# 6th report of the TAF TSI Implementation

## RU/IM Telematics Joint Sector Group (JSG)

August 2017

**Version 1.0**
**Jan-Christian Arms, JSG Vice-chairman**

## Document history

| Version | Name | Changes | Date |
|---|---|---|---|
| 0.1 | Jan-Christian Arms | Initial version for IRG | 30.08.2017 |
| 0.2 | Jan-Christian Arms | Revised at IRG | 14.09.2017 |
| 0.3 | Jan-Christian Arms | Approved at JSG | 21.09.2017 |
| 0.4 | Jan-Christian Arms | Agreed with ERA at JF | 06.10.2017 |
| 1.0 | Jan-Christian Arms | Document presented at Cooperation Group | 18.10.2017 |

# Contents

## LIST OF TABLES

## LIST OF DIAGRAMS

# EXECUTIVE SUMMARY

This 6th TAF implementation report summarized the results received via the JSG Reporting Tool in June/July 2017 and thus shows the status of implementation by 30 June 2017.

Starting from the first report, invitations and responses have grown in all aspects. After stagnating, responses have grown again from the 5th to the 6th reporting session. The response rate however, calculated as number of responses in relation to number of invitations, is quite stable oscillating between 42 % and 45 % since the 2nd reporting session. The feedback comprises twenty-three EU Member States plus Norway, Switzerland and Turkey.

Regarding the TAF TSI functions reported, the following results can be observed:

- The majority of IMs having reported to the present query have completed the Primary Location Codes for their network.
- The vast majority of companies (close to 90 %) having replied to the query possess a Company Code.
- The feedback of the current questionnaire shows a difference in level of fulfilment for Common Interface between IMs, RUs-F and WKs. The majority of IMs has already implemented, while most of RUs-F and WKs are still developing.
- The degree of implementation for Train Running Information is at 45 % for IMs and 20 % for RUs-F, showing an increase of about 5 % each.
- 70 % of the participating RUs-F started implementing the Train Composition Message.
- Implementation of the WIMO-function rests at very low degree of completion with no sign of improvement over time.
- More than half of the RUs-F companies already started implementing the Consignment Note Data.
- A number of companies fulfil the RSRD-functionality via the common sector tool RSRD$^2$, so that the degree of implementation remains at about 65 %.

At European level the Degree of Implementation shows different trends for IMs and RUs-F. Implementation of TAF TSI functions for IMs generally display a positive evolution, even though diagram 23 shows a slight decrease of the DI due to increase of participation in the survey. The proportion of RUs having finished implementation has increased slightly at a low level (diagram 24). Moreover, due to irregular participation to the survey of RUs-F, the development of the TAF TSI functions is undetermined.

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 does not reflect real situation.

# 1. BACKGROUND TO THE ASSIGNMENT

According to Article 5, Section 1, of Commission Regulation (EU) No 1305/2014 relating to the Telematics Applications for Freight subsystem (TAF TSI), the European Union Agency for Railways (ERA) shall assess and oversee its implementation.

The Agency has established the 'TAF TSI Implementation Cooperation Group' in order to evaluate the reports of the sector. The remit of this group is monitoring the parameters for RU/IM communication of both TAF and TAP TSIs. Members of the European railway sector are encouraged to submit their reports through the JSG to the Agency.

## 2. METHODOLOGY

### General assumptions

Starting with the 6<sup>th</sup> Reporting session, the monitoring of RU/IM functions is being carried out using one common questionnaire for both TAF and TAP TSIs. However, results from the survey are presented in two separate reports. This report is related only to the TAF TSI.

The progress of implementation of the TAF and TAP TSI is reported twice a year based on the following assumptions:

- Companies are reporting per mandatory TAF TSI function compared to their own Master Plan target date. In case there is no company Master Plan it will be reported against the target implementation date.
- The level of fulfilment will be displayed in predetermined percentage steps at 0%, 25%, 50%, 75% and 100%.
- Each message based function is realized at 100%, if there is at least one implementation of message exchange in production, even if with a single partner only.

The level of fulfilment in terms of percentage steps are defined as follows:

- 0% - Level 1: Not started - Project not launched
- 25% - Level 2: Initiating phase - Implementation plan is available in the company
- 50% - Level 3: Planning phase - Project development
- 75% - Level 4: Executing phase - Pilot project / System testing
- 100% - Level 5: In-Production & Monitor and Control: Finished means 1st Telematic data exchange is implemented

The obligation to meet functions of the TAF and TAP TSI is sometimes limited to specific stakeholders of the railway sector. Evaluation of the results of this survey is therefore stakeholder-specific. For that reason and in accordance with European legislation the following stakeholders are taken into account:

- Infrastructure Manager (IM)
- Railway Undertaking for Freight transport (RU-F)
- Railway Undertaking for Passenger transport (RU-P)
- Wagon Keeper (WK)
- Allocation Body (AB)

### Establishment of this report

This report summarised the results received via the JSG Reporting Tool during the sixth reporting period lasting from 19 June 2017 to 14 July 2017 and thus shows the status of implementation by 30 June 2017. Diagrams in the following chapters of this report show results per RU/IM function summarised in an anonymous way. The present report integrates also data from wagon keepers using RSRD2 submitted by UIP. Table 1 gives an overview about the history of reporting periods.

| Report session | Reporting period | Number of questions[1] |
|---|---|---|
| 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 |

Table 1: Reporting periods

The 'TAF/TAP TSI Implementation Report Volume 6' questionnaire contains ten question groups, eight 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 |
| | Train Running Information (TRI) | X | X | | | |
| | Train Composition Message (TCM) | | X | | | |
| | Consignment Note Data (CND) | | X | | | |
| | Wagon InterModal unit Operational database (WIMO) | | X | | | |
| | Rolling Stock Reference Database (RSRD) | | | | X | |

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

- Primary Location Codes (PLC) - IMs only
- Company Code (CC) – all companies
- Common Interface (CI) – all companies
- Train Running Information (TRI) - IMs and RUs-F
- Train Composition Message (TCM) – RUs-F only
- Consignment Note Data (CND) – RUs-F only
- Wagon and Intermodal Unit Operating Database (WIMO) – RUs-F only
- Rolling Stock Reference Database (RSRD) - WKs only

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

- Company information
- Sector Tools in use

This report was drafted by the Implementation Reporting Group (IRG), the members of which are listed in Annex 1. As a result, it was endorsed at the JSG meeting on 21 September 2017 and published accordingly. It will be presented at the ERA TAF TSI Implementation Cooperation Group meeting on 18 and 19 October 2017.

---

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

## 3. PARTICIPATION IN THE SURVEY

### 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. Starting from the first report, invitations and responses have grown in all aspects. After stagnating, responses have grown again from the 5th to the 6th reporting session.

The 6th report includes 66 WKs submitted by UIP using RSRD[2].

**Evolution of participation**
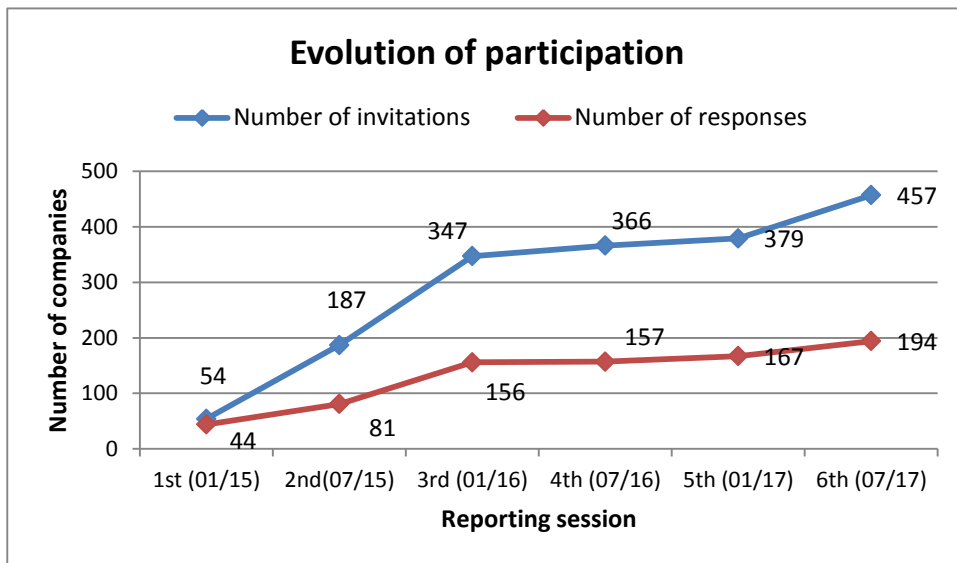


Diagram 1: Evolution of participation over time

The response rate however, calculated as number of responses in relation to number of invitations, is quite stable oscillating between 42 % and 45 % since the 2nd reporting session (see diagram 2).
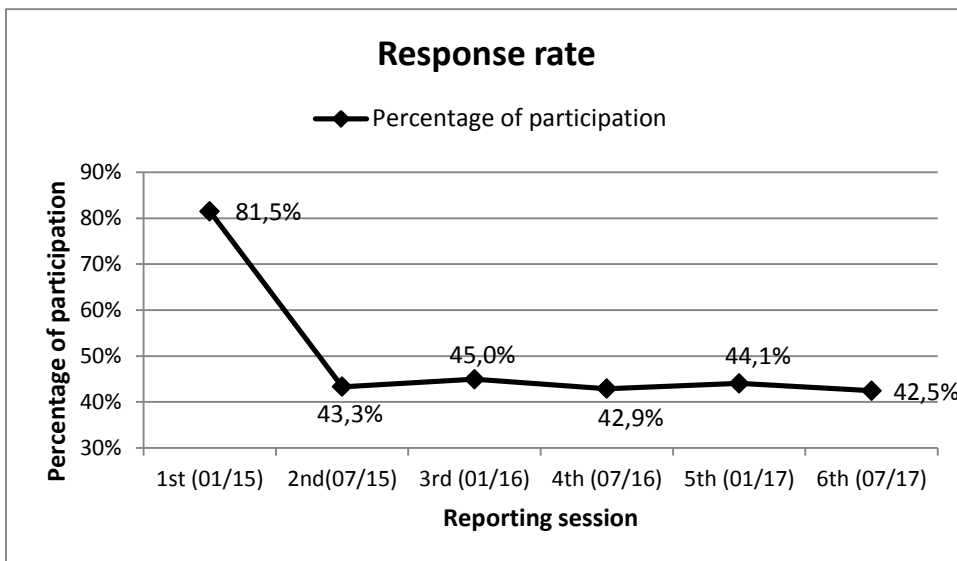
**Response rate**



