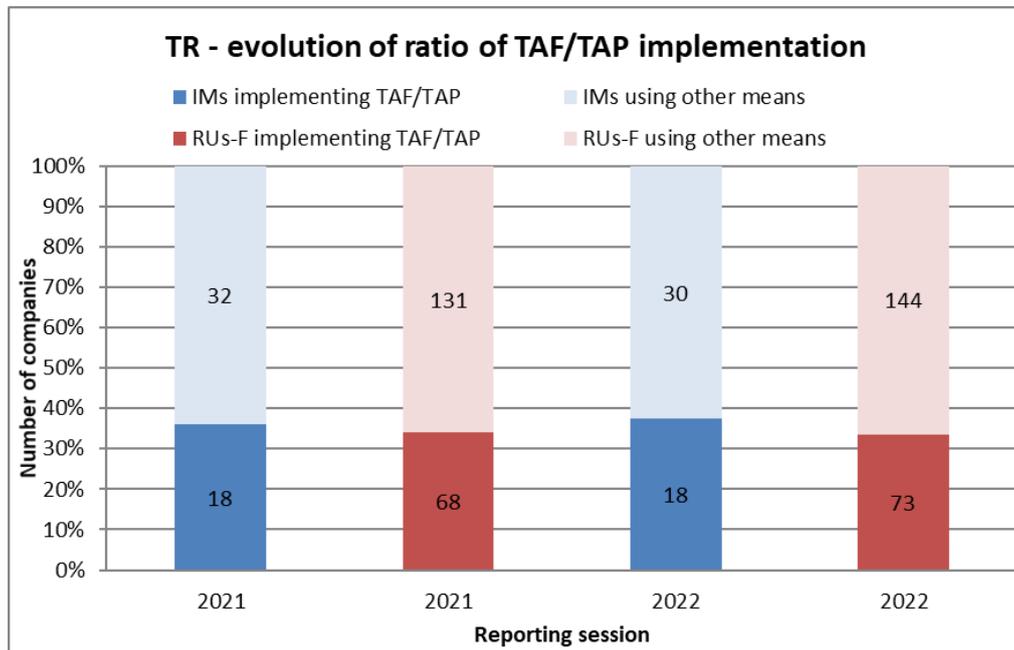
Diagram 21: Train Ready (TR)

The level of fulfilment of diagram 22 shows 7 IMs and 51 RUs-F with 100% implementation of the TR message.
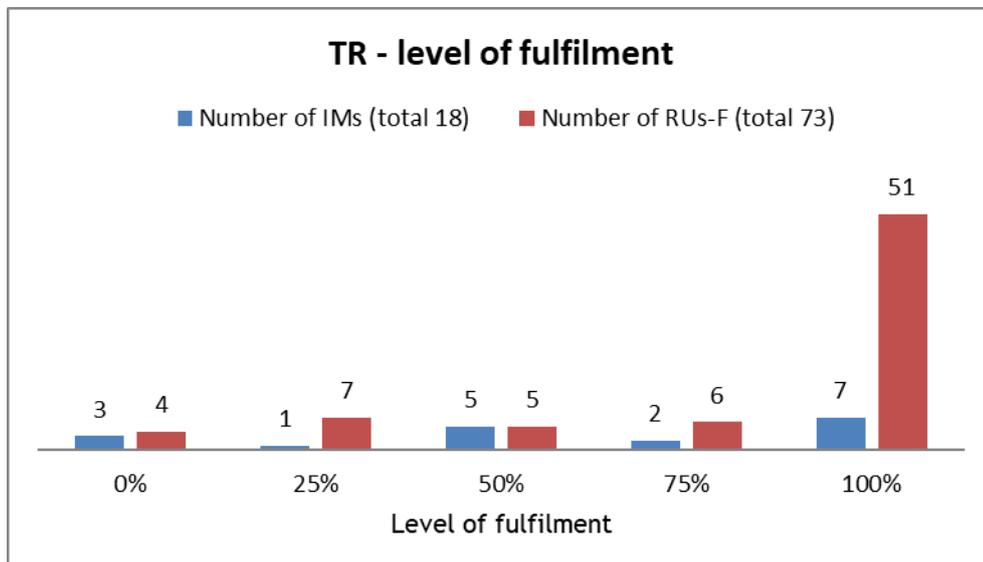
Diagram 22: Train Ready (TR)

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 23. There is a mixed evolution of TR in production for IMs and RUs-F up to December 2022.
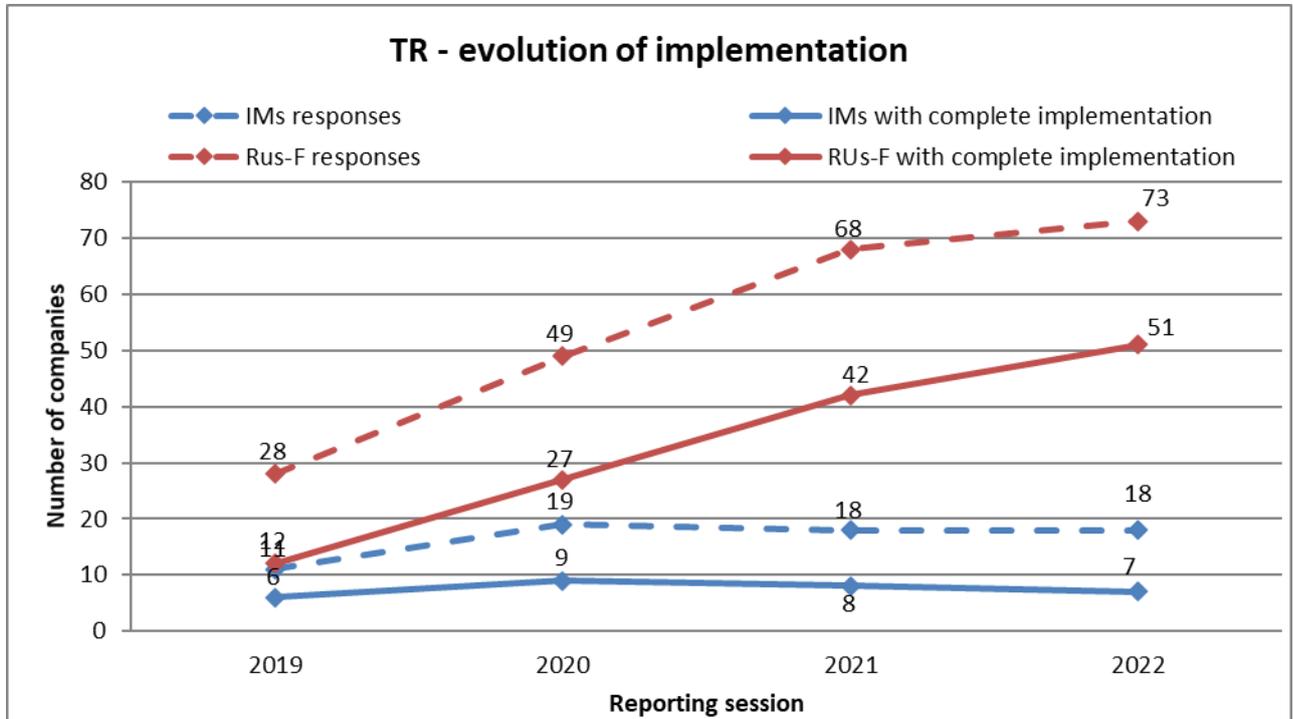
Diagram 23: Evolution of responses and implementation for Train Ready

6.8 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 24 indicates 22 IMs and 90 RUs-F with 100 % level of fulfilment. 29 companies which do not have fully implemented TRI declared to use TIS (75 in total) according to their feedback to the survey.
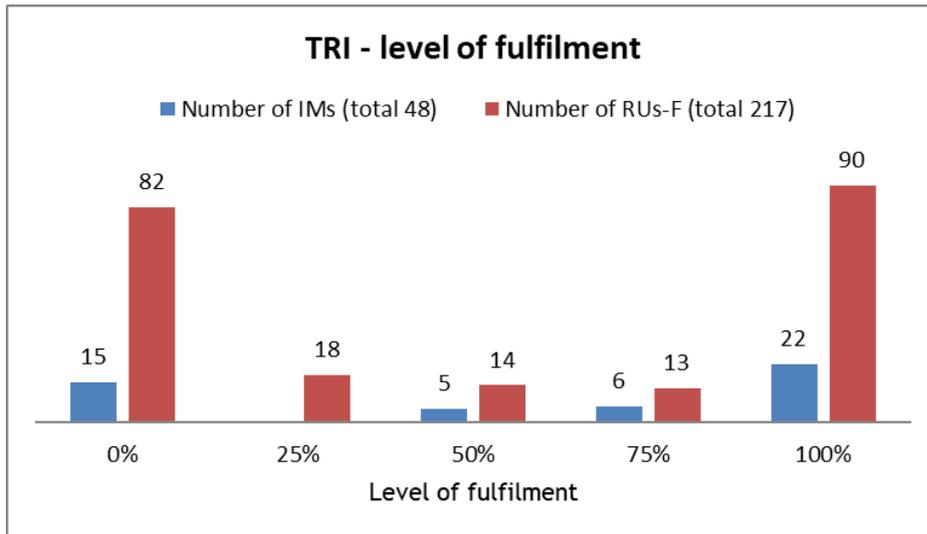
Diagram 24: Train Running Information (TRI)

Regarding diagram 25, the number of RUs-F having implemented completely the TRI increased in comparison to the previous reporting session at a higher level of participation. For IMs participation and implementation went down.
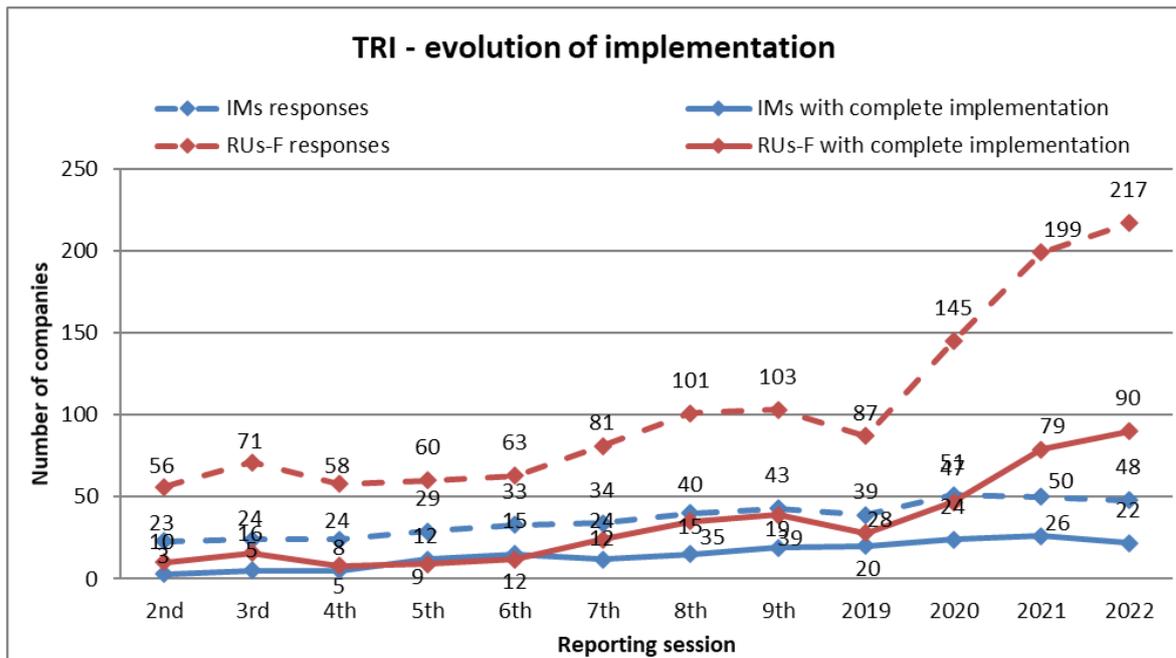
Diagram 25: Evolution of responses and implementation for Train Running Information

6.9 Train Running Interruption Message (IMs and RUs-F)

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

The level of fulfilment of diagram 26 shows 13 IMs and 43 RUs-F with complete implementation of the TRIM message. However, most companies have not yet started implementation.

TRIM - level of fulfilment

■ Number of IMs (total 48)   ■ Number of RUs-F (total 217)
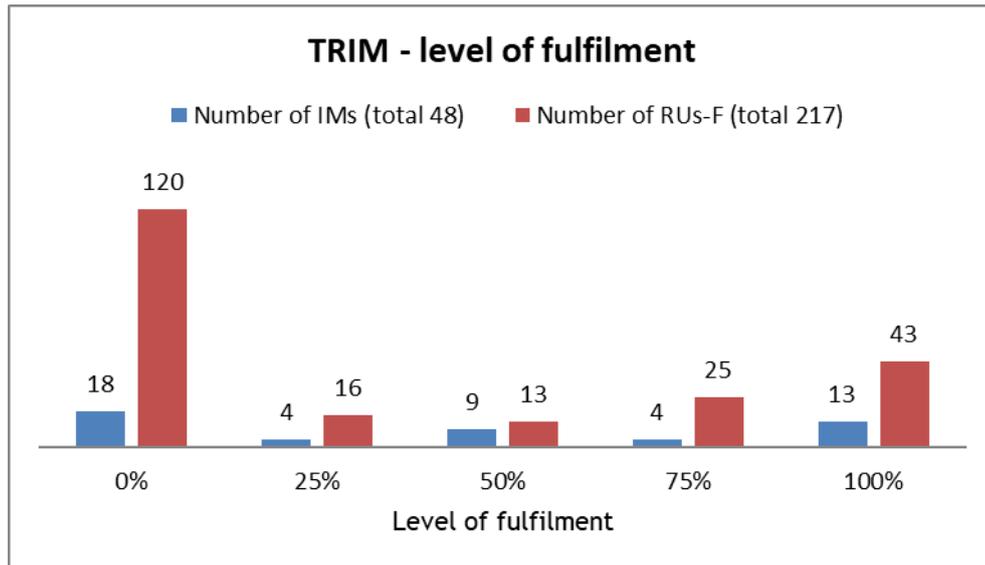
Diagram 26: Train Running Interruption Message (TRIM)