Diagram 2: Evolution of response rate over time

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

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

Diagram 3 indicates the distribution of total responses per country. The feedback comprises twenty-three EU Member States plus Norway, Switzerland and Turkey. The average number of answers per country is 7.
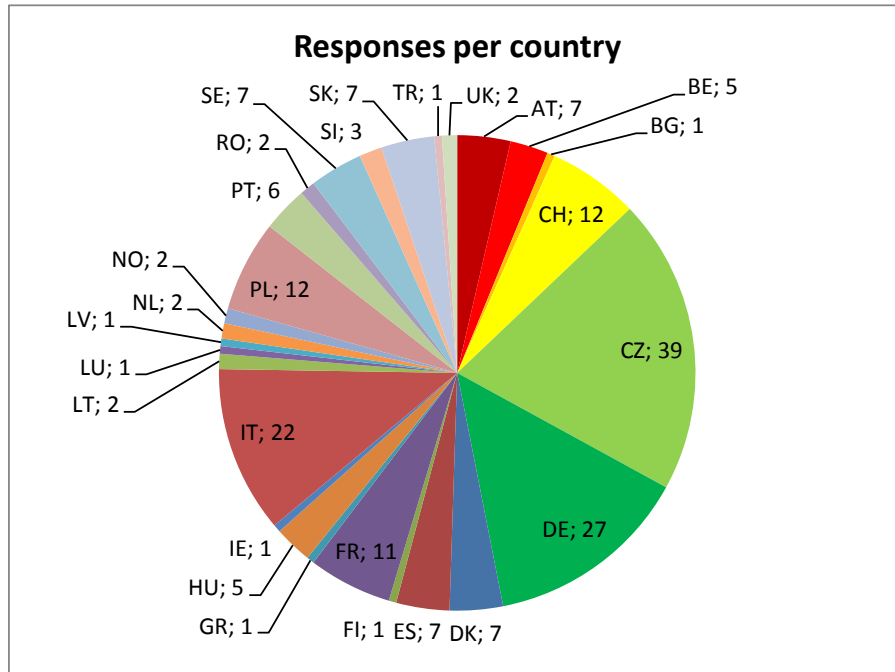


Diagram 3: Number of responses per country

Diagram 4 shows the distribution and the development of responses per country.
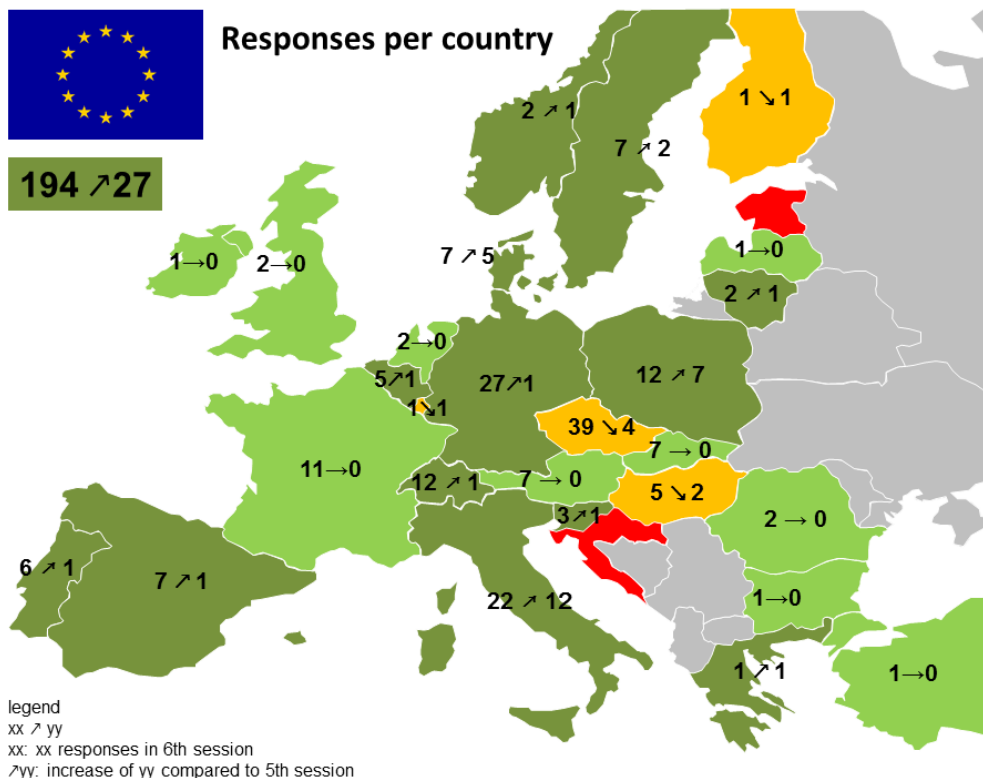


Diagram 4: Evolution of responses per country

## Participation per company type

The total number of responses displayed in diagram 1 (194 companies) and listed in Annex 2 is lower than the total number of company types shown in diagram 5 hereafter (244 companies). The difference is due to the fact, that some answers affect multiple roles of companies, such as RU and WK at the same time. Nearly all of the growth in participation of 47 types of companies is caused by passenger railway undertakings participating for the first time.
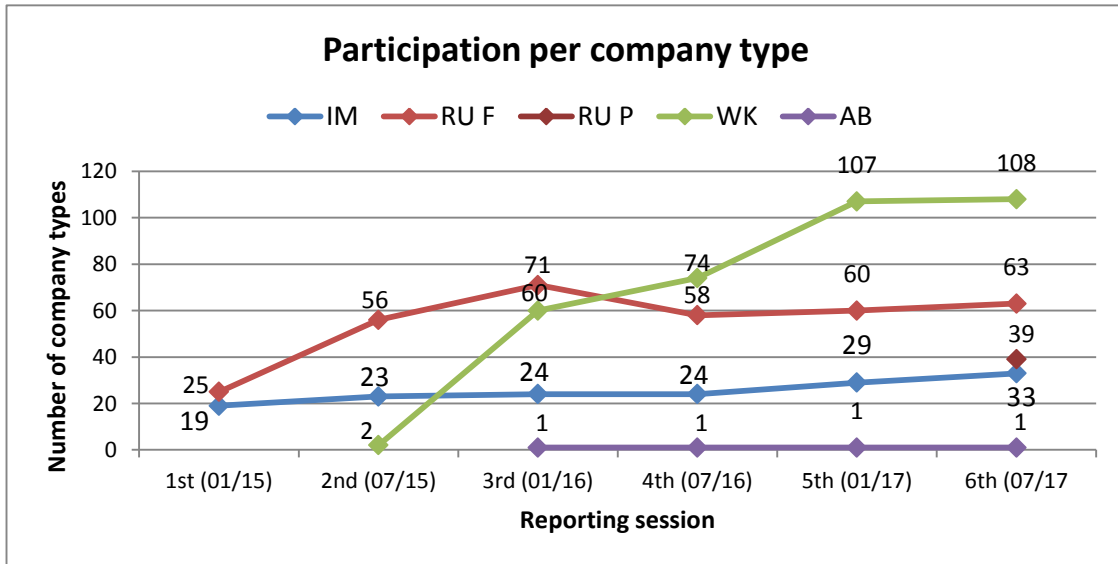


Diagram 5: Evolution of participating per company type over time

## 4. IMPLEMENTATION MONITORING OF TAF TSI FUNCTIONS

### Common Reference Files – Primary Location Codes (IMs)

The Target Implementation Milestone for realisation of the Primary Location Code Function (PLC) according to the TAF TSI Masterplan was 2013. This activity corresponds to Primary Location Codes, which have to be defined by IMs. Consequently, the following 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 yet taken into account.

Diagram 6 indicates, that the majority of IMs reported to have completed the Common Reference Files for locations on their network. However, complete population of PLC is not yet reached.
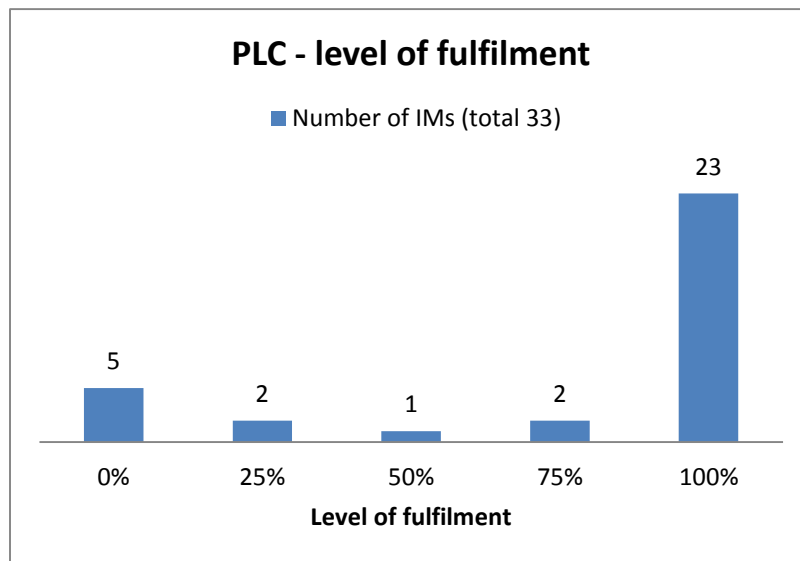


Diagram 6: Common Reference Files - Primary Location Codes (PLC)

Regarding the evolution of PLC implementation, diagram 7 shows 23 IMs with complete implementation out of 33 IMs in the survey. The number of participating IMs has grown more than the ones with complete implementation, which leads to a decline to 70% of degree of implementation (see diagram 21).
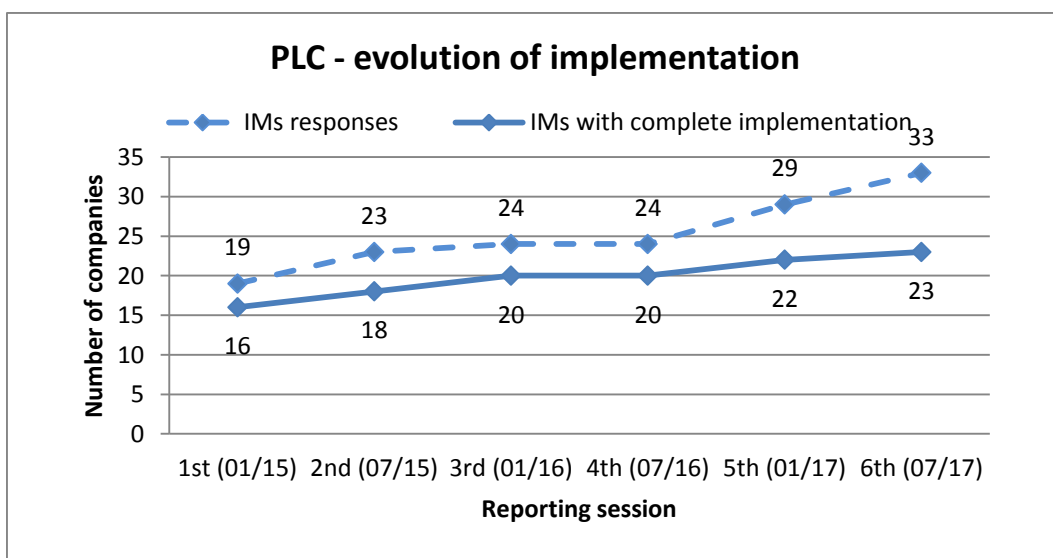


Diagram 7: Evolution of PLC implementation

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

## CC - level of fulfilment

Number of IMs (total 33)  Number of RUs-F (total 63)
Number of WKs (total 108)
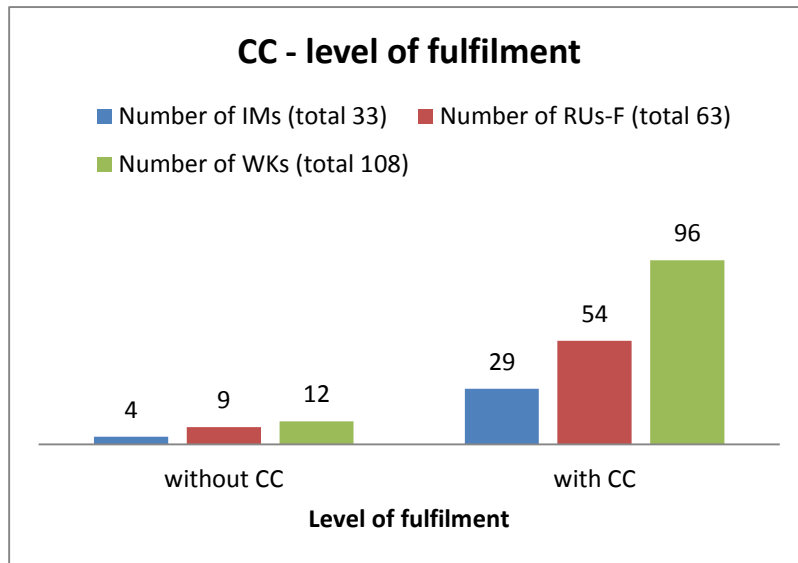
Diagram 8: Common Reference Files - Company Codes (CC)

According to Diagram 9, the number of companies with CCs grew slightly for all types. The degree of implementation is close to 90% for all of them.

## CC - evolution of implementation
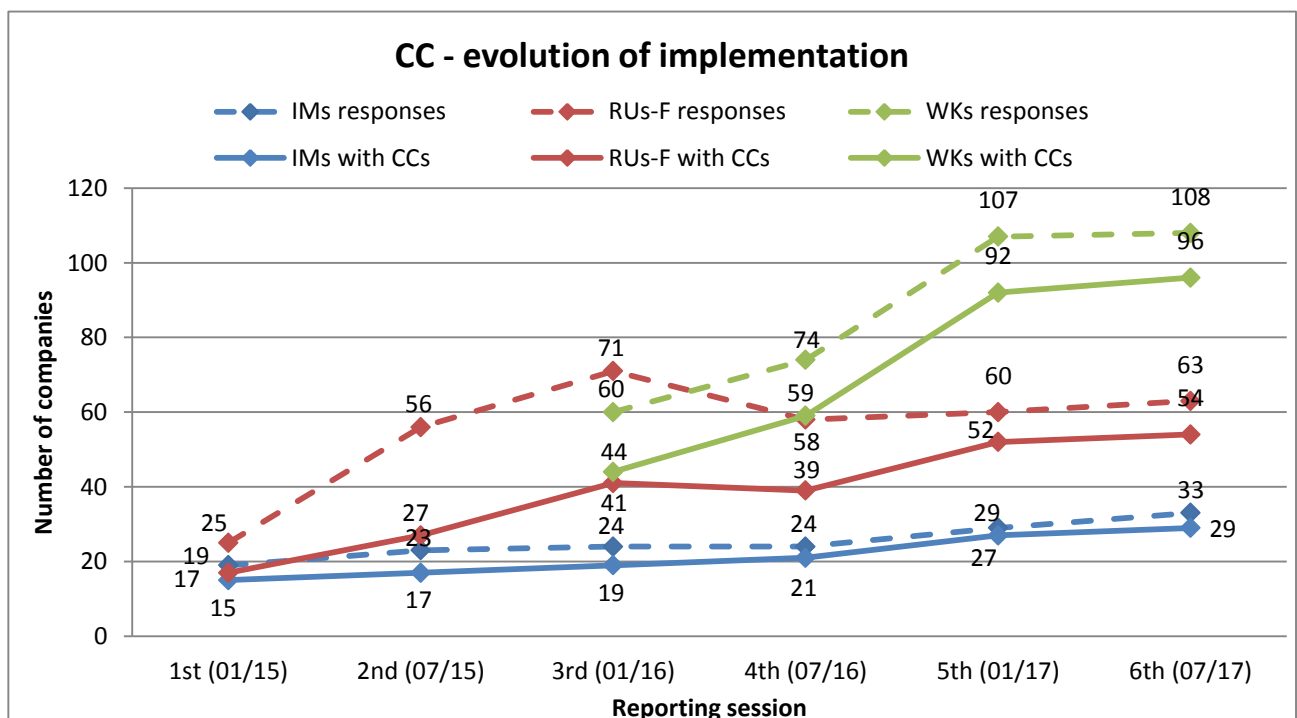
Diagram 9: Evolution of implementation for Company Codes

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



**CI - level of fulfilment**

- Number of IMs (total 33)
- Number of RUs-F (total 63)
- Number of WKs (total 107)
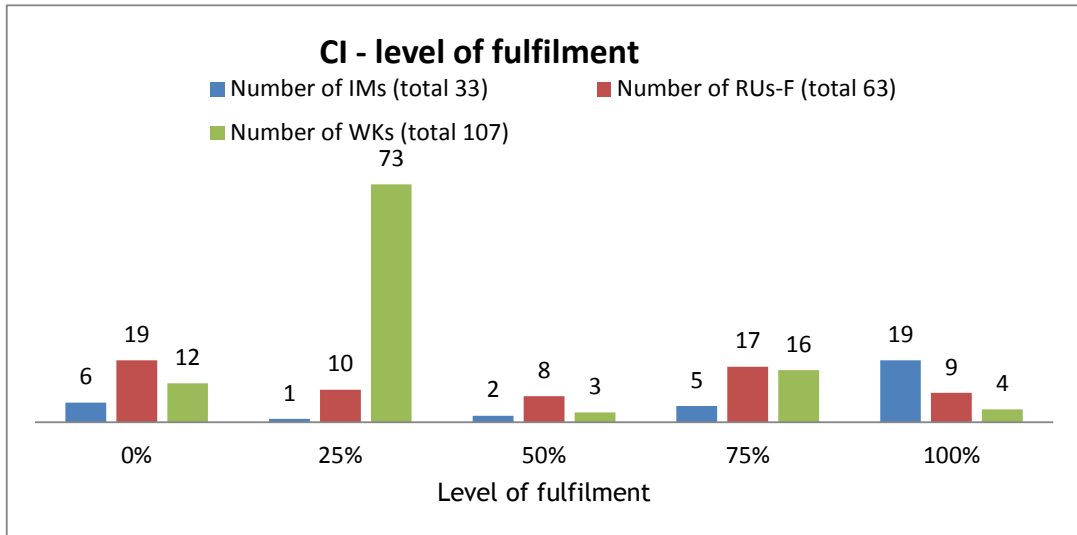
Diagram 10: Common Reference Files – Common Interface (CI)

The development of complete implementation of the CI over time according to diagram 11 shows again the relation to the number of responses per company type.  60% of IMs have already finished the implementation of the CI. However, with completion being at between 10% and 15% of responding companies, the majority of RUs-F is still developing. For WKs completion is below 5%, projects have not started yet or are at initiating phase. RSRD$^2$ has yet not implemented the CI. WKs using RSRD$^2$ therefore form part of the 25% level.