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

TRIM - evolution of implementation
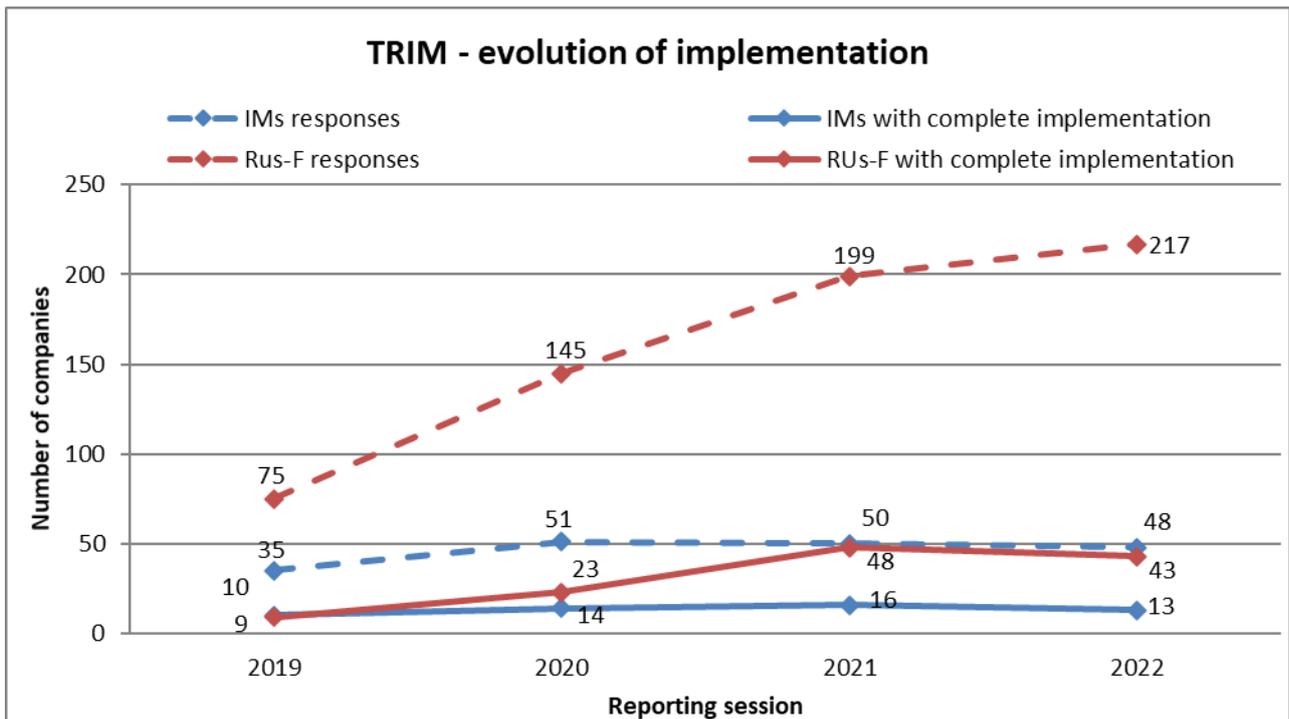
Diagram 27: Evolution of responses and implementation for Train Running Interruption Message

6.10 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.

TRF is reported to be fully implemented end of 2022 by 14 IMs and 47 RUs-F.
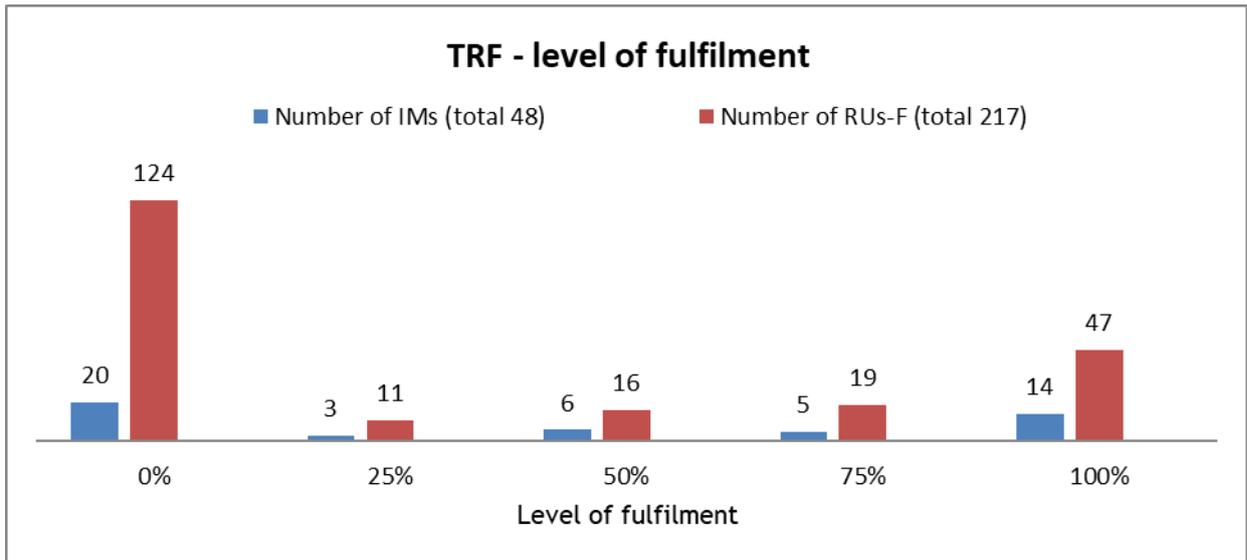
Diagram 28: Train Running Forecast (TRF)

Following a higher participation of RUs-F, complete implementation of the TRF function also shows a higher level than the previous year. Evolution of TRF for IMs shows a reverse effect.
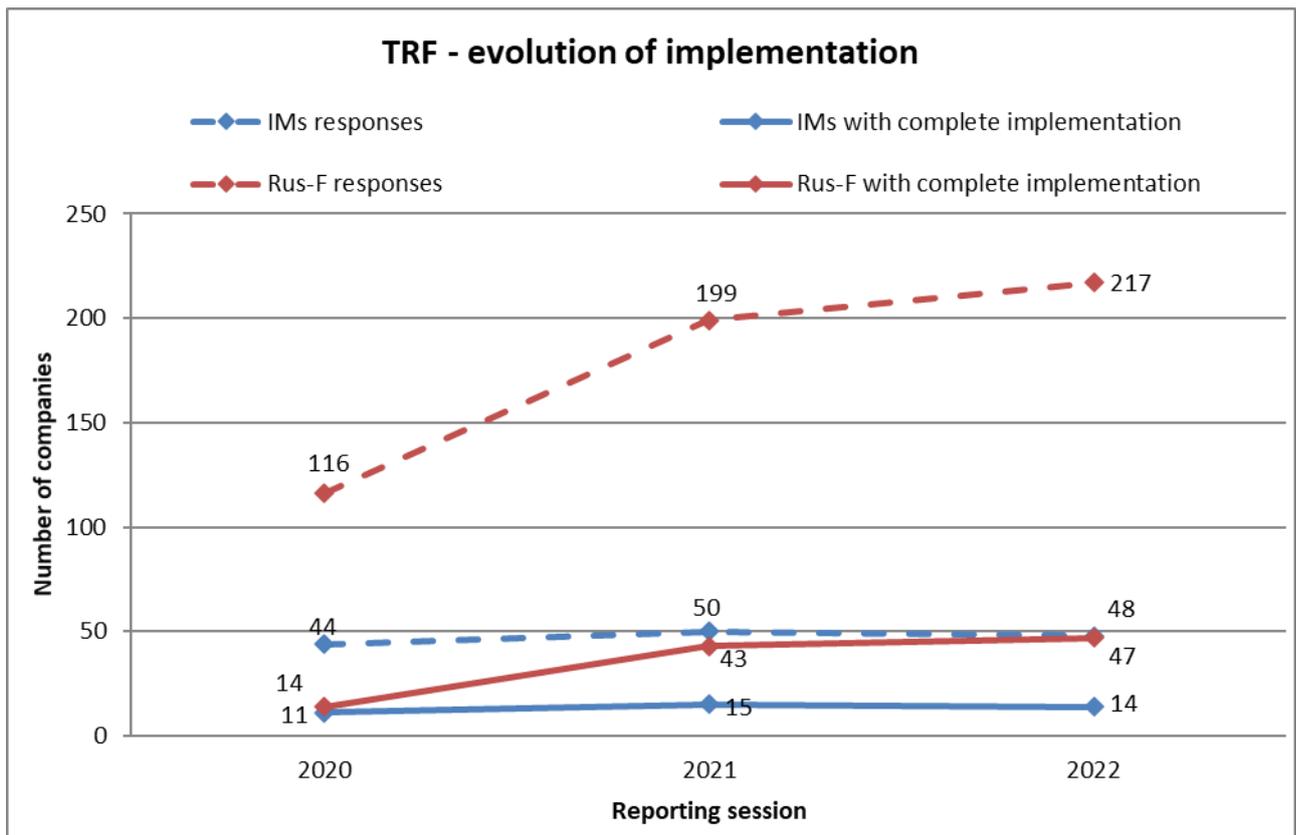
Diagram 29: Evolution of responses and implementation for Train Running Forecast

6.11 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.

18 IMs and 90 RUs-F have implemented TCM completely.
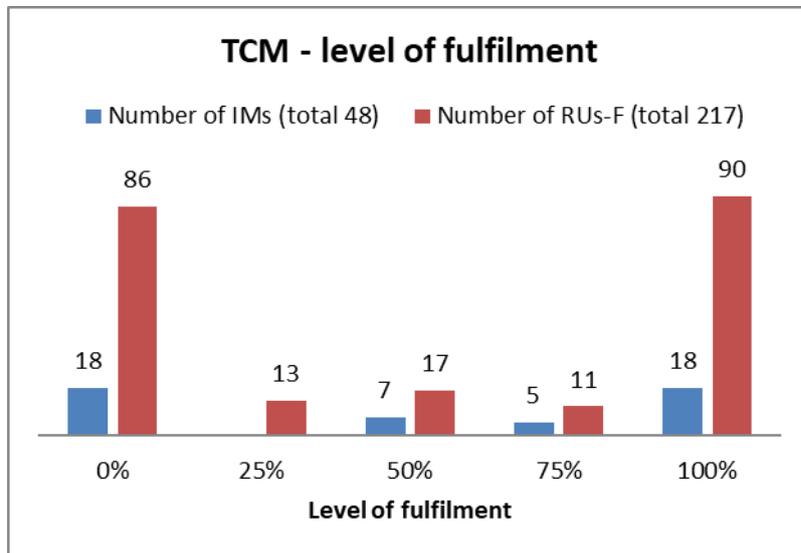
Diagram 30: Train Composition Message (TCM)

Figures show an increase in terms of complete implementation of TCM since last reporting session. 90 RUs-F out of 217 which replied to the survey have completely implemented the TCM while 18 out of 48 IMs have finished their duty.
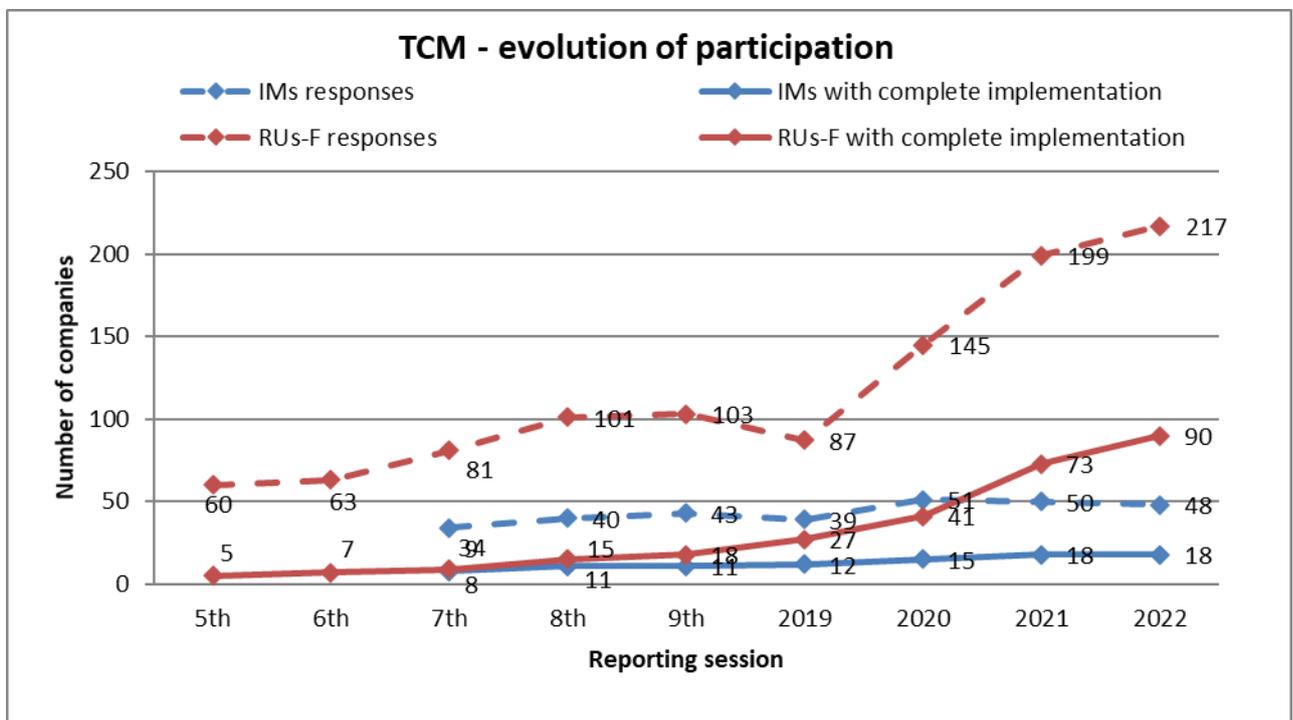
Diagram 31: Evolution of responses and implementation for Train Composition Message (TCM)