**CI - evolution of implementation**

- IMs responses
- IMs with complete implementation
- Rus-F responses
- Rus-F with complete implementation
- WKs responses
- WKs with complete implementation
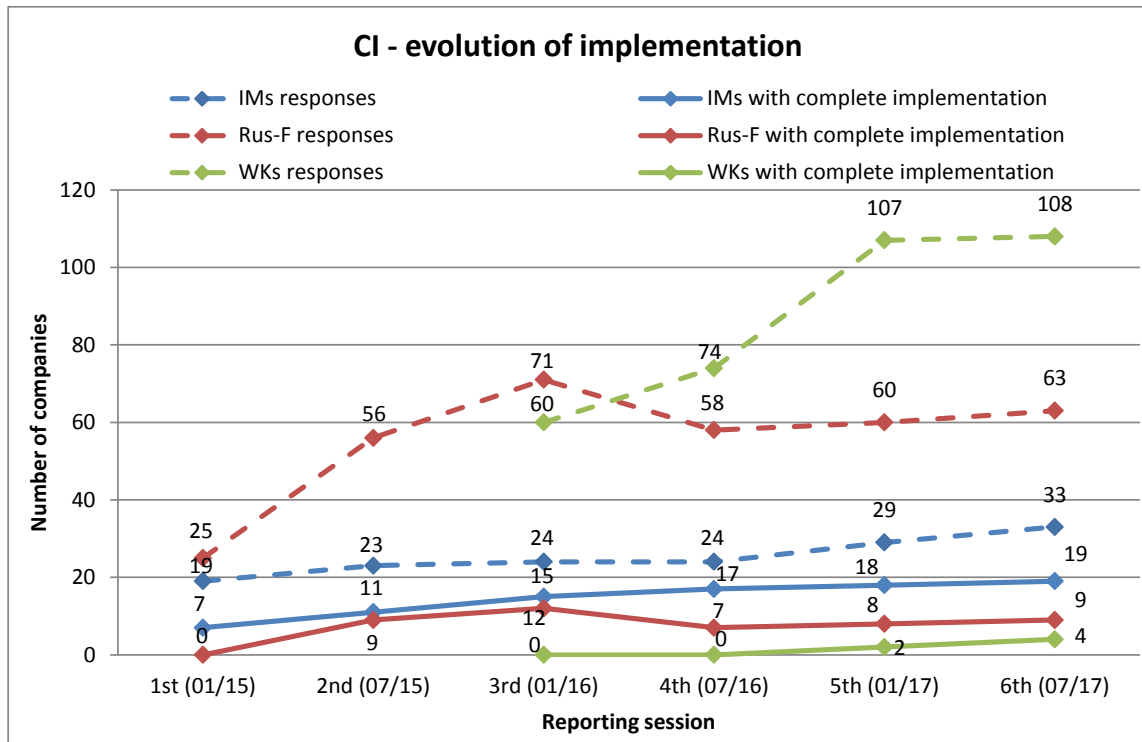
Diagram 11: Evolution of implementation for Common Interface

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

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

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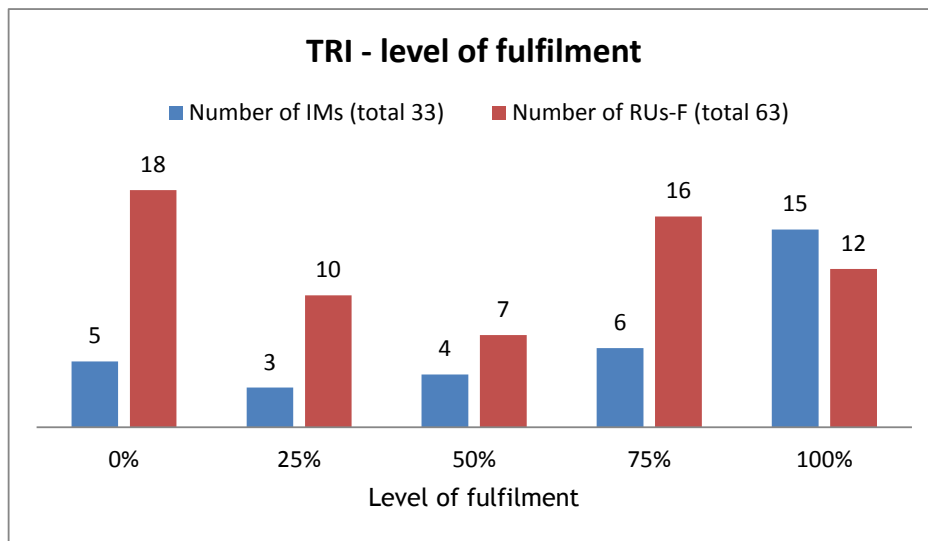


Diagram 12: Train Running Information (TRI)

Regarding diagram 13, both the number of IMs and RUs-F having implemented the TRI and the degree of completion slightly increased in comparison to the 5th reporting session.
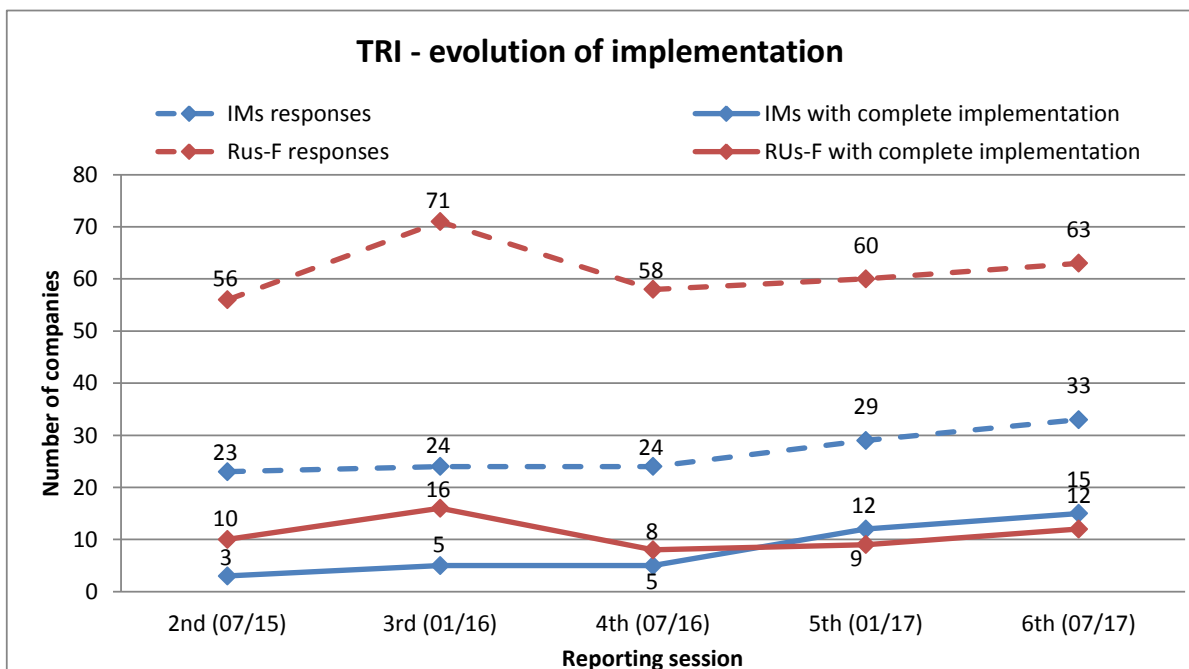


Diagram 13: Evolution of implementation for Train Running Information

Diagram 14 gives an impression about the state of implementation of TRI by IMs in countries across Europe. The IMs having the longest network have been taken as relevant for the country. For IMs still in development the current planned end date and the respective level of fulfilment is shown in diagram 14.
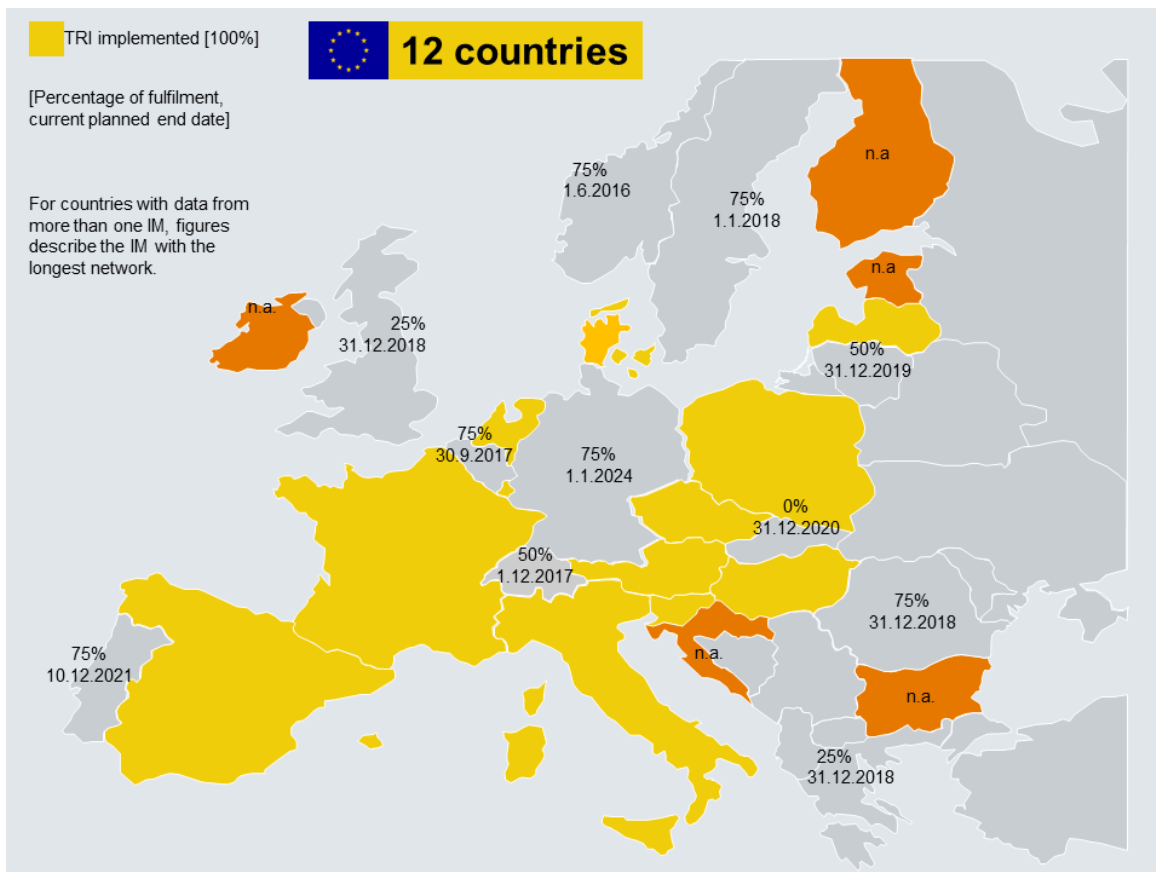


Diagram 14: Implementation of TRI of IMs across European countries

## Train Composition Message (RUs-F)

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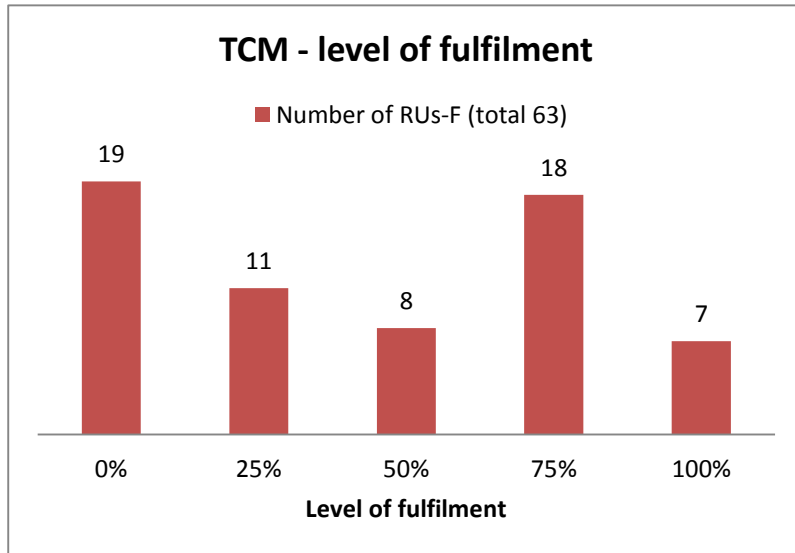


Diagram 15: Train Composition Message (TCM)

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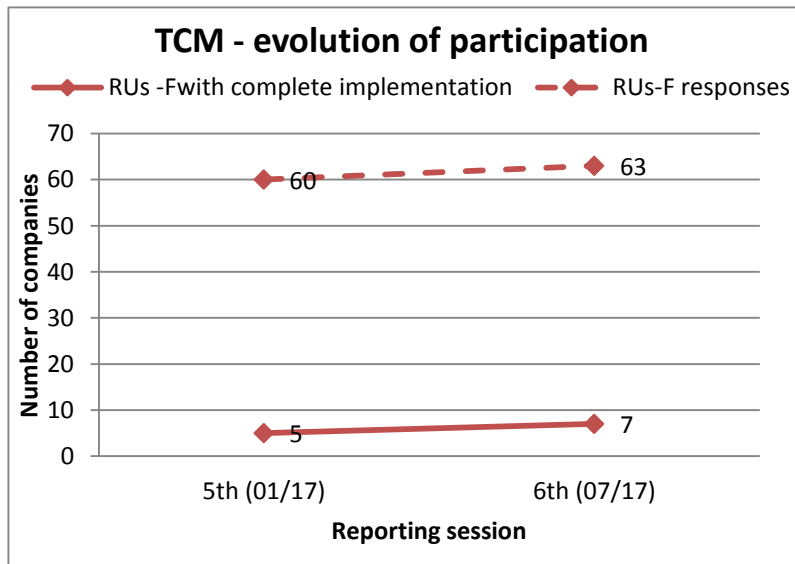


Diagram 16: Evolution of implementation for Train Composition Message

## Consignment Note Data (RUs-F)

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

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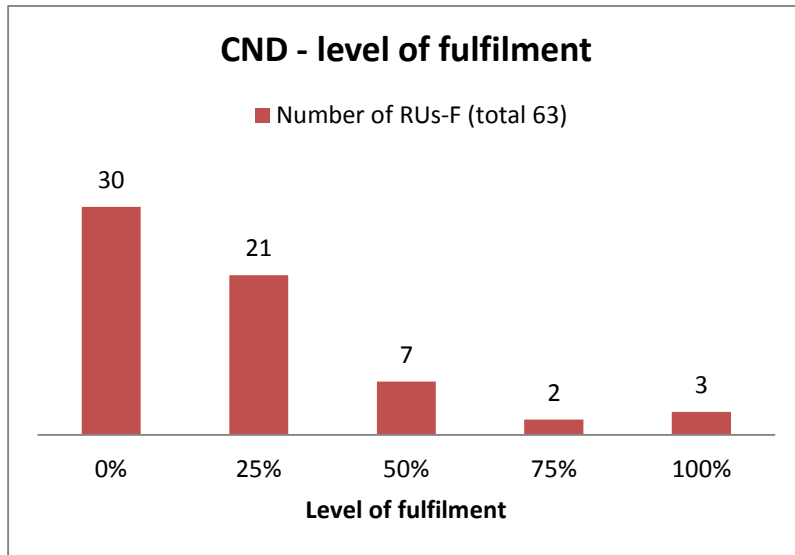


Diagram 17: Consignment Note Data (CND)

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

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

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

This function remains at a low degree of implementation of about 3 %. The reason for this must be further investigated. Companies claim that some requirements and the criteria for fulfilling are still unclear (diagrams 18 and 19).



**WIMO - level of fulfilment**

■ Number of RUs-F (total 63)
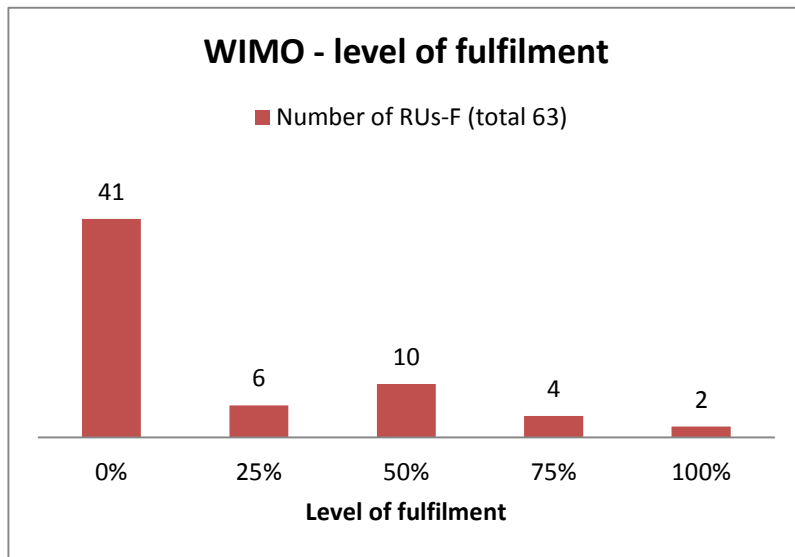
Diagram 18: Wagon and Intermodal Unit Operating Database

Diagram 19 indicates the very low degree of completion for WIMO with no sign of improvement over time.



**WIMO - evolution of implementation**
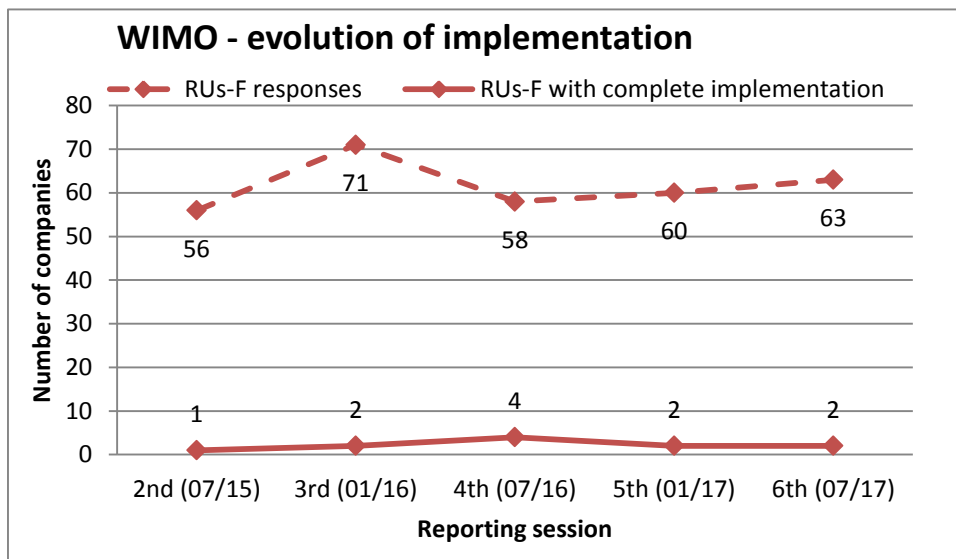
Diagram 19: Evolution of implementation for WIMO

## Rolling Stock Reference Database (WKs)

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

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

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

**RSRD - level of fulfilment**

Number of WKs (total 108)

| Level of fulfilment | Number of WKs |
|---|---|
| 0% | 23 |
| 25% | 8 |
| 50% | 6 |
| 75% | 2 |
| 100% | 69 |
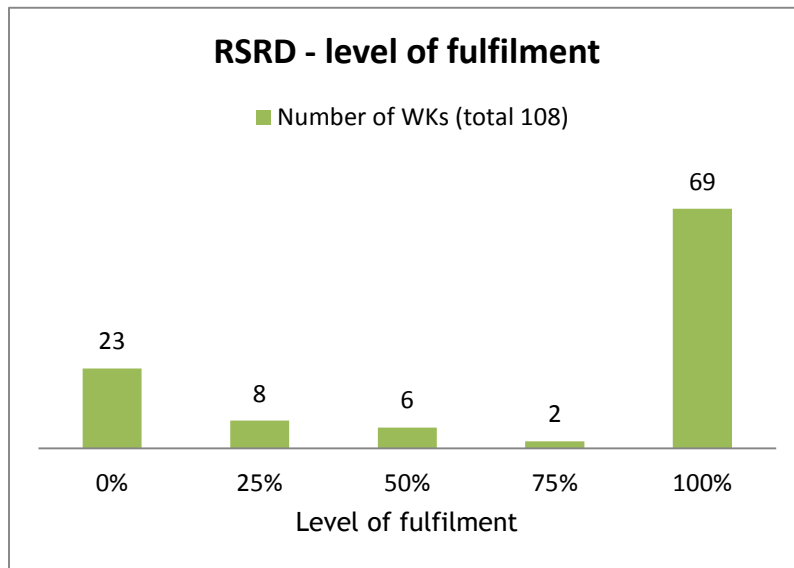
Diagram 20: Rolling Stock Reference Database

Following the nearly identical number of WKs using RSRD[2] and similar participation to the survey, the implementation rate remains stable compared to the previous report (see diagram 25).