6.12 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 59 RUs-F out of 217 having finished implementation of CND. 18 companies declared in the questionnaire using ORFEUS, but 5 of them not having implemented CND completely.
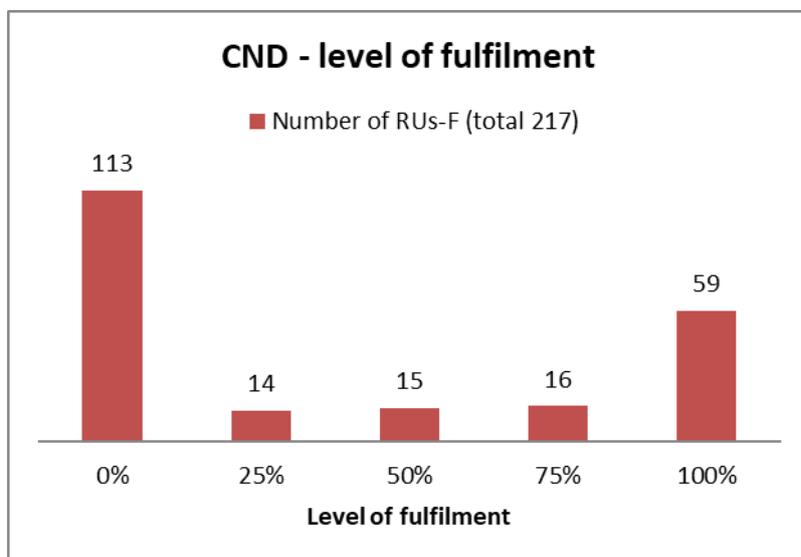
Diagram 32: Consignment Note Data (CND)

Both, the evolution of responses and the evolution of implementation for CND increases quite significantly for 2022 (diagram 33).
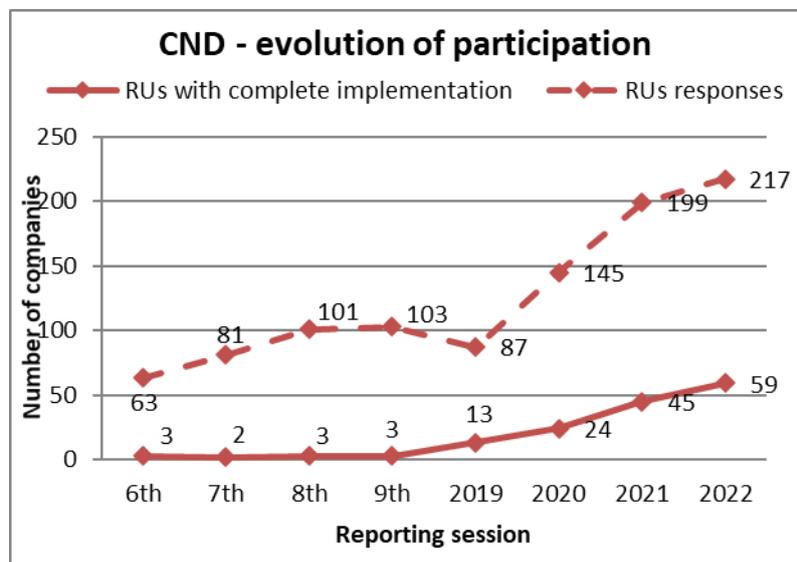
Diagram 33: Evolution of responses and implementation for Consignment Note Data (CND)

6.13 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 54 RUs-F having completed the WM function from a total of 217 companies. 15 RUs-F declared using the Common Sector Tool ISR, out of which 4 companies did not have implemented WM completely.
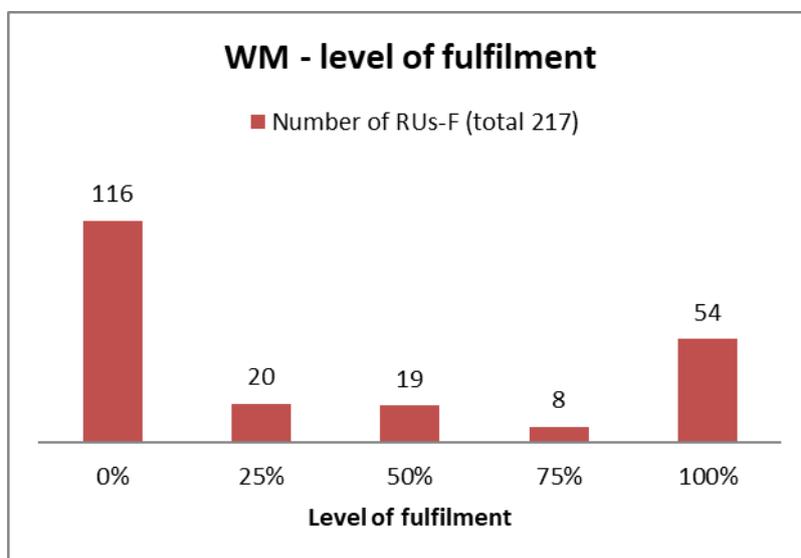
Diagram 34: Wagon Movement (WM)

The implementation for WM shows a significant positive evolution for 2022 (diagram 35).
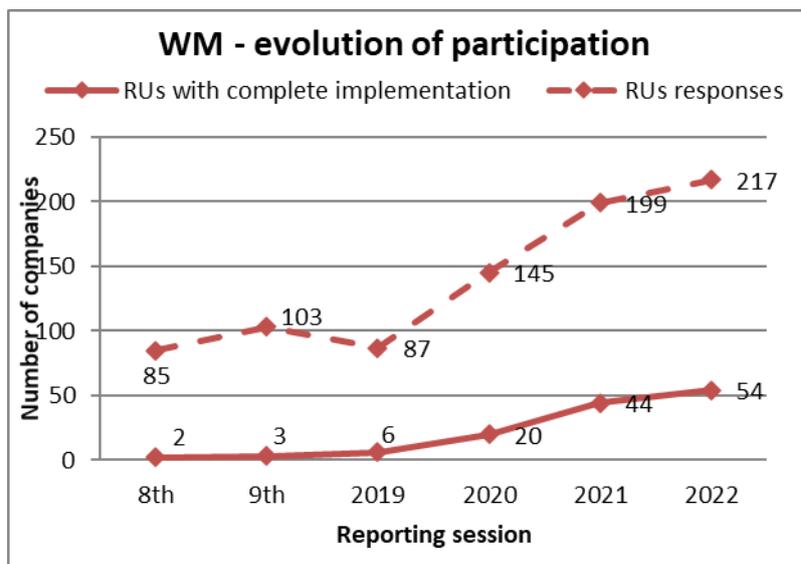
Diagram 35: Evolution of responses and implementation for Wagon Movement (WM)

6.14 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.

50 RUs-F out of a total of 217 RUs-F declare to have implemented this function by the end of 2022 is shown in diagram 36.
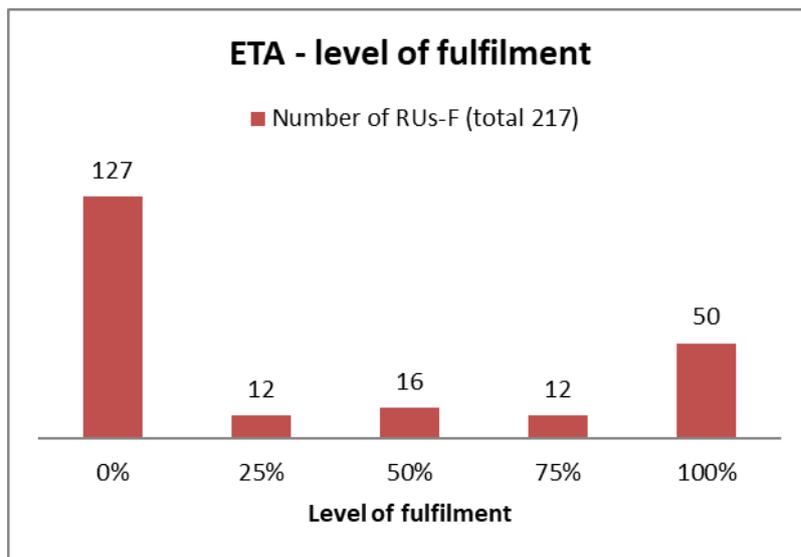
Diagram 36: Shipment ETA

Together with replies for ETA, the number of RUs-F having implemented the function has risen in 2022 according to diagram 37.
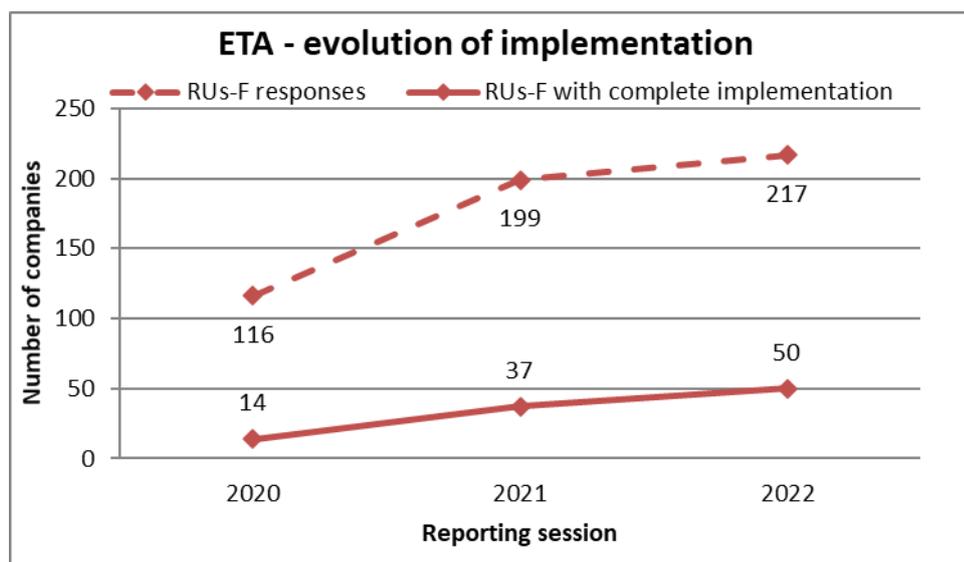
Diagram 37: Evolution of responses and implementation for Shipment ETA

6.15 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 RSRD[2]. Information delivered by UIP for RSRD[2] means 100% of fulfilment. 116 WKs have implemented this function, out of which 80 WKs thanks to RSRD[2].
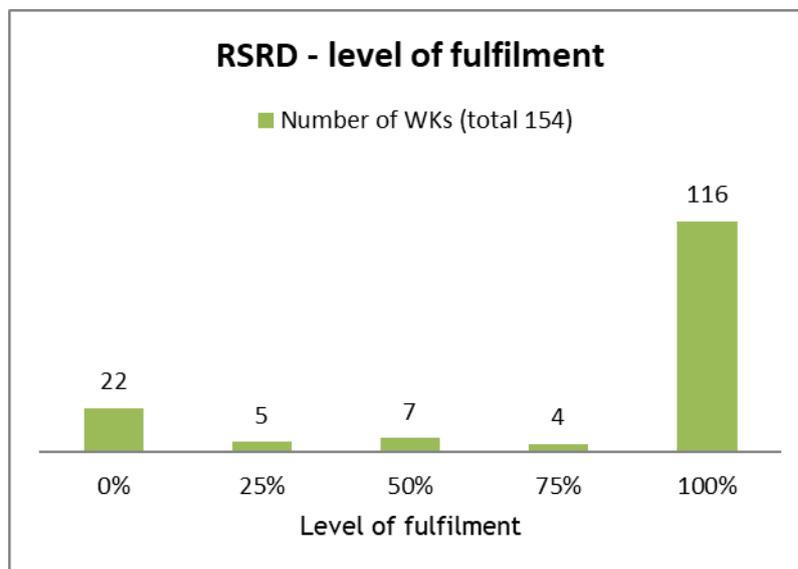
Diagram 38: Rolling Stock Reference Database

Despite lower participation to the survey, the evolution of implementation remains growing compared to the previous report (see diagram 39).
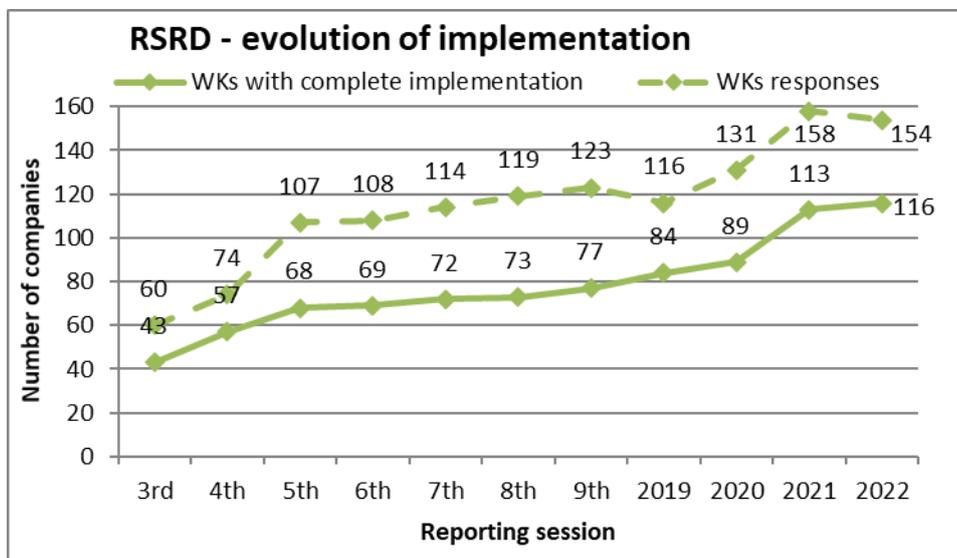
Diagram 39: Evolution of responses and implementation for RSRD

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

Compared to the precious survey, feedback regarding reasons for not implementing went down by about 13 % in total from 1537 reasons in 2021.
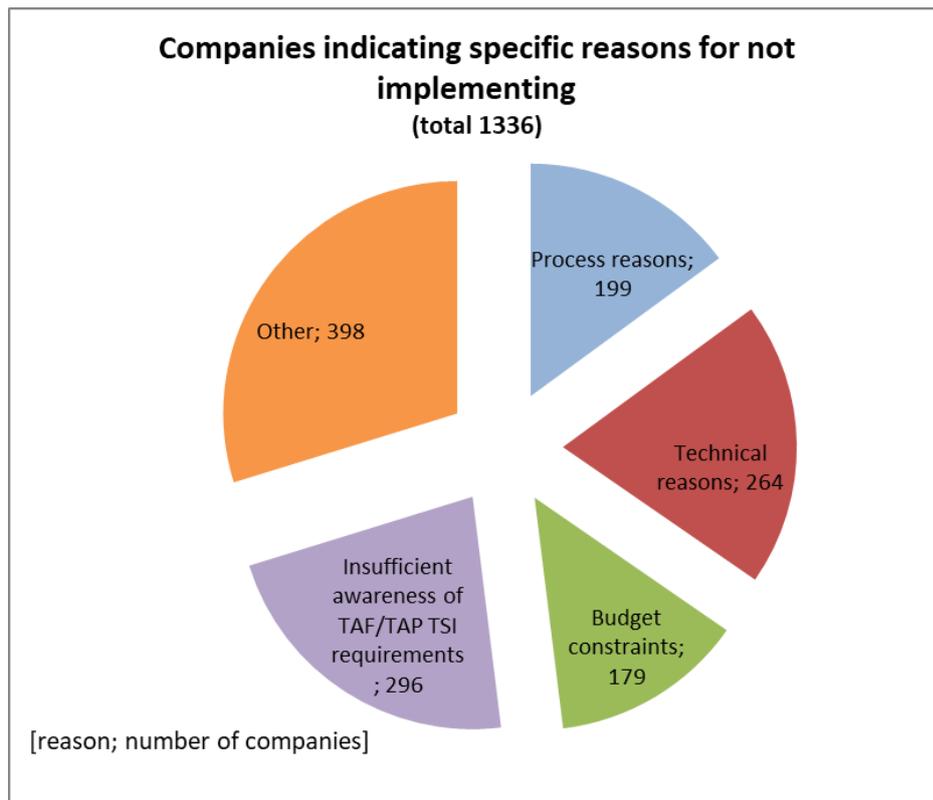
Diagram 40: Reasons for not starting implementation of TAF/TAP TSI functions

Diagram 41 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.

Companies indicating TAF/TAP TSI functions with reasons for not implemementing
(total 1336)
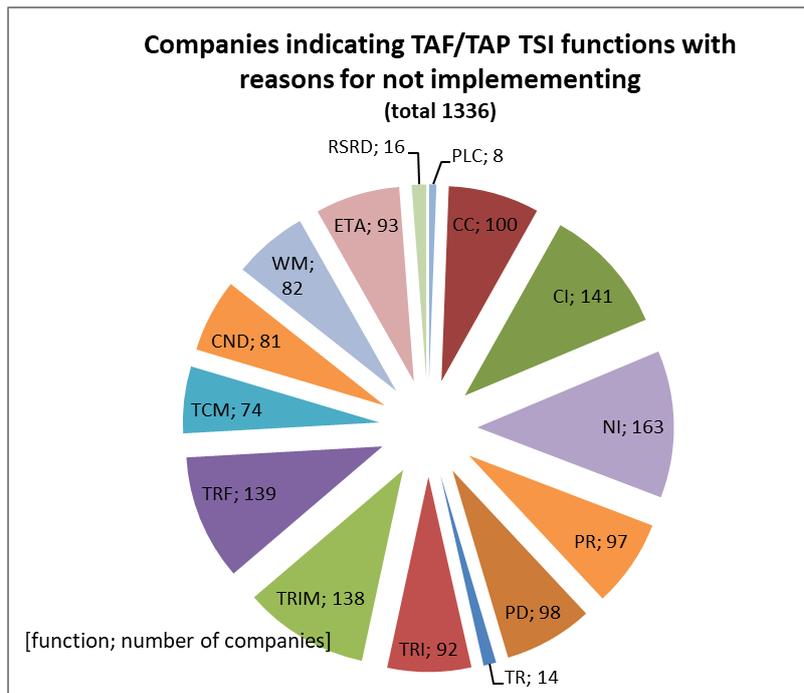
Diagram 41: TAF/TAP functions with reasons for not starting implementation

Diagram 42 gives a closer look to the development of 'Insufficient awareness of TAF/TAP TSI requirements' over time. The percentage given in diagram 42 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 has risen since last year to 22%. However, the absolute number of 296 companies declaring 'Insufficient awareness of TAF/TAP TSI requirements' is below the number of 2021. Dedicated information sessions should be initiated as a mitigation measure.
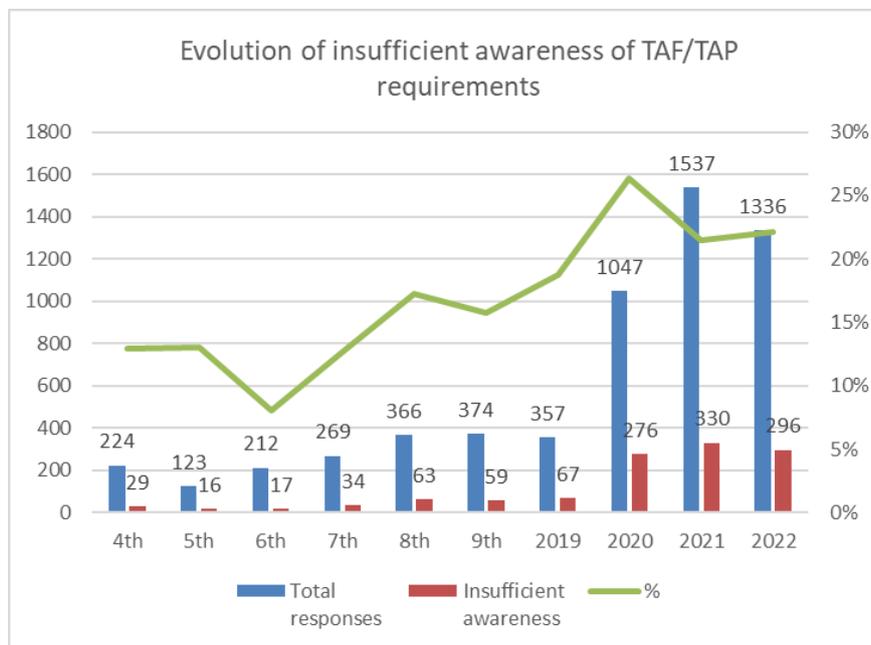
Diagram 42: Evolution of insufficient awareness of TAF/TAP requirements

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 %.

Diagrams 43 and 44 show the DI for planning and operation functions to be implemented by IMs. Relative to the last report, implementation of all IM planning functions show a positive trend, while most IM operational functions have developed in a negative way.
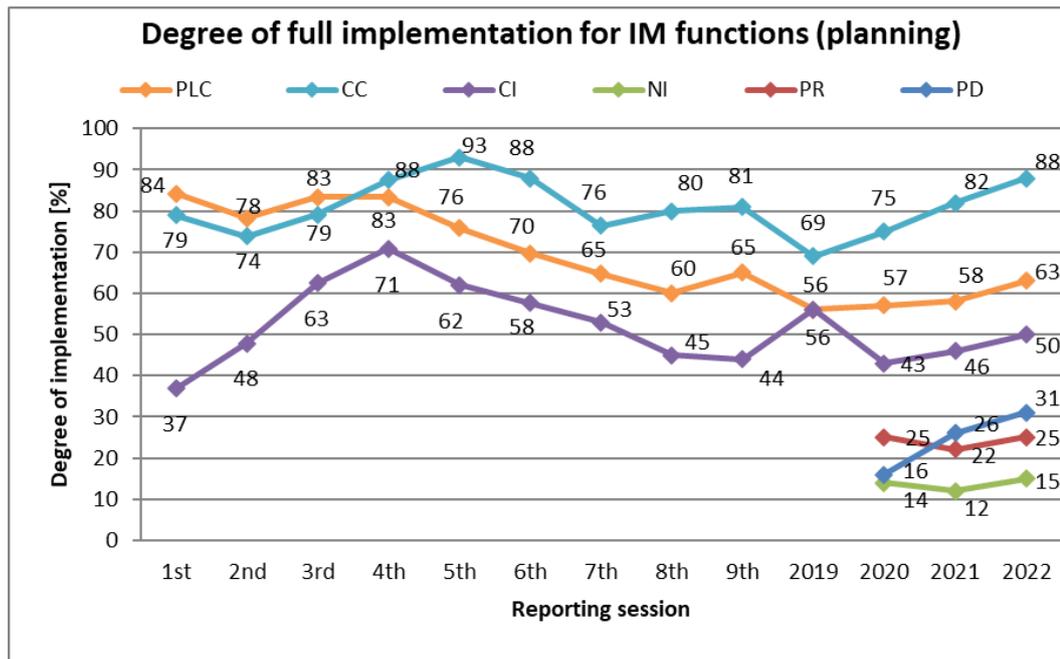
Diagram 43: Reported DI for IM functions (planning)
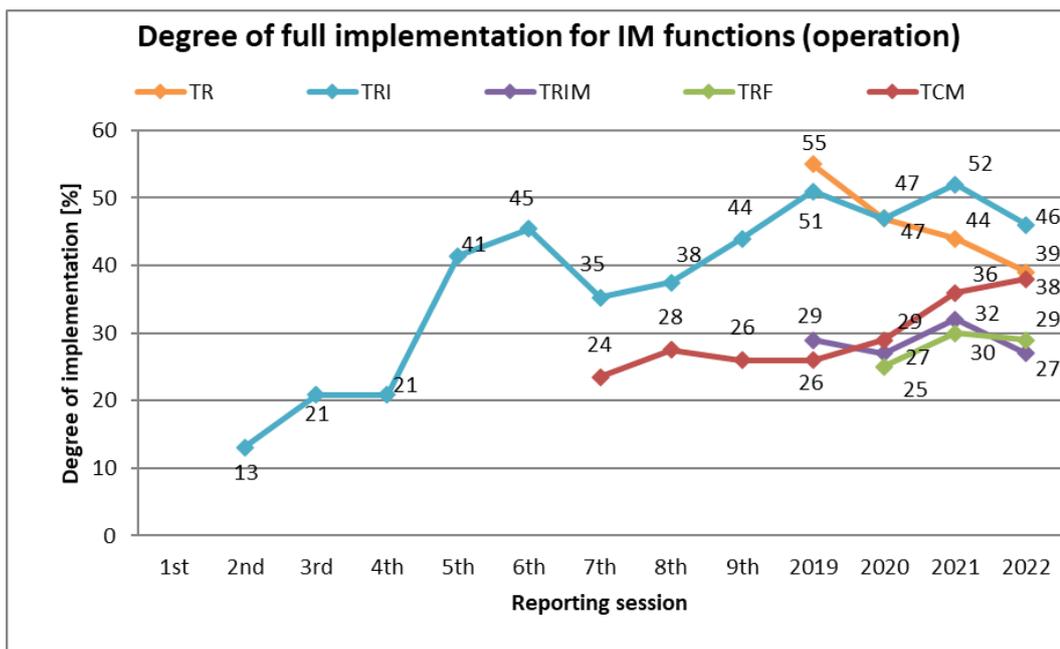
Diagram 44: Reported DI for IM functions (operation)

Diagrams 45 and 46 indicate the evolution of implementation for RUs-F functions. Generally, the proportion of RUs having finished implementation is considerably lower than for IMs.

RUs-F functions for planning and operation except for TRIM show a positive development in terms of degree of full implementation.
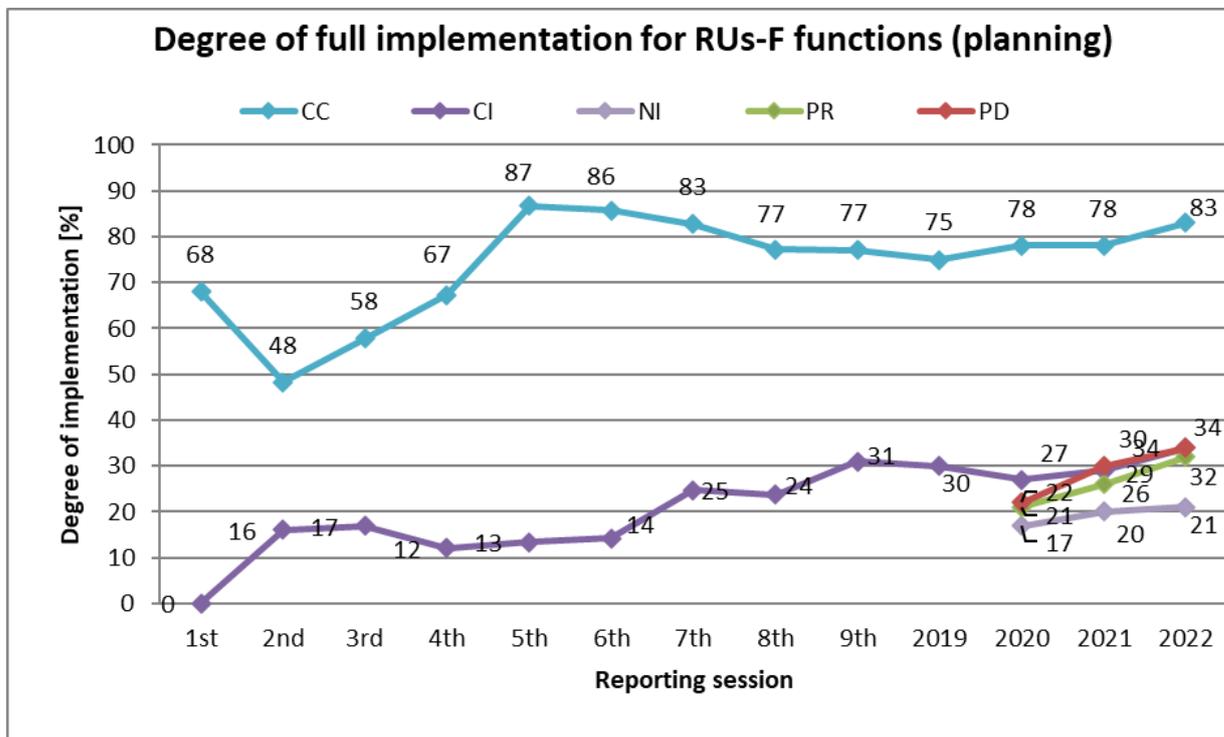
Diagram 45: Reported DI for RUs-F functions (planning)
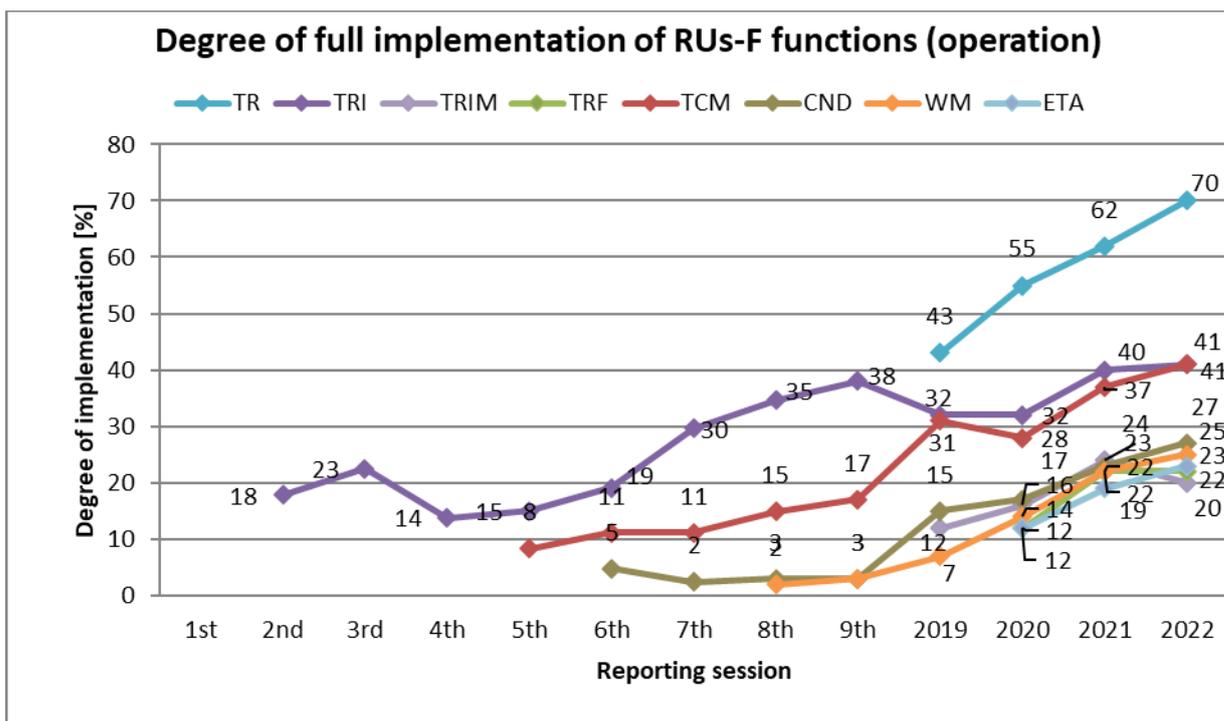
Diagram 46: Reported DI for RUs-F functions (operation)