**RSRD - evolution of implementation**

WKs with complete implementation — WKs responses

| Reporting session | WKs with complete implementation | WKs responses |
|---|---|---|
| 2nd (07/15) | 0 | 2 |
| 3rd (01/16) | 43 | 60 |
| 4th (07/16) | 57 | 74 |
| 5th (01/17) | 68 | 107 |
| 6th (07/17) | 69 | 108 |
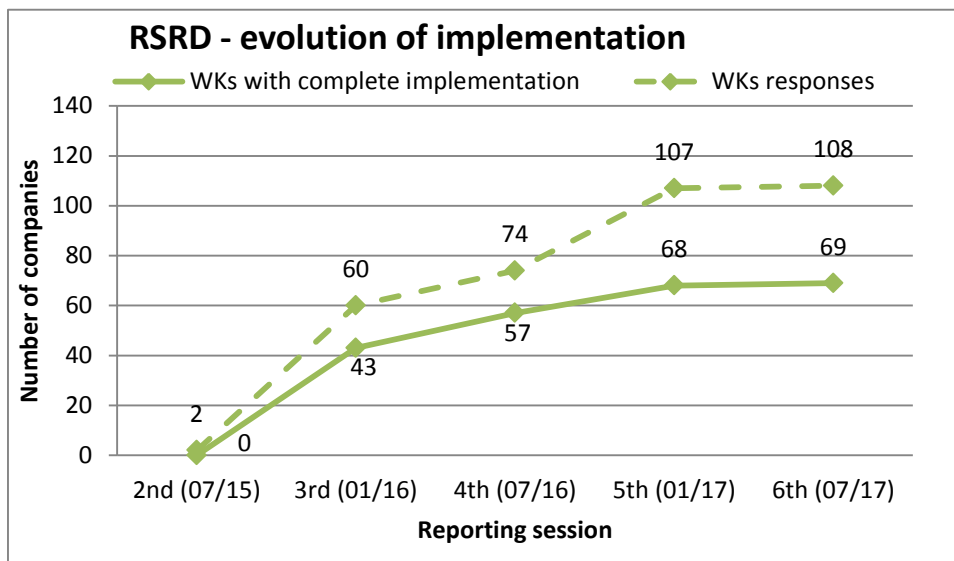
Diagram 21: Evolution of implementation for RSRD

## 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 22 gives a summary of the reasons selected by the companies.

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

**Reasons for not implemementing TAF/TAP TSI functions**

- Process reasons
- Technical reasons
- Budget constraints
- Insufficient awareness of TAF/TAP TSI requirements
- Other

40
48
42
17
65

[number of companies]
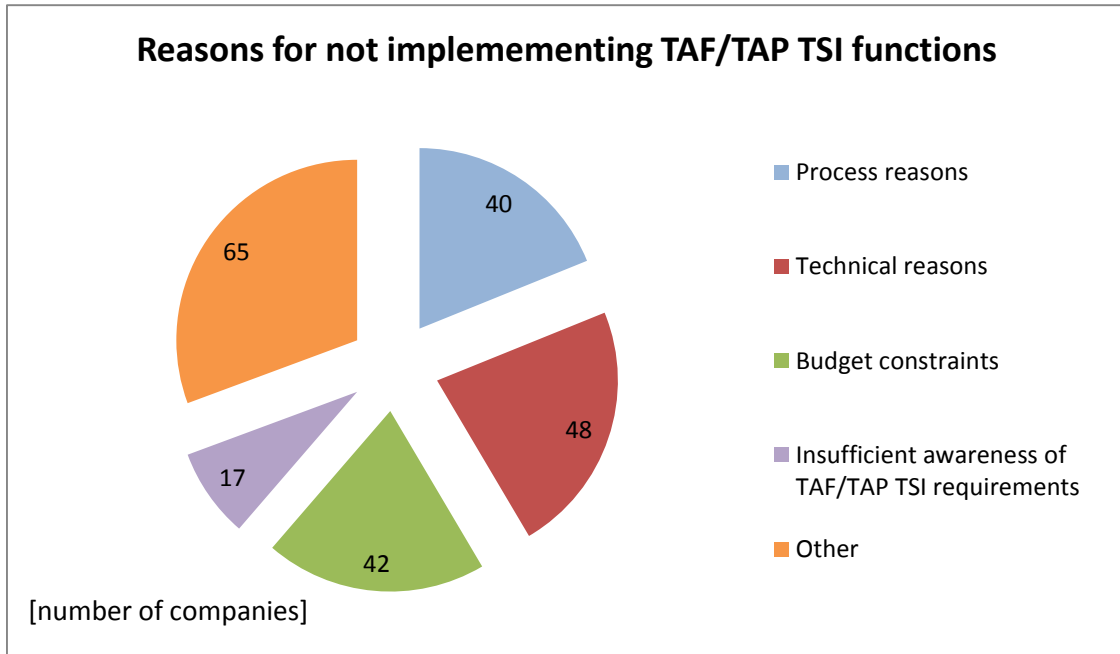
Diagram 22: Reasons for not starting implementation of TAF/TAP TSI functions

## Degree of implementation at European level

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

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

Diagram 23 shows the DI for functions to be implemented by IMs. TRI shows still a quite positive growing trend over time. PLC, CC and CI implementation however decline compared to the last report. This might partly be explained by the growing number of IMs taking part.
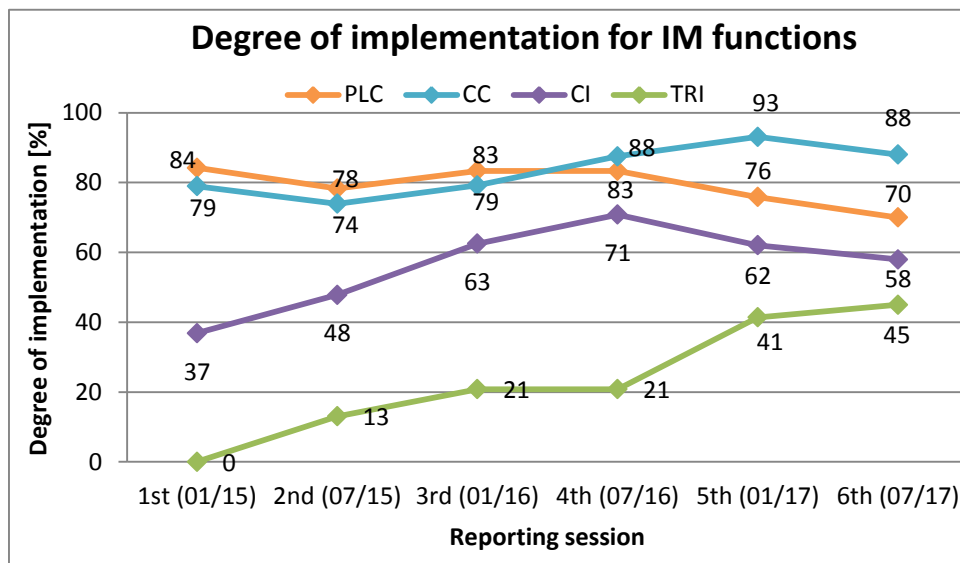


Diagram 23: Reported DI for mandatory IM functions

Diagram 24 indicates the evolution of implementation for RUs-F functions. Generally the proportion of RUs having finished implementation is considerably lower than for IMs. The DI for the CC stays high at 86 %, but the other RUs-F functions stagnate at a low level of implementation. The CND message is not shown yet as it is reported for the first time in the present session.
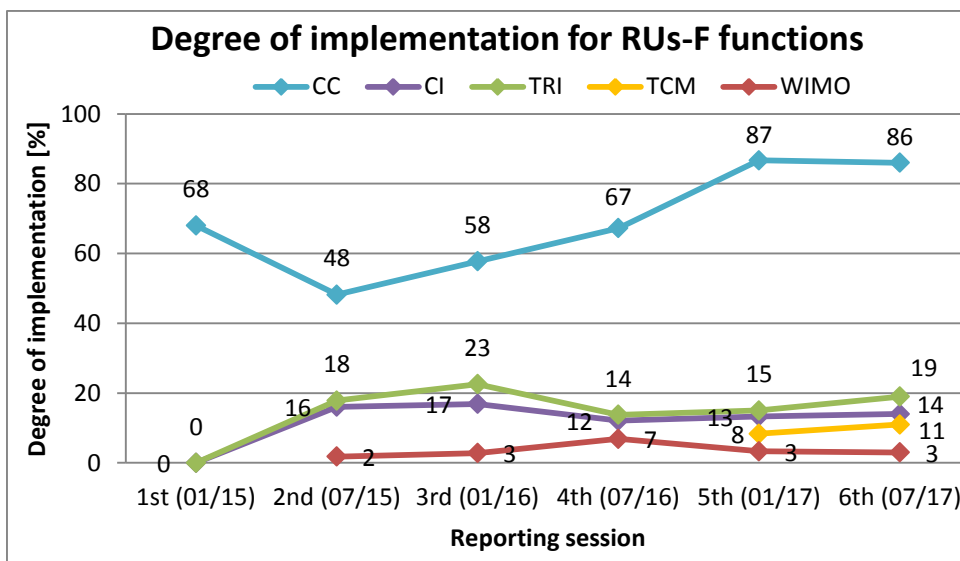


Diagram 24: Reported DI for mandatory RUs-F functions

Diagram 25 shows the reported DI for WKs for the first time in the present report. Similar to the RU-functions, only the DI of CC increases, whereas the RSRD completion remains stable. With 2 WK having CI in production, the respective DI is negligible.

**Degree of implementation for WK functions**
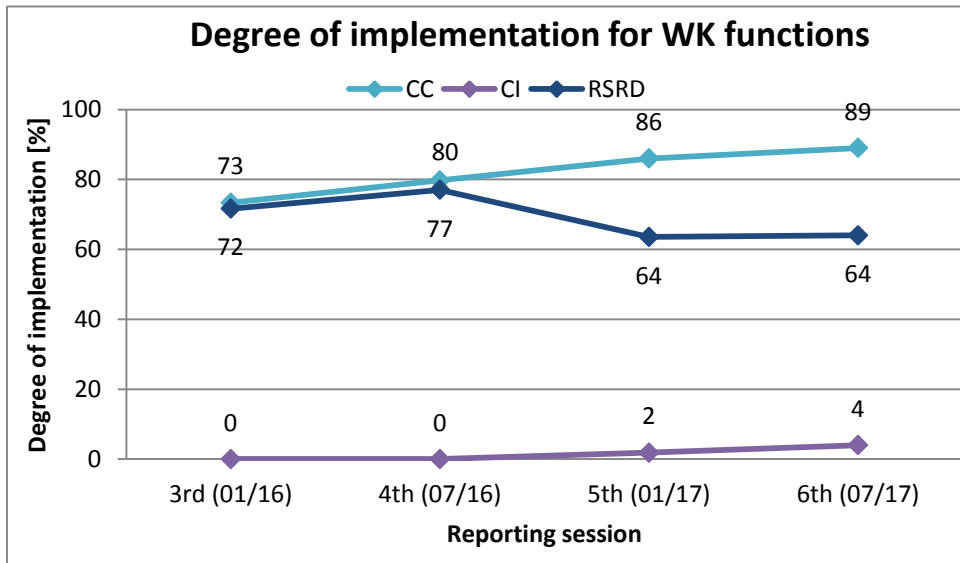


Diagram 25: Reported DI for mandatory WK functions

## 5. INTENTIONS FOR IMPLEMENTATION

Common sector tools

Participants of the questionnaire could select all common sector tools in use to meet some specific requirements of the TAF/TAP TSI. The number of companies having indicated using such tools are summarised in diagram 26.
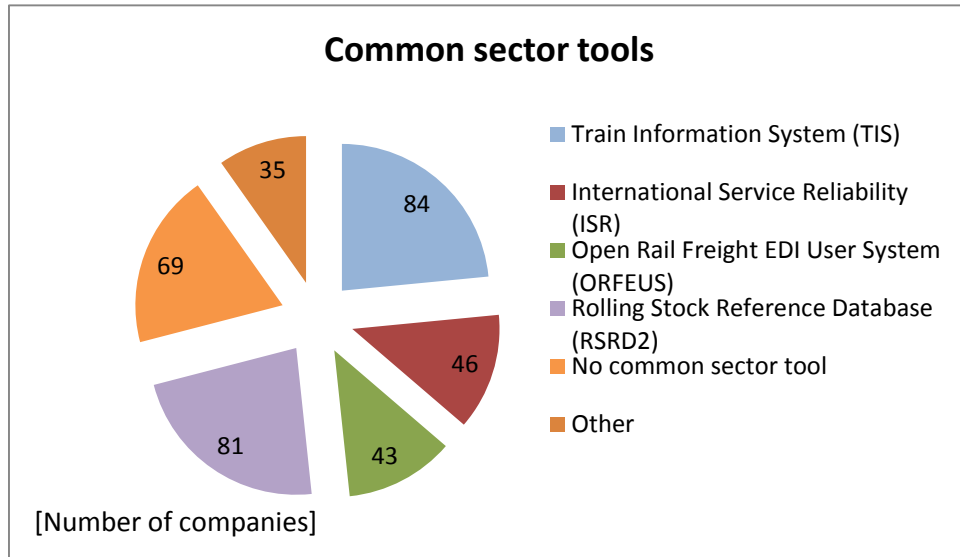


Diagram 26: Common sector tools in use

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

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

From 35 companies using other common sector tools, only 1 company has indicated the tools[2] in use.

---

[2] The Czech IM SZDC uses the tools named KADR, ComposT and ISOŘ.

## 6. SURVEY COVERAGE

The present reporting period contained also few statistical questions, such as line-km, ton-km and passenger-km.

After analysing the partly incomplete data from the companies and the comparison of this data with the available statistical data the IRG was unable to draw a clear picture of the actual situation for whole Europe.

To achieve this goal, more detailed questions and answers would be necessary and some administrational work the NCP would be required. Since an European-wide picture of the real implementation status would be very helpful, the IRG suggest that ERA will discuss this matter with the NCP at the next ICG meeting.

## 7. CONCLUSION AND FINDINGS

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

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

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

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

The degree of implementation as set out in diagrams 23 to 25 of this report is calculated from the responses to the questionnaire. If companies not having responded would be also taken into calculation, the degree of implementation would drop by around half of the percentage.

## 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 |
| **Achille** | Vito Sante | RFI | v.achille@rfi.it |
| **Bruckner** | Robert | ÖBB | robert.bruckner@oebb.at |
| **Heydenreich** | Thomas | UIP | rsd@th-heydenreich.de |
| **Lo Duca** | Carmen | Trenitalia | c.loduca@trenitalia.it |
| **Mastrodonato** | Emanuele | CER | ema@cer.be |
| **Weber** | Christian | SNCF | christian.weber@sncf.fr |

## ANNEX 2: RESPONSES CONTACT LIST

| Nr. | Member State | Type of Company | Company name | Reporting Entity |
|---|---|---|---|---|
| 1 | AT | IM | ÖBB Infrastruktur | |
| 2 | AT | RU F, WK | Rail Cargo Austria | |
| 3 | AT | WK | GATX Rail Austria GmbH | RSRD[2] |
| 4 | AT | WK | Felbermayr Transport- und Hebetechnik GmbH & Co KG | RSRD[2] |
| 5 | AT | WK | Logistik Service GmbH | RSRD[2] |
| 6 | AT | WK | Bahnbau Wels GmbH | RSRD[2] |
| 7 | AT | WK | Propangas AG | RSRD[2] |
| 8 | BE | IM | Infrabel | |
| 9 | BE | RU F, WK | Lineas Group | |
| 10 | BE | RU P | THI factory | |
| 11 | BE | WK | LINEAS Intermodal | RSRD[2] |
| 12 | BE | WK | LINEAS | RSRD[2] |
| 13 | BG | RU F, WK | DB Cargo Bulgaria | DB Cargo AG |
| 14 | CH | IM | SBB Infrastruktur | |
| 15 | CH | IM | BLS-Netz | |
| 16 | CH | RU F | SBB Cargo International | |
| 17 | CH | RU F, WK | DB Cargo Switzerland | DB Cargo AG |
| 18 | CH | RU P | SBB Personenverkehr | |
| 19 | CH | WK | VTG Cargo AG | RSRD[2] |
| 20 | CH | WK | Ermewa SA, Geneva branch | RSRD[2] |
| 21 | CH | WK | TRANSWAGGON AG | RSRD[2] |
| 22 | CH | WK | MITRAG AG | RSRD[2] |
| 23 | CH | WK | WASCOSA AG Luzern | RSRD[2] |
| 24 | CH | WK | HASTAG (Zürich) AG | RSRD[2] |
| 25 | CH | WK | Diversified Investments SA | RSRD[2] |
| 26 | CZ | IM | Správa železniční dopravní cesty | |
| 27 | CZ | IM, RU F | PDV RAILWAY | |
| 28 | CZ | IM, RU F, RU P | Jindrichohradecke mistni drahy | |
| 29 | CZ | IM, RU F, WK | Advanced world transport | |
| 30 | CZ | IM, RU F, WK | Sokolovská uhelná | |
| 31 | CZ | RU F | EP Cargo | |
| 32 | CZ | RU F | LTE Czechia | LTE Group |
| 33 | CZ | RU F | TONCUR | |
| 34 | CZ | RU F | SLEZSKOMORAVSKÁ DRÁHA | |
| 35 | CZ | RU F | TCHAS ŽD | |
| 36 | CZ | RU F | IDS CARGO | |
| 37 | CZ | RU F, RU P | KŽC Doprava | |
| 38 | CZ | RU F, RU P | CityRail | |
| 39 | CZ | RU F, RU P | LTE Logistik a Transport Slovakia s.r.o. | LTE Group |
| 40 | CZ | RU F, RU P, WK | Ceske drahy | |
| 41 | CZ | RU F, WK | DBV-ITL | |

| Nr. | Member State | Type of Company | Company name | Reporting Entity |
|---|---|---|---|---|
| 42 | CZ | RU F, WK | ČD Cargo | |
| 43 | CZ | RU F, WK | LOKO TRANS | |
| 44 | CZ | RU P | GW Train Regio | |
| 45 | CZ | WK | Cement Hranice | |
| 46 | CZ | WK | ČR SSHR | |
| 47 | CZ | WK | Coal Services | |
| 48 | CZ | WK | Vápenka Čertovy schody | |
| 49 | CZ | WK | VÁPENKA VITOŠOV | |
| 50 | CZ | WK | ZX-BENET | |
| 51 | CZ | WK | státní podnik DIAMO | |
| 52 | CZ | WK | NH-TRANS | |
| 53 | CZ | WK | Spolek pro chemickou a hutní výrobu | |
| 54 | CZ | WK | KKB | |
| 55 | CZ | WK | KOTOUČ ŠTRAMBERK | |
| 56 | CZ | WK | Škoda Auto | |
| 57 | CZ | WK | Lafarge Cement, a.s. | RSRD[2] |
| 58 | CZ | WK | RYKO PLUS spol. s r.o. | RSRD[2] |
| 59 | CZ | WK | Railco a.s. | RSRD[2] |
| 60 | CZ | WK | Felbermayr Transport- und Hebetechnik spol.s.r.o. | RSRD[2] |
| 61 | CZ | WK | KOS Trading, akciová společnost | RSRD[2] |
| 62 | CZ | WK | Lovochemie, a.s. | RSRD[2] |
| 63 | CZ | WK | V.K.S. Vagon Komerc Speed, spol. s r.o. | RSRD[2] |
| 64 | CZ | WK | ArcelorMittal Ostrava a.s. | RSRD[2] |
| 65 | DE | IM | DB Netz | |
| 66 | DE | RU F | RheinCargo | |
| 67 | DE | RU F | SBB Cargo Deutschland GmbH | SBB Cargo International |
| 68 | DE | RU F, WK | DB Cargo | |
| 69 | DE | RU F, WK | MEG Mitteldeutsche Eisenbahn GmbH | DB Cargo AG |
| 70 | DE | RU F, WK | RBH Logistics GmbH | |
| 71 | DE | WK | Ermewa GmbH | RSRD[2] |
| 72 | DE | WK | GATX Rail Germany GmbH | RSRD[2] |
| 73 | DE | WK | TRANSWAGGON GmbH | RSRD[2] |
| 74 | DE | WK | VTG Rail Europe GmbH | RSRD[2] |
| 75 | DE | WK | VTG Aktiengesellschaft | RSRD[2] |
| 76 | DE | WK | Aretz GmbH und Co. KG | RSRD[2] |
| 77 | DE | WK | NACCO GmbH | RSRD[2] |
| 78 | DE | WK | ERR European Rail Rent GmbH | RSRD[2] |
| 79 | DE | WK | AlzChem AG | RSRD[2] |
| 80 | DE | WK | DAHER PROJECTS GmbH | RSRD[2] |
| 81 | DE | WK | Vossloh Logistics GmbH | RSRD[2] |
| 82 | DE | WK | Kombiverkehr Deutsche Gesellschaft für kombinierten Güterverkehr mbH & Co KG | RSRD[2] |
| 83 | DE | WK | Zürcher Bau GmbH | RSRD[2] |