Diagram 47 shows the reported DIs for the WK functions in the present report. The development of full implementation is positive in all cases.
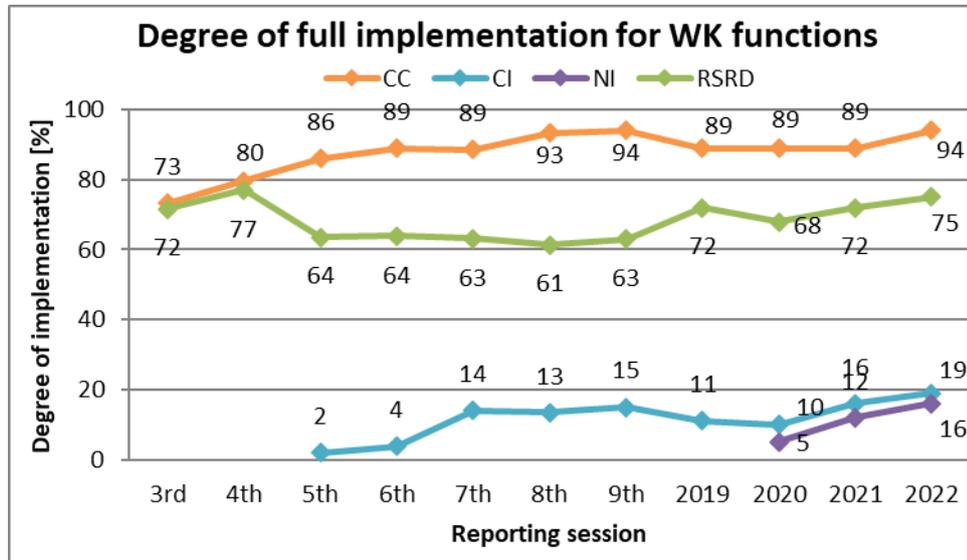
Diagram 47: Reported DI for WK functions

Development of Degree of Implementation (DI) at European level since 2021 reporting session	Type of company		
	IM	RU-F	WK
Primary Location Codes (PLC)	↗		
Company Code (CC)	↗	↗	↗
Common Interface (CI)	↗	↗	↗
New Identifiers (NI)	↗	↗	↗
Path Request (PR)	↗	↗	
Path Details (PD)	↗	↗	
Train Ready (TR)	↘	↗	
Train Running Information (TRI)	↘	↗	
Train Running Interrupted Message (TRIM)	↘	↘	
Train Running Forecast (TRF)	↘	→	
Train Composition Message (TCM)	↗	↗	
Consignment Note Data (CND)		↗	
Wagon Movement (WM)		↗	
Shipment ETA (ETA)		↗	
Rolling Stock Reference Database (RSRD)			↗

Diagram 48: Summary of DI development for TAF TSI

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7. IMPLEMENTATION STATUS OF IMS PER COUNTRY

This chapter gives an impression about the state of implementation of TAF functions by IMs in countries across Europe.

The IMs having the longest network have been taken as relevant for the country. For EU Member States those IMs account for at least 90 % of network share. Consequently, this dominating companies play a major role for implementing RU/IM functions in a country. Once they have decided implementing RU/IM communication via TAF/TAP messages, the respective national railway sector will follow and have to adapt.

European maps indicate the level of implementation separately for each function and the dominating IM of the respective country. Where complete implementation has not yet been reached, current planned end date is made visible by colours.
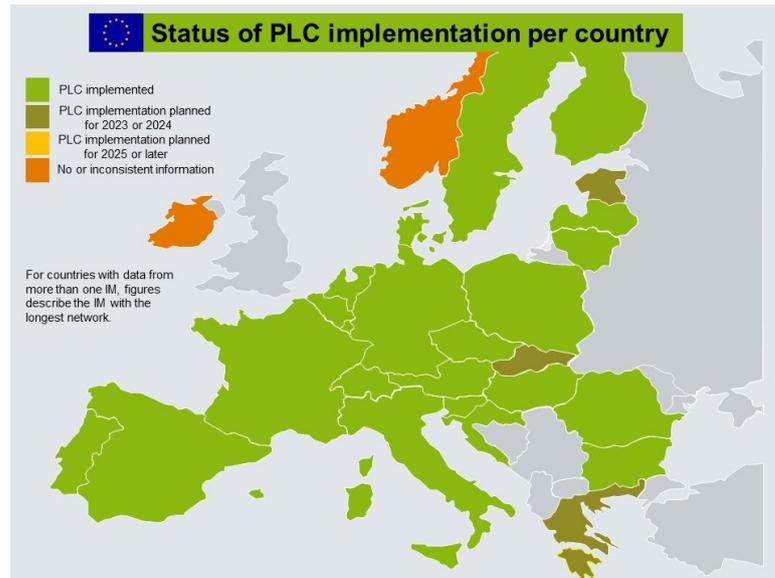
Diagram 49: Implementation of PLC of IMs across European countries
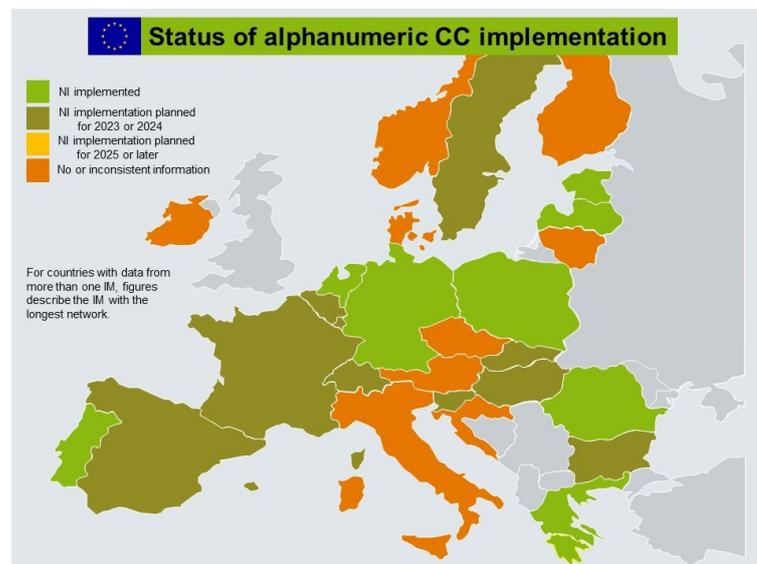
Diagram 50: Implementation of alphanumeric CC of IMs across European countries
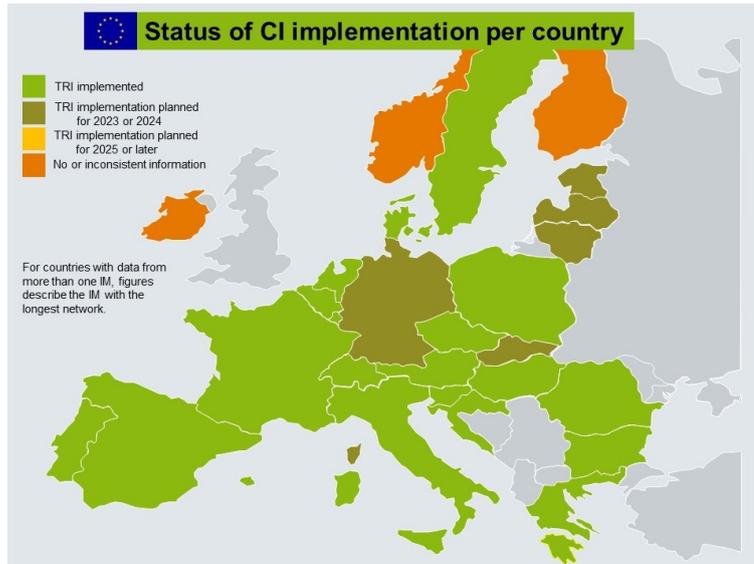
Diagram 51: Implementation of CI of IMs across European countries
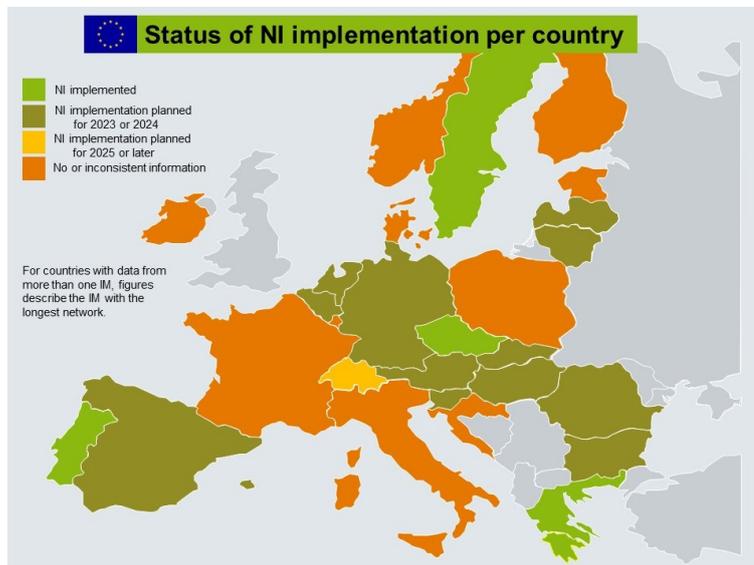
Diagram 52: Implementation of NI of IMs across European countries
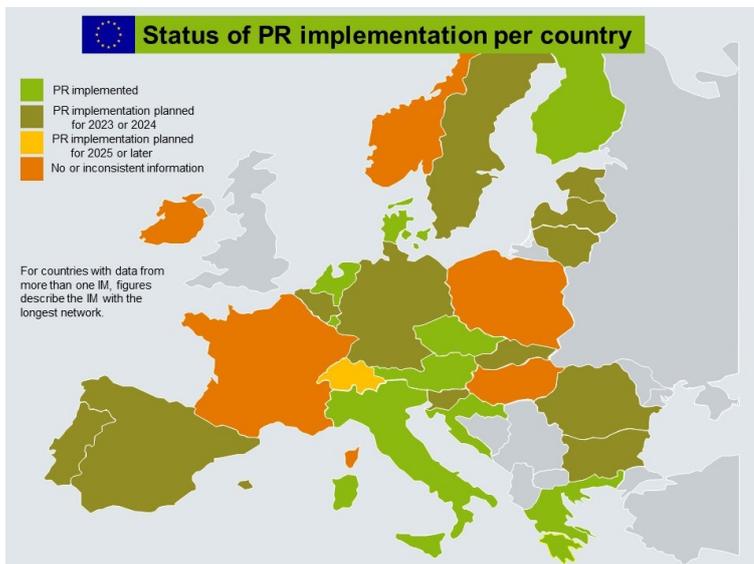
Diagram 53: Implementation of PR of IMs across European countries
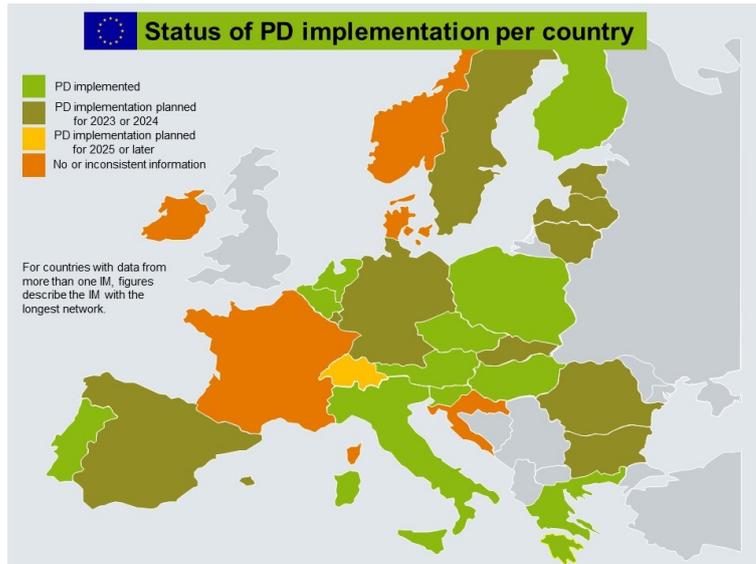
Diagram 54: Implementation of PD of IMs across European countries
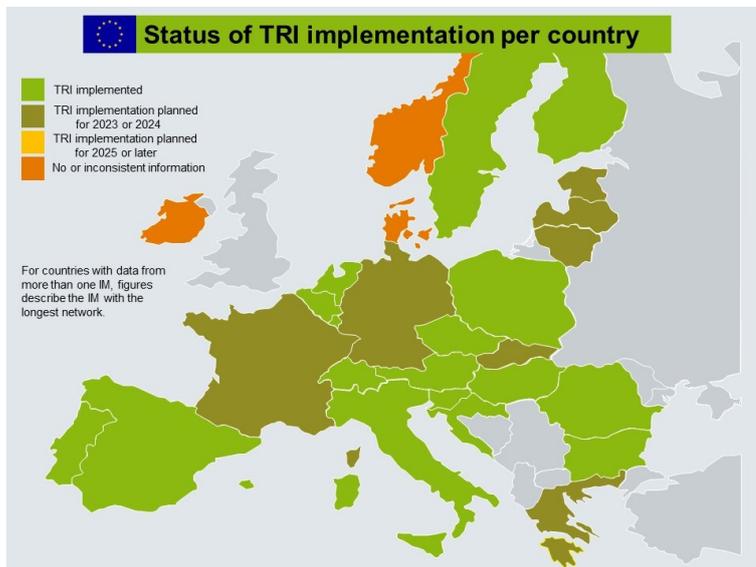
Diagram 55: Implementation of TRI of IMs across European countries
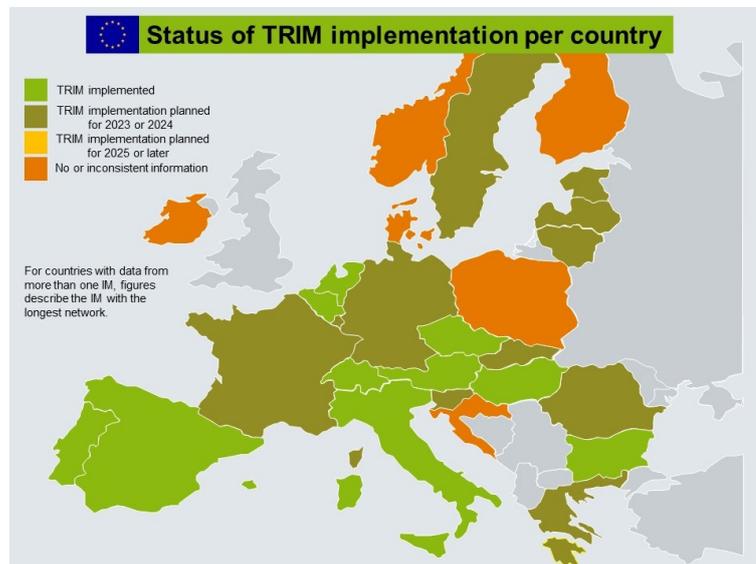
Diagram 56: Implementation of TRIM of IMs across European countries
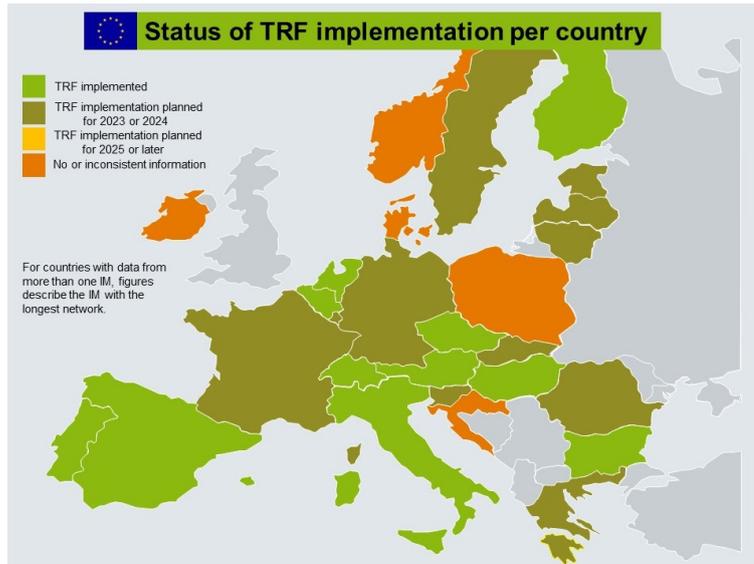
Diagram 57: Implementation of TRF of IMs across European countries
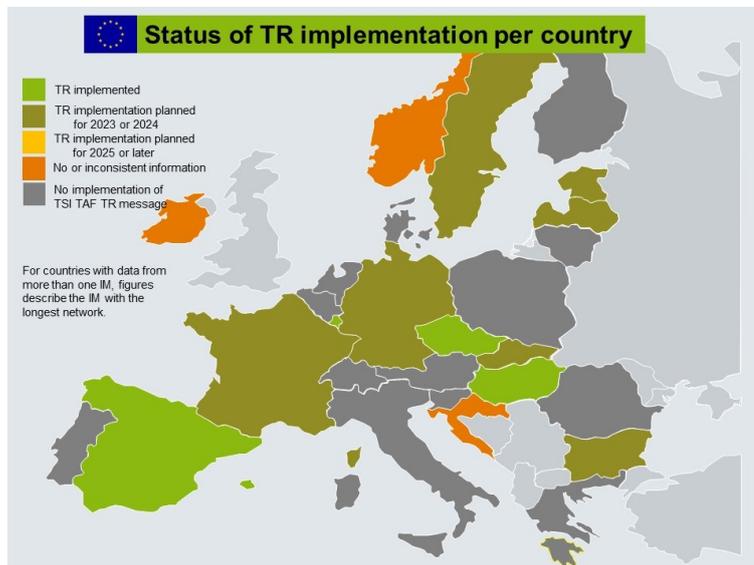
Diagram 58: Implementation of TR of IMs across European countries
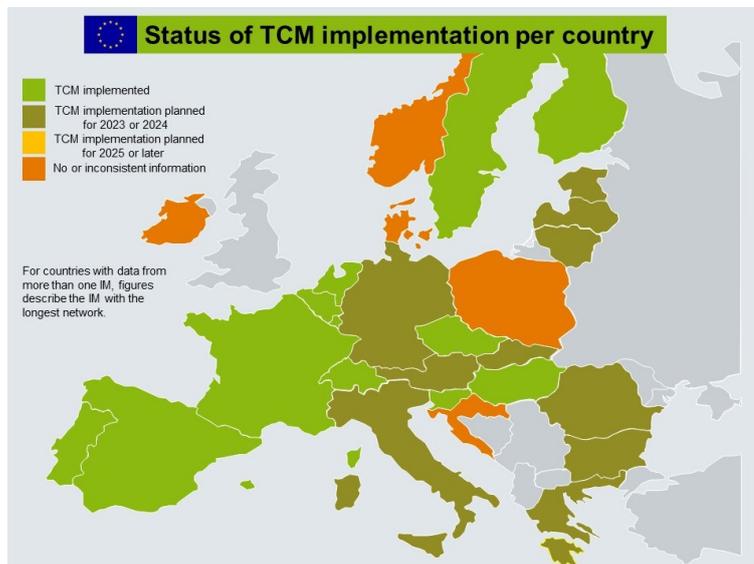
Diagram 59: Implementation of TCM of IMs across European countries