| Nr. | Member State | Type of Company | Company name | Reporting Entity |
|---|---|---|---|---|
| 84 | DE | WK | Kurt Nitzer (GmbH & Co.) KG | RSRD[2] |
| 85 | DE | WK | Mosolf Automotive Railway GmbH | RSRD[2] |
| 86 | DE | WK | BASF SE | RSRD[2] |
| 87 | DE | WK | On Rail - Gesellschaft für Eisenbahnausrüstung und Zubehör mbH | RSRD[2] |
| 88 | DE | WK | Tyczka Gase GmbH | RSRD[2] |
| 89 | DE | WK | voestalpine Rail Center Königsborn GmbH | RSRD[2] |
| 90 | DE | WK | On Rail Gesellschaft für Vermietung und Verwaltung von Eisenbahnwaggons mbH | RSRD[2] |
| 91 | DE | WK | Petrochem Mineralöl-Handels-GmbH | RSRD[2] |
| 92 | DK | IM | Banedanmark | |
| 93 | DK | RU F, WK | DB Cargo Scandinavia AS | DB Cargo AG |
| 94 | DK | RU P | BF Logistics | |
| 95 | DK | RU P | DSB | |
| 96 | DK | RU P | Lokaltog | |
| 97 | DK | RU P | Nordjyske Jernbaner | |
| 98 | DK | RU P | Midtjyske Jernbaner | |
| 99 | EL | IM | O.S.E. | |
| 100 | ES | IM | ADIF | |
| 101 | ES | RU F | RENFE MERCANCIAS | |
| 102 | ES | RU F | Logitren Ferroviaria | |
| 103 | ES | RU F, RU P | FERROVIAL RAILWAY | |
| 104 | ES | RU F, WK | TF Transfesa | DB Cargo AG |
| 105 | ES | WK | Transportes Ferroviarios Especiales S.A. | RSRD[2] |
| 106 | ES | WK | Sociedad de estudios y explotacion de material auxiliar de transportes S.A. | RSRD[2] |
| 107 | FI | RU F, RU P, WK | VR Group | |
| 108 | FR | IM | SNCF Réseau | |
| 109 | FR | RU F | FRET SNCF | |
| 110 | FR | RU F, WK | ECR Euro Cargo Rail SA | DB Cargo AG |
| 111 | FR | RU P | SNCF Voyageurs | |
| 112 | FR | WK | Ermewa SA | RSRD[2] |
| 113 | FR | WK | NACCO S.A.S. | RSRD[2] |
| 114 | FR | WK | Monfer France SASU | RSRD[2] |
| 115 | FR | WK | ATIR-RAIL | RSRD[2] |
| 116 | FR | WK | Compagnie Française de Produits Métallurgiques | RSRD[2] |
| 117 | FR | WK | STVA S.A. | RSRD[2] |
| 118 | FR | WK | SOCOMAC | RSRD[2] |
| 119 | HU | AB | VPE | |
| 120 | HU | IM | MÁV | |
| 121 | HU | IM | GYSEV | |
| 122 | HU | RU F | MMV | |
| 123 | HU | RU F, WK | DB Cargo Hungaria Kft | DB Cargo AG |
| 124 | IE | WK | TOUAX Rail Ltd. | RSRD[2] |
| 125 | IT | IM | Ferrovie Emilia Romagna | |

| Nr. | Member State | Type of Company | Company name | Reporting Entity |
|-----|--------------|-----------------|--------------|------------------|
| 126 | IT | IM | RETE FERROVIARIA ITALIANA | |
| 127 | IT | IM | La Ferroviaria Italiana | |
| 128 | IT | IM, RU F, RU P, WK | Società Ferrovie Udine Cividale | |
| 129 | IT | RU F | SBB Cargo Italia | SBB Cargo International |
| 130 | IT | RU F | HUPAC | |
| 131 | IT | RU F | TX Logistik | |
| 132 | IT | RU F | Dinazzano PO | |
| 133 | IT | RU F | GTS Rail | |
| 134 | IT | RU F, RU P | Trasporto Ferroviario Toscano | |
| 135 | IT | RU F, WK | DB Cargo Italia Srl | DB Cargo AG |
| 136 | IT | RU F, WK | MERCITALIA RAIL | |
| 137 | IT | RU P | TRENORD | |
| 138 | IT | RU P | GRUPPO TRASPORTI TORINESI | |
| 139 | IT | RU P | Trenitalia | |
| 140 | IT | RU P | ARRIVA Italia Rail | |
| 141 | IT | RU P | SNCF Voyages Italia | |
| 142 | IT | RU P | Trasporto Passeggeri Emilia Romagna | |
| 143 | IT | RU P | Trenord | |
| 144 | IT | RU P | TRENTINO TRASPORTI ESERCIZIO | |
| 145 | IT | WK | Lotras srl | RSRD[2] |
| 146 | IT | WK | Monfer Cereali SRL | RSRD[2] |
| 147 | LT | IM, RU F, RU P, WK | Lithuanian Railways | |
| 148 | LT | RU F | Captrain Italia | |
| 149 | LU | IM, RU F, RU P, WK | CFL | |
| 150 | LV | IM, RU F, WK | VAS Latvijas dzelzceļš | |
| 151 | NL | IM | ProRail | |
| 152 | NL | RU F, WK | DB Cargo Nederland N.V. | DB Cargo AG |
| 153 | NO | IM | Bane NOR | |
| 154 | NO | RU F | LKAB Malmtrafikk AS | |
| 155 | PL | IM | PKP | |
| 156 | PL | IM, RU P | PKP | |
| 157 | PL | RU F, WK | DB Cargo Polska Spolka Akyina | DB Cargo AG |
| 158 | PL | RU P | Koleje Małopolskie | |
| 159 | PL | RU P | Koleje Śląskie | |
| 160 | PL | RU P | Koleje Dolnoslaskie | |
| 161 | PL | RU P | PKP Intercity | |
| 162 | PL | RU P | Arriva RP | |
| 163 | PL | WK | Łódzka Kolej Aglomeracyjna | |
| 164 | PL | WK | GATX Rail Poland Sp. z o.o. | RSRD[2] |
| 165 | PL | WK | Tankwagon Sp. z o. o. | RSRD[2] |
| 166 | PL | WK | Felbermayr Immo Sp.z.o.o. | RSRD[2] |
| 167 | PT | IM | Infraestruturas de Portugal | |
| 168 | PT | RU F | Medway | |
| 169 | PT | RU F, WK | TAKARGO | |

| Nr. | Member State | Type of Company | Company name | Reporting Entity |
|-----|--------------|-----------------|--------------|------------------|
| 170 | PT | RU P | CP | |
| 171 | PT | WK | ADP Fertilizantes, S.A. | RSRD² |
| 172 | PT | WK | CIMPOR - Serviços de Apoio à Gestão de Empresas, S.A. | RSRD² |
| 173 | RO | IM | CFR | |
| 174 | RO | RU F, WK | DB Cargo Rail Romania SRL | DB Cargo AG |
| 175 | SE | IM | Trafikverket | |
| 176 | SE | RU F | Hector Rail | |
| 177 | SE | RU F | LKAB Malmtrafik | LKAB Malmtrafikk AS |
| 178 | SE | RU F, WK | Green Cargo | |
| 179 | SE | RU P | sj | |
| 180 | SE | WK | TRANSWAGGON AB | RSRD² |
| 181 | SE | WK | Stena Recycling AB | RSRD² |
| 182 | SI | IM | SŽ Infrastruktura | |
| 183 | SI | RU F | SŽ TOVORNI PROMET | |
| 184 | SI | WK | Adria kombi d.o.o. | RSRD² |
| 185 | SK | IM | Slovak Railways | |
| 186 | SK | RU F, RU P | LTE Slovakia | LTE Group |
| 187 | SK | RU F, WK | Cargo Slovakia | |
| 188 | SK | RU P | RegioJet | |
| 189 | SK | RU P | Železničná spoločnosť Slovensko | |
| 190 | SK | WK | Ing. Alica Ovciariková A.O. | RSRD² |
| 191 | SK | WK | Felbermayr Slovakia s.r.o. | RSRD² |
| 192 | TR | WK | TRANSWAGGON Vagon Isletmeleri Ltd. Sti. | RSRD² |
| 193 | UK | IM | Network Rail Infrastructure | |
| 194 | UK | RU F, WK | DB Cargo (UK) Ltd | DB Cargo AG |

## Disclaimer

**The RU/IM Telematics Joint Sector Group (JSG)**
The JSG was set up in October 2012 as a voluntary organisation supported by nine European Associations involved in the implementation of the rail technical specifications for interoperability of the Telematic Application for Freight (TAF TSI).

http://taf-jsg.info/