8. 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 638 to 804. The summary shown in diagram 58 does not contain companies declaring not to use any tool (171 nominations).

PCS being displayed for the first time, increase of use of common sector tools relative to 2021 is at 10 %. The indicated higher use of common sector tools is based at a similar level of data basis for evaluation.

Common sector tools

Tool	Number of companies
HEROS Train Preadvice App (H30)	47
HEROS Path Request WebApp (H20)	1
Optimised planning of the marshalling processes (EMAN)	2
Logistics Web Portal (LWP)	19
Kapacita Dráhy (KADR)	51
Rolling Stock Reference Database (RSRD2)	171
Open Rail Freight Electronic Data Interchange User System (ORFEUS)	57
International Service Reliability (ISR)	42
Path Coordination System (PCS)	105
Train Information System (TIS)	138

Diagram 60: Common sector tools in use

RSRD[2] and TIS both stay the most used Common Sector Tools for TAF TSI functions.

9. CONCLUSION AND FINDINGS

The 2022 reporting session can be described as successful with the highest number of invitations (+24) and the highest number of responses (+2). As always, the number of companies having responded to the 2022 questionnaire is significantly lower than the number of companies having been invited. The response rate of over 41 % of the current reporting session is quite a good rate regarding the high number of invitations.

There might be different reasons for this positive fact:
• Most companies can select to answer the questionnaire in their native language
• Reduction of the survey frequency to once a year
• Pandemic crisis forcing more home office
• Higher awareness of the regulation due to new EU subsidies in the CEF calls.

The inclusion of data from the previous reporting session has proved its worth to have a more complete view of the company's feedback and of the current level of implementation.

The maps showing the implementation of some functions indicate that many IM's plan the implementation of function in the next two years.

The degree of implementation (DI) as set out in diagrams 43 to 47 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.

To have a better overview for DI, functions were split in planning and operation showing now 11 functions for IM, 13 functions for RU and 4 functions for WK.

The DI for the different TAF functions in the present report shows generally a mixed development:
•   positive trends for IM planning functions
•   positive trends for all RUs-F functions except TRIM
•   positive trends for all WK function except CC (unchanged)
•   negative trends for all IM operations functions but TCM

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.

More common sector tools are in use and the common sector tools are used by more companies. RSRD2 and TIS remain the most used common sector tools following feedback to this survey.

Conclusion and findings for the functions where Common Tools are widely used are getting more and more difficult to accomplish, because the responses from the companies are sometimes contradictory and a deep manual verification of the responses is not possible due to lack of resources and time. Improvements in the future KPI reporting will be discussed with the responsible IT-provider.

ANNEX 1: MEMBERS OF THE IMPLEMENTATION REPORTING GROUP (IRG)

Last Name	First Name	Company	e-mail
Arms (Chair)	Jan-Christian	DB AG	jan-christian.arms@deutschebahn.com
Achermann	Rudolf	SBB	rudolf.achermann@sbb.ch
Hendriks	Tom	NS	tom.hendriks@ns.nl
Heydenreich	Thomas	UIP	rsd@th-heydenreich.de
Maglajlic	Seid	FTE	sma@interconnective.at
Massari	Filippo	RFI	f.massari@rfi.it
Matheau	Franck	SNCF	franck.matheau@sncf.fr
Möllmann	Jan	DB AG	jan.moellmann@deutschebahn.com
		CER	
Paul	Michael	DB Systel	michael.mi.paul@deutschebahn.com
Stefanovic	Vojkan	RNE	Vojkan.stefanovic@rne.eu
Stahl	Josef	RNE	josef.stahl@rne.eu
Weber	Christian	SNCF	christian.weber@sncf.fr

ANNEX 2: RESPONSES CONTACT LIST 2022

Nr.	Member State	Type of Company	Company name	Reporting Entity
1	AT	IM	ÖBB Infrastruktur AG	
2	AT	IM, RUP	Raab-Ödenburg-Ebenfurter Eisenbahn AG	
3	AT	RU-F	LTE Austria GmbH	LTE Logistik- und Transport- GmbH = Holding of LTE GROUP
4	AT	RU-F	LTE Logistik- und Transport- GmbH	LTE Logistik- und Transport- GmbH = Holding of LTE GROUP
5	AT	RU-F	WLC – Wiener Lokalbahnen Cargo GmbH	
6	AT	RU-F, WK	Rail Cargo Austria AG	Germany, Rail Cargo Carrier Germany, 3162
7	AT	WK	Felbermayr Transport- und Hebetechnik GmbH & Co KG	
8	AT	WK	waggonservice WSG mbH	
9	BE	IM	Infrabel	
10	BE	RU-F, WK	Lineas NV	Lineas France - France - 3220
11	BE	RU-P	THI Factory SA	
12	BE	WK	Lineas SA/NV	
13	BE	WK	Mosolf Automotive Railway GmbH	
14	BG	IM	NRIC (National Railway Infrastructure Company)	
15	BG	RU-F	BDZ TOVARNI PREVOZI EOOD	
16	BG	RU-F	Bulgarian Raiway Company	
17	BG	RU-F	DB Cargo Bulgaria EOOD	
18	BG	RU-F	LTE Bulgaria EOOD	LTE Logistik- und Transport- GmbH = Holding of LTE GROUP
19	BG	RU-F	MMIRL	
20	BG	RU-F	Rail Cargo Carrier Bulgaria	
21	BG	RU-F	TRANSPORT CONSTRUCTION AND REHABILITATION EAD	
22	BG	RU-F	Булмаркет Рейл Карго ЕООД	
23	CH	IM	BLS-Netz AG	
24	CH	IM	SBB Infrastruktur	
25	CH	RU-F	BLS Cargo AG	
26	CH	RU-F	railCare AG	
27	CH	RU-F	SBB Cargo	
28	CH	RU-F	SBB Cargo International AG	SBB Cargo International

Nr.	Member State	Type of Company	Company name	Reporting Entity
29	CH	WK	CICA SA	
30	CH	WK	DHL FoodLogistics GmbH	
31	CH	WK	Diversified Investments SA	
32	CH	WK	HASTAG (Zürich) AG	
33	CH	WK	Osterwalder St. Gallen AG	
34	CH	WK	SBB Cargo AG	
35	CH	WK	TRANSWAGGON AG	
36	CH	WK	VTG Schweiz GmbH	
37	CH	WK	WASCOSA AG	
38	CZ	IM	PDV RAILWAY a.s.	
39	CZ	IM	Vítkovická doprava a.s.	
40	CZ	IM, RU-F, RU-P	KŽC Doprava, s.r.o.	
41	CZ	IM, RUF, WK	ORLEN Unipetrol Doprava, s.r.o.	
42	CZ	RU-F	DBV-ITL, s.r.o.	
43	CZ	RU-F	Gerhát Train s.r.o.	
44	CZ	RU-F	HSL_Logistik s.r.o.	Slovakia - 3699
45	CZ	RU-F	LTE Logistik a Transport Czechia s.r.o.	
46	CZ	RU-F	LTE Logistik a Transport Czechia s.r.o.	LTE Logistik- und Transport- GmbH = Holding of LTE GROUP
47	CZ	RU-F	Rabbit Rail s.r.o.	
48	CZ	RU-F	SLEZSKOMORAVSKÁ DRÁHA a.s.	
49	CZ	RU-F	SUAS Transportation Service s.r.o.	
50	CZ	RU-F	TORAMOS s.r.o.	
51	CZ	RU-F	TSS Grade a.s., pobočka Česká republika	TSS Grade a.s. Slovenská republika
52	CZ	RU-F	WTT, s.r.o.	
53	CZ	RU-F, RU-P	CityRail, a.s.	
54	CZ	RU-F, RU-P, WK	České dráhy, a.s.	
55	CZ	RU-F, WK	AWT ROSCO a.s.	PKP CARGO INTERNATIONAL
56	CZ	RU-F, WK	ČD Cargo, a.s.	
57	CZ	RU-F, WK	PKP CARGO INTERNATIONAL a.s.	PKP CARGO INTERNATIONAL
58	CZ	RU-P	Die Länderbahn CZ s.r.o.	
59	CZ	WK	Česká republika - Správa státních hmotných rezerv	
60	CZ	WK	DIAMO, státní podnik	
61	CZ	WK	EP Cargo Invest	
62	CZ	WK	Ermewa GmbH	

Nr.	Member State	Type of Company	Company name	Reporting Entity
63	CZ	WK	Ermewa SA	
64	CZ	WK	Felbermayr Transport- und Hebetechnik spol.s.r.o.	
65	CZ	WK	Interfracht s.r.o.	
66	CZ	WK	KOS Trading, akciová společnost	
67	CZ	WK	Lafarge Cement, a.s.	
68	CZ	WK	Liberty Ostrava a.s.	
69	CZ	WK	Lovochemie, a.s.	
70	CZ	WK	NH - TRANS, SE	
71	CZ	WK	Rail Cargo Operator - CSKD s.r.o.	
72	CZ	WK	Railco a.s.	
73	CZ	WK	RYKO PLUS spol. s r.o.	
74	CZ	WK	ŠKODA AUTO a.s.	
75	CZ	WK	Spolek pro chemickou a hutní výrobu, akciová společnost	
76	CZ	WK	V.K.S. Vagon Komerc Speed s.r.o.	
77	CZ	WK	Vápenka Čertovy schody a.s.	
78	CZ	WK	VÁPENKA VITOŠOV s.r.o.	
79	DE	IM	DB Netz AG	
80	DE	IM	Häfen und Güterverkehr Köln AG	
81	DE	IM	Stadtwerke Schweinfurt GmbH	
82	DE	IM	SWEG Schienenwege GmbH	
83	DE	IM, RUF	Hafen Krefeld GmbH & Co. KG	
84	DE	RU-F	boxXpress.de	
85	DE	RU-F	DB Cargo AG	
86	DE	RU-F	LOCON Logistik & Consulting AG	
87	DE	RU-F	LTE Germany GmbH	LTE Logistik- und Transport- GmbH = Holding of LTE GROUP
88	DE	RU-F	SBB Cargo Deutschland GmbH	SBB Cargo International
89	DE	RU-F, WK	Rail Cargo Carrier Germany	Germany, Rail Cargo Carrier Germany, 3163
90	DE	RU-P	DB Regio AG	
91	DE	RU-P	FlixTrain GmbH	FlixBus Sverige AB, Schweden
92	DE	WK	AlzChem Trostberg GmbH	
93	DE	WK	Aretz GmbH und Co. KG	
94	DE	WK	BASF SE	
95	DE	WK	BSAS EisenbahnVerkehrs GmbH & Co.KG	
96	DE	WK	Dortmunder Eisenbahn GmbH	
97	DE	WK	ERR European Rail Rent GmbH	

Nr.	Member State	Type of Company	Company name	Reporting Entity
98	DE	WK	Euro-Waggon GmbH	
199	DE	WK	GATX Rail Austria GmbH	
100	DE	WK	GATX Rail Germany GmbH	
101	DE	WK	ITL Eisenbahngesellschaft mbH	
102	DE	WK	Kombiverkehr Deutsche Gesellschaft für kombinierten Güterverkehr mbH & Co. KG	
103	DE	WK	Logistik Service GmbH	
104	DE	WK	MFD Rail GmbH	
105	DE	WK	On Rail - Gesellschaft für Eisenbahnausrüstung und Zubehör mbH	
106	DE	WK	On Rail Gesellschaft für Vermietung und Verwaltung von Eisenbahnwaggons mbH	
107	DE	WK	Petrochem Mineralöl-Handels-GmbH	
108	DE	WK	Railco a.s.	
109	DE	WK	Schienenfahrzeuge Export-Import Handelsgesellschaft mbH - SFH	
110	DE	WK	Schröder & Klaus GmbH & Co. KG	
111	DE	WK	Spedition Kübler GmbH	
112	DE	WK	TRANSWAGGON GmbH	
113	DE	WK	Tyczka Gase GmbH	
114	DE	WK	voestalpine Rail Center Königsborn GmbH	
115	DE	WK	Vossloh Rail Services Deutschland GmbH	
116	DE	WK	VTG Schweiz GmbH (ex AAE)	
117	DE	WK	WASCOSA AG Luzern	
118	DE	WK	Zürcher Bau GmbH	
119	DK	IM	Oresundsbro Konsortiet	
120	EE	IM, AB	Eesti Raudtee AS	
121	EE	RU-F	AS Operail	Operail Finland Oy 3803
122	ES	IM	ADIF	
123	ES	RU-F	CSP LOGITREN SA	
124	ES	RU-F	GO TRANSPORT SERVICIOS 2018, S.A.	
125	ES	RU-F	TRACCIÓN RAÍL, S.A.U.	
126	ES	WK	Ferrocarrils de la Generalitat de Catalunya	
127	ES	WK	Sociedad de estudios y explotacion de material auxiliar de transportes S.A.	
128	FI	IM	Finnish Traffic Intrastructure Agency	
129	FI	RU-F	Operail Finland Oy	Operail Finland Oy 3804
130	FI	RU-F, RU-P	VR-Group Plc	
131	FR	IM	SNCF Réseau	
132	FR	RU-F	Captrain France	
133	FR	RU-F	DB CARGO FRANCE	
134	FR	RU-F	Europorte	

Nr.	Member State	Type of Company	Company name	Reporting Entity
135	FR	RU-F	FRET SNCF SAS	
136	FR	RU-F, WK	Lineas France	Lineas France - France - 3220
137	FR	RU-P	SNCF Voyageurs SA	
138	FR	RU-P	Trenitalia France	
139	FR	WK	ATIR-RAIL	
140	FR	WK	ERMEWA	
141	FR	WK	Lotras srl	
142	FR	WK	Millet SAS	
143	FR	WK	SOCOMAC	
144	FR	WK	STVA S.A.	
145	FR	WK	Transportes Ferroviarios Especiales S.A.	
146	FR	WK	VTG Rail Europe GmbH	
147	GR	IM	ΟΡΓΑΝΙΣΜΟΣ ΣΙΔΗΡΟΔΡΟΜΩΝ ΕΛΛΑΔΟΣ	
148	HR	IM	HŽ Infrastruktura d.o.o.	
149	HR	RU-F	Adria Transport Croatia, d.o.o.	
150	HR	RU-F	CER Cargo d.o.o.	Central European Railway CO - 3085
151	HR	RU-F	ENNA Transport d.o.o.	ENNA Transport SI (Slovenija 5103)
152	HR	RU-F	PRUŽNE GRAĐEVINE	
153	HR	RU-F, WK	HŽ-Cargo	
154	HR	RU-P	HŽ Putnički prijevoz d.o.o.	
155	HU	IM	GYSEV Zrt.	
156	HU	IM	MÁV Co.	
157	HU	RU-F	Central European Railway CO	Central European Railway CO - 3085
158	HU	RU-F	LTE Hungária Kft.	LTE Logistik- und Transport- GmbH = Holding of LTE GROUP
159	HU	RU-F	MMV Magyar Magánvasút Zártkörűen működő részvénytársaság	
160	HU	RU-F	PKP CARGO INTERNATIONAL HU Zrt.	
161	HU	RU-F, WK	PKP CARGO INTERNATIONAL HU Zrt	PKP CARGO INTERNATIONAL
162	HU	RU-F, WK	Rail Cargo Hungaria Zrt.	
163	HU	RU-P	MÁV-START Zrt.	
164	HU	WK	Felbermayr Immo Sp.z.o.o.	
165	HU	WK	GYSEV Cargo Zrt	
166	HU	WK	TOUAX Rail Ltd.	
167	IT	IM	EAV srl	
168	IT	IM	Ferrotramviaria SpA - Divisione Infrastruttura	
169	IT	IM	Ferrovie del Gargano Gestore Infrastruttura	

Nr.	Member State	Type of Company	Company name	Reporting Entity
170	IT	IM	Ferrovie Emilia Romagna S.r.l.	
171	IT	IM	FERROVIENORD S.p.A.	
172	IT	IM	Infrastrutture Venete	
173	IT	IM	La Ferroviaria Italiana S.p.A.	
174	IT	IM	Rete Ferroviaria Italiana S.p.A.	
175	IT	RU-F	Adriafer srl	
176	IT	RU-F	BLS Cargo Italia S.r.l.	
177	IT	RU-F	DB CARGO ITALIA SRL	
178	IT	RU-F	EVM Rail Srl	
179	IT	RU-F	FuoriMuro Impresa Ferroviaria S.r.L.	
180	IT	RU-F	GTS Rail Spa	
181	IT	RU-F	Hupac SpA	
182	IT	RU-F	INRAIL SPA	
183	IT	RU-F	Interporto Servizi Cargo SpA	
184	IT	RU-F	LTE Italia S.r.l.	LTE Logistik- und Transport- GmbH = Holding of LTE GROUP
185	IT	RU-F	Oceanogate Italia SpA	
186	IT	RU-F	Sangritana SpA	
187	IT	RU-F	SBB Cargo Italia Srl	SBB Cargo International
188	IT	RU-F	TX Logistik Transalpine GmbH - Sede secondaria italiana	
189	IT	RU-F, RU-P	Rail Cargo Carrier Italy	
190	IT	RU-F, RU-P	Trasporto Ferroviario Toscano S.p.A.	
191	IT	RU-F, WK	Mercitalia Rail	
192	IT	RU-P	Busitalia Sita Nord S.r.l.	
193	IT	RU-P	Ferrovie del Gargano srl	
194	IT	RU-P	Grandi Treni Espressi SpA	
195	IT	RU-P	Italo Spa	
196	IT	RU-P	SAD - Trasporto Locale SpA	
197	IT	RU-P	Trenitalia S.p.A.	
198	IT	RU-P	Trenitalia Tper S.c.a.r.l.	
199	IT	RU-P	TRENORD SRL	
200	IT	WK	Giovanni Ambrosetti Auto Logistica S.p.A	
201	IT	WK	LOTRAS	
202	IT	WK	Mercitalia Intermodal Spa	
203	IT	WK	SITFA SpA	
204	IT	WK	Vrail s.r.l.	
205	LU	AB	Administration des chemins de fer	

Nr.	Member State	Type of Company	Company name	Reporting Entity
206	LU	IM	Société Nationale des Chemins de Fer Luxembourgeois (IM)	
207	LU	RU-F	CFL cargo SA	
208	LU	RU-P	Société Nationale des Chemins de Fer Luxembourgeois (SNCFL)	
209	LV	IM	VAS Latvijas dzelzceļš (LDz)	
210	NL	IM	ProRail	
211	NL	RU-F	LTE Netherlands BV	LTE Logistik- und Transport- GmbH = Holding of LTE GROUP
212	NL	RU-F	SBB Cargo Deutschland GmbH	SBB Cargo International
213	NL	RU-F	Shunter Tractie	
214	NL	RU-F	VolkerRail Materieel & Logistiek bv	
215	NL	RU-F, RU-P	Railexperts BV	
216	NL	RU-F, WK	Rail2U	Lineas France - France - 3220
217	NL	RU-F, WK	VTR Rail	Lineas France - France - 3220
218	NL	RU-P	Arriva Netherlands	
219	NL	WK	Eiffage Infra-Rail GmbH	
220	NL	WK	Ministerie van Defensie Koninklijke Landmacht Materieellogistiek Commando Land Afdeling Logistiek	
221	NL	WK	RailRelease B.V.	
222	PL	IM	PKP POLSKIE LINIE KOLEJOWE S.A.	
223	PL	IM, RUP	PKP Szybka Kolej Miejska w Trójmieście Sp. z o. o.	
224	PL	RU-F	Barter S.A.	
225	PL	RU-F	CD Cargo Poland	
226	PL	RU-F	CIECH Cargo SP.z o.o.	
227	PL	RU-F	CL Cargo Logistics Sp. z o.o.	
228	PL	RU-F	CTL Logistics Sp. z o.o.	
229	PL	RU-F	Eurasian Railway Carrier Sp. z o.o.	
230	PL	RU-F	Freightliner PL Sp. z o.o.	
231	PL	RU-F	IGL Sp. z o.o. Sp.k.	
232	PL	RU-F	Inter Cargo Sp. z o.o.	
233	PL	RU-F	IRT Sp. zo.o.	
234	PL	RU-F	LOTOS Kolej Sp. z o.o.	
235	PL	RU-F	LTE Polska Spółka z o.o.	LTE Logistik- und Transport- GmbH = Holding of LTE GROUP
236	PL	RU-F	METRANS Rail sp. z o.o.	
237	PL	RU-F	OWLP	

Nr.	Member State	Type of Company	Company name	Reporting Entity
238	PL	RU-F	PBS TRANSKOL	
239	PL	RU-F	PCC Intermodal S.A.	
240	PL	RU-F	PKP Energetyka S.A.	
241	PL	RU-F	Poland	
242	PL	RU-F	POZ BRUK Sp. z o.o.	
243	PL	RU-F	PROTOR Spółka z ograniczoną odpowiedzialnością Spółka komandytowa	
244	PL	RU-F	PUK Kolprem	
245	PL	RU-F	Rail Cargo Carrier - Poland Sp. z o.o.	
246	PL	RU-F	Rail Force One Poland Sp. z o.o.	
247	PL	RU-F	RailTrans Poland sp. z o.o. sp.k.	
248	PL	RU-F	T&C Sp. z o.o.	
249	PL	RU-F	TKP SILESIA Sp. Z O.O. Sp. K.	
250	PL	RU-F	Track Tec Logistics sp. z o.o.	
251	PL	RU-F	Track Tec Rail sp. z o.o.	
252	PL	RU-F	Trainspeed Sp. z o.o.	
253	PL	RU-F, RU-P	CARGO Master Sp. z o.o.	
254	PL	RU-F, RU-P	NKN Usługi Kolejowe Sp. z o.o.	
255	PL	RU-F, WK	CEMET S.A.	
256	PL	RU-F, WK	DB Cargo Polska S.A	
257	PL	RU-F, WK	DB Cargo Spedkol Spółka z ograniczoną odpowiedzialnością	
258	PL	RU-F, WK	Dolnośląskie Przedsiębiorstwo Napraw Infrastruktury Komunikacyjnej "DOLKOM" Sp. z o. o.	
259	PL	RU-F, WK	Ecco Rail Sp. z o.o.	
260	PL	RU-F, WK	Grupa Azoty "KOLTAR" Sp. z o.o.	
261	PL	RU-F, WK	JSW Logistics Spółka z ograniczoną odpowiedzialnością	
262	PL	RU-F, WK	Kopalnia Piasku Kotlarnia S.A.	
263	PL	RU-F, WK	Lubelski Węgiel BOGDANKA S.A	
264	PL	RU-F, WK	Moris Sp. z o.o.	
265	PL	RU-F, WK	ORLEN KolTrans S.A.	
266	PL	RU-F, WK	Pomorskie Przedsiębiorstwo Mechaniczno - Torowe sp. z o.o.	
267	PL	RU-F, WK	Przedsiębiorstwo Napraw i Utrzymania Infrastruktury Kolejowej w Krakowie Sp. z o.o.	
268	PL	RU-F, WK	Rail Polska Sp. z o.o.	

Nr.	Member State	Type of Company	Company name	Reporting Entity
269	PL	RU-F, WK	TORPOL S.A.	
270	PL	RU-F, WK	Zakład Robót Komunikacyjnych - DOM w Poznaniu sp. z o.o.	
271	PL	RU-F, WK	ZUE S.A.	
272	PL	RU-P	"Koleje Małopolskie" sp. z o.o.	
273	PL	RU-P	"Koleje Mazowieckie - KM" sp. z o.o.	
274	PL	RU-P	Koleje Slaskie sp. z o.o.	
275	PL	RU-P	Łódzka Kolej Aglomeracyjna Sp. z o.o.	
276	PL	WK	GATX Rail Poland Sp. z o.o.	
277	PL	WK	Lotos Kolej Sp. z o.o.	
278	PL	WK	Tankwagon Sp. z o. o.	
279	PT	IM	Infraestruturas de Portugal	
280	PT	RU-P	CP - Comboios de Portugal EPE	
281	PT	RU-P	FERTAGUS, S.A.	
282	PT	WK	ADP Fertilizantes, S.A.	
283	PT	WK	CIMPOR – SERVIÇOS, S.A.	
284	PT	WK	Takargo, Transporte de Mercadorias, S.A.	
285	RO	IM	CFR	
286	RO	RU-F	LTE-RAIL ROMANIA S.R.L.	LTE Logistik- und Transport- GmbH = Holding of LTE GROUP
287	RO	RU-P	SC INTERREGIONAL CALATORI SRL	
288	RS	RU-F	ENNA Transport Bgd	ENNA Transport SI (Slovenija 5103)
289	RS	WK	ARS Altmann AG	
290	SE	IM	Trafikverket	
291	SE	RU-F	Svensk Tagkraft AB	
292	SE	RU-F, WK	Green Cargo	
293	SE	RU-P	FlixBus Sverige AB	FlixBus Sverige AB, Schweden
294	SE	RU-P	SJ AB	
295	SE	WK	Stena Recycling AB	
296	SE	WK	TRANSWAGGON AB	
297	SI	IM	SŽ Infrastruktura, d.o.o.	
298	SI	RU-F	ENNA Transport SI d.o.o.	ENNA Transport SI (Slovenija 5103)
299	SI	RU-F	SŽ Tovorni promet d.o.o.	
300	SK	IM	Železnice Slovenskej republiky	
301	SK	RU-F	CENTRAL RAILWAYS, a.s.	
302	SK	RU-F	CER Slovakia a.s.	Central European Railway CO - 3085
303	SK	RU-F	DMG, s.r.o.	

Nr.	Member State	Type of Company	Company name	Reporting Entity
304	SK	RU-F	HSL_Logistik s.r.o.	Slovakia - 3699
305	SK	RU-F	I.G.Rail, s.r.o.	
306	SK	RU-F	LOKORAIL, a.s.	
307	SK	RU-F	LTE Logistik a Transport Slovakia s.r.o.	
308	SK	RU-F	LTE Logistik a Transport Slovakia s.r.o.	LTE Logistik- und Transport- GmbH = Holding of LTE GROUP
309	SK	RU-F	Rail Cargo Carrier Slovakia s.r.o.	
310	SK	RU-F	Rail Support, s.r.o.	
311	SK	RU-F	Railtrans International, a.s.	HU, CZ, AT, DE - RTI, 3281
312	SK	RU-F	Retrack Slovakia s.r.o	
313	SK	RU-F	TSS Grade a.s. Slovenská republika	TSS Grade a.s. Slovenská republika
314	SK	RU-F	U.S.Steel Košice s.r.o	
315	SK	RU-F	Železničné stavby a.s. Košice	
316	SK	RU-F, WK	Hornonitrianske Bane zamestnanecká, akciová spoločnosť	
317	SK	RU-F, WK	PKP CARGO INTERNATIONAL SK a.s.	PKP CARGO INTERNATIONAL SK a.s.,
318	SK	RU-F, WK	Železničná spoločnosť Cargo Slovakia, a. s.	
319	SK	WK	Adria kombi d.o.o.	
320	SK	WK	Cargo Wagon, a.s.	
321	SK	WK	Duslo, a.s.	
322	SK	WK	EEWS, spol. s r. o.	
323	SK	WK	Felbermayr Slovakia s.r.o.	
324	SK	WK	Railtrans Wagon, s.r.o	
325	TR	WK	TRANSWAGGON Vagon Isletmeleri Ltd. Sti.	

ANNEX 3: RESPONSES CONTACT LIST 2021

Nr.	Member State	Type of Company	Company name	Reporting Entity
1	BE	RU-F	DB Cargo Belgium bv	
2	BE	RU-F	Railtraxx NV	
3	BG	RU-F	"Порт Рейл" ЕООД	
4	BG	RU-F	Express Service OOD	
5	BG	RU-F	PORTRAIL EOOD	
6	CH	RU-F	Widmer Rail Services AG	
7	CZ	AB	Správa železnic, státní organizace	
8	CZ	IM	Správa železnic, státní organizace	
9	CZ	RU-F	DB Cargo Czechia s.r.o.	

Nr.	Member State	Type of Company	Company name	Reporting Entity
10	CZ	RU-F	EUROVIA CS, a.s.	
11	CZ	RU-F	GJW Praha spol. s r.o.	
12	CZ	RU-F	HROCHOSTROJ a.s.	
13	CZ	RU-F	LokoTrain s.r.o.	
14	CZ	RU-F	Prvá Slovenská železničná, akciová spoločnosť	Prvá Slovenská železničná, akciová spoločnosť branch office RO, HU, CZ
15	CZ	RU-F	Sokolovská uhelná, právní nástupce,a.s.	
16	CZ	RU-F	SUAS Transportation s.r.o.	
17	CZ	RU-F	Vítkovická doprava a.s.	
18	CZ	RU-P	Leo Express	
19	CZ	WK	EP Cargo Invest	
20	CZ	WK	HROCHOSTROJ a.s.	
21	CZ	WK	Prvá Slovenská železničná, akciová spoločnosť	Prvá Slovenská železničná, akciová spoločnosť branch office RO, HU, CZ
22	CZ	WK	ZX-Benet CZ s.r.o.	
23	DE	RU-F	Bentheimer Eisenbahn AG	
24	DE	RU-F	SGL Schienen Güter Logistik	
25	DE	RU-F	SWEG Südwestdeutsche Landesverkehrs-GmbH	
26	DE	RU-P	agilis Eisenbahngesellschaft mbH & Co. KG (BeNEX GmbH)	
27	DE	RU-P	Albtal-Verkehrs-Gesellschaft mbH	
28	DE	RU-P	Bentheimer Eisenbahn AG	
29	DE	RU-P	cantus Verkehrsgesellschaft mbH (BeNEX GmbH)	
30	DE	RU-P	DB Fernverkehr AG	
31	DE	RU-P	metronom Eisenbahngesellschaft mbH (BeNEX GmbH)	
32	DE	RU-P	NBE nordbahn Eisenbahngesellschaft mbH & Co. KG (BeNEX GmbH)	
33	DE	RU-P	ODEG Ostdeutschen Eisenbahn GmbH (BeNEX GmbH)	
34	DE	RU-P	SWEG Südwestdeutsche Landesverkehrs-GmbH	
35	DE	WK	On Rail - Gesellschaft für Eisenbahnausrüstung und Zubehör mbH	
36	DK	IM	Banedanmark	
37	ES	RU-F	Ferrovial Railway	
38	ES	RU-F	Renfe Mercancias S.A.U.	
39	ES	RU-F	Renfe Mercancías SLE	

Nr.	Member State	Type of Company	Company name	Reporting Entity
40	ES	RU-F	Transfesa Logistics S.A.	
41	FR	RU-F	SAS OFP Sud-Ouest	
42	HR	RU-F	LOG RAIL d.o.o.	
43	HR	RU-F	Rail&Sea d.o.o.	
44	HU	AB	VPE Vasúti Kapacitás-elosztó Kft.	
45	HU	RU-F	MÁV FKG Felépítménykarbantartó és Gépjavító Korlátolt Felelősségű Társaság	
46	HU	RU-F	Prvá Slovenská železničná, akciová spoločnosť	Prvá Slovenská železničná, akciová spoločnosť branch office RO, HU, CZ
47	HU	WK	Prvá Slovenská železničná, akciová spoločnosť	Prvá Slovenská železničná, akciová spoločnosť branch office RO, HU, CZ
48	IT	IM	GTT SPA	
49	IT	RU-F	Mercitalia Shunting & Terminal S.r.l.	
50	IT	RU-P	Busitalia Sita Nord S.r.l.	
51	IT	RU-P	Ferrovie del gargano srl	
52	IT	RU-P	GTT SPA	
53	IT	RU-P	Mercitalia Shunting & Terminal S.r.l.	
54	IT	RU-P	Sistemi Territoriali Spa	
55	IT	WK	Ambrogio Trasporti	
56	IT	WK	CEPRINI COSTRUZIONI S.R.L.	
57	IT	WK	FER RENT S.r.l.	
58	IT	WK	GCF Generale Costruzioni Ferroviarie SpA	
59	LT	IM	JSC "Lithuanian Railways"	
60	LT	RU-F	JSC "Lithuanian Railways"	
61	LT	RU-P	JSC "Lithuanian Railways"	
62	LT	WK	JSC "Lithuanian Railways"	
63	LU	RU-F	SIBELIT	
64	LV	RU-F	SIA LDZ Cargo (LDZ Cargo)	
65	LV	WK	SIA LDZ Cargo (LDZ Cargo)	
66	NL	RU-F	DB Cargo Nederland N.V.	
67	PL	RU-F	B.R.S. sp. z o.o.	
68	PL	RU-F	CEMET S.A.	
69	PL	RU-F	CIECH Cargo	
70	PL	RU-F	Eurasian Railway Carrier Sp. z o.o.	
71	PL	RU-F	FDM REW Damian Żur	

Nr.	Member State	Type of Company	Company name	Reporting Entity
72	PL	RU-F	HSL Polska	
73	PL	RU-F	IRT Sp. zo.o.	
74	PL	RU-F	JSW Logistics Spółka z ograniczoną odpowiedzialnością	
75	PL	RU-F	Kolej Bałtycka S.A.	
76	PL	RU-F	LokoTrain s.r.o. Sp. z o.o. Oddział w Polsce	
77	PL	RU-F	Lubelski Węgiel "BOGDANKA" S.	
78	PL	RU-F	NKN Usługi Kolejowe Sp. z o.o.	
79	PL	RU-F	Railpolonia sp. z o.o.	
80	PL	RU-F	RuG Polska Sp. z o.o.	
81	PL	RU-F	Transchem Sp. z o.o.	
82	PL	RU-F	WISKOL 1 Sp. z o.o.	
83	PL	RU-P	B.R.S. sp. z o.o.	
84	PL	RU-P	NKN Usługi Kolejowe Sp. z o.o.	
85	PL	WK	CEMET S.A.	
86	PL	WK	JSW Logistics Spółka z ograniczoną odpowiedzialnością	
87	PL	WK	Lubelski Węgiel "BOGDANKA" S.	
88	PL	WK	Transchem Sp. z o.o.	
89	PT	RU-F	Medway - Operador Ferroviário e Logístico de Mercadorias, SA	
90	PT	RU-F	Takargo	
91	PT	WK	Medway - Operador Ferroviário e Logístico de Mercadorias, SA	
92	RO	RU-F	DB Cargo Romania	
93	RO	RU-F	Prvá Slovenská železničná, akciová spoločnosť	Prvá Slovenská železničná, akciová spoločnosť branch office RO, HU, CZ
94	RO	WK	Prvá Slovenská železničná, akciová spoločnosť	Prvá Slovenská železničná, akciová spoločnosť branch office RO, HU, CZ
95	SE	IM	Inlandsbanan AB	
96	SE	RU-F	CFL cargo Sverige AB	
97	SI	IM	ORLEN Unipetrol Doprava, s.r.o.	Slovensko, 3115, ORLEN Unipetrol Doprava, s.r.o.
98	SI	RU-F	ORLEN Unipetrol Doprava, s.r.o.	Slovensko, 3115, ORLEN Unipetrol Doprava, s.r.o.

Nr.	Member State	Type of Company	Company name	Reporting Entity
99	SK	RU-F	Bulk Transshipment Slovakia, a.s.	
100	SK	RU-F	Prvá Slovenská železničná, akciová spoločnosť	Prvá Slovenská železničná, akciová spoločnosť branch office RO, HU, CZ
101	SK	RU-F	SK - H Trans, s.r.o.	
102	SK	RU-F	SLOV-VAGON, a.s.	
103	SK	WK	BUDAMAR LOGISTICS, a.s.	
104	SK	WK	Prvá Slovenská železničná, akciová spoločnosť	Prvá Slovenská železničná, akciová spoločnosť branch office RO, HU, CZ
105	SK	WK	SLOV-VAGON, a.s.	
106	UK	RU-F	DB Cargo UK	