

# 5th report of the TAF TSI Implementation

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

February 2017



Version 1.0 Jan-Christian Arms, JSG Vice-chairman



























## **Document history**

Version	Name	Changes	Date
0.1	Finn Wirth, Jan-Christian Arms	Initial version for IRG	14.02.2017
0.2	Jan-Christian Arms	Revision of report at IRG	24.02.2017
0.3	Jan-Christian Arms	Document for approval at JSG	01.03.2017
1.0	Jan-Christian Arms	Document approved at JSG on 09.03.2017	16.03.2017

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#### **EXECUTIVE SUMMARY**

This 5th TAF TSI implementation report summarized the results received via the JSG Reporting Tool in January 2017 and thus shows the status of implementation by 31 December 2016.

Starting from the first report, invitations and responses have grown in all aspects. However, since the 3rd TAF TSI monitoring responses have slightly increased. Response rates per type of company have hardly changed since the 2nd report. 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 <u>Primary Location</u> Codes for their network.
- The vast majority of companies having replied to the query possess a **Company Code**.
- The feedback of the current questionnaire shows a difference in level of fulfilment for <u>Common Interface</u> between IMs, RUs and WKs. The majority of IMs has already implemented, while most of RUs and WKs are still developing.
- Degree of implementation for <u>Train Running Information</u> is around 40 % for IMs and 15 % for RUs.
- 63 % of the participating RUs started implementing the Train Composition Message.
- Implementation of the <u>WIMO</u>-function rests at very low degree of completion with no sign of improvement over time.
- A number of companies fulfil the <u>RSRD</u>-functionality via the common sector tool RSRD<sup>2</sup>, so that the degree of implementation is at 65 %.

At European level the <u>Degree of Implementation</u> shows different trends for IMs and RUs. Implementation of TAF TSI functions for IMs generally display a positive evolution. The proportion of RUs having finished implementation is considerably lower. Moreover, the development of the TAF TSI functions for RUs is unclear, mainly due to irregular participation to the survey.

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 invited' is closer to reality.

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#### 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. Members of the European railway sector are encouraged to submit their reports through the JSG to the Agency.

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#### 2. METHODOLOGY

#### General assumptions

The progress of implementation of the TAF 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 average target deadline.
- 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 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 (RU)
- Wagon Keeper (WK)
- Allocation Body (AB)

#### Establishment of the fifth report

This report summarised the results received via the JSG Reporting Tool during the fifth reporting period lasting from 02 January 2017 to 27 January 2017 and thus shows the status of implementation by 31 December 2016. Diagrams in the following chapters of this report show results per TAF TSI 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 <sup>st</sup> Report	01.07.2014 - 31.12.2014	21	
2 <sup>nd</sup> Report	01.01.2015 - 30.06.2015	40	
3 <sup>rd</sup> Report	01.07.2015 - 31.12.2015	42	
4 <sup>th</sup> Report	01.01.2016 - 30.06.2016	53	
5 <sup>th</sup> Report	01.07.2016 - 31.12.2016	57	

Table 1: Reporting periods

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The 'TAF TSI Implementation Report Volume 5' questionnaire contains nine question groups, seven of which are about the current implementation of TAF TSI functions:

- Primary Location Codes (PLC) IMs only
- Company Code (CC) all companies
- Common Interface (CI) all companies
- Train Running Information (TRI) IMs and RUs
- Train Composition Message (TCM) RUs only
- Wagon InterModal unit Operational database (WIMO) RUs only
- Rolling Stock Reference Database (RSRD) WKs only

In addition it contains two more general question groups intended 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 9 March 2017 and published accordingly. It will be presented at the ERA TAF TSI Implementation Cooperation Group meeting on 22 and 23 March 2017.

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#### 3. PARTICIPATION IN THE SURVEY

#### Evolution of participation

The number of project managers invited to report about the implementation of the TAF 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 slightly in the 5<sup>th</sup> reporting session.

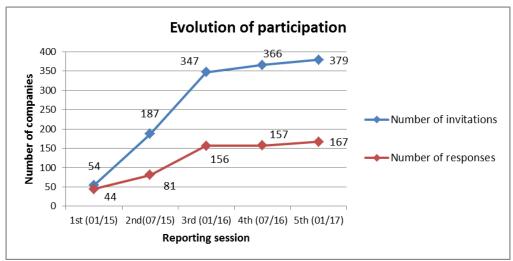


Diagram 1: Evolution of participation over time

The response rate however, calculated as number of responses in relation to number of invitations, is quite stable at about 45% since the  $2^{nd}$  reporting session (see diagram 2).

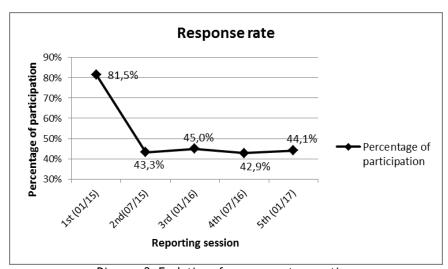


Diagram 2: Evolution of response rate over time

Responses from IMs increased compared to the previous survey. WKs gave significant additional feedback this time, while the activity of RUs was similar compared to the 4<sup>th</sup> survey. Participation of ABs remains negligible.

Sixty-four wagon keepers using RSRD<sup>2</sup> were submitted by the UIP and are included in the 5th report.

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The total number of responses displayed in diagram 1 (167 companies) and listed in Annex 2 is lower than the total number of companies shown in diagram 3 hereafter (197 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.

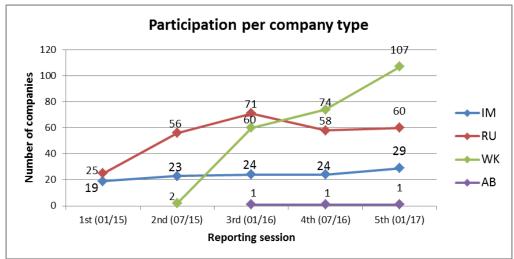


Diagram 3: Evolution of participating per company type over time

Diagram 4 illustrates the share of new companies in the 5<sup>th</sup> Reporting Session.

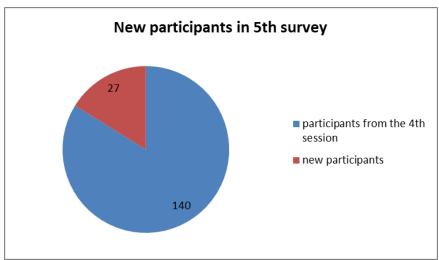


Diagram 4: New participants in 5<sup>th</sup> survey

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.

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Diagram 5 indicates the distribution of total responses per country. The feedback comprises twenty-three EU Member States plus Norway, Switzerland and Turkey. The average number of answers per country is four, if the Czech Republic and Germany are not taken into account.

Feedback from the Czech Republic represents one quarter of total participation.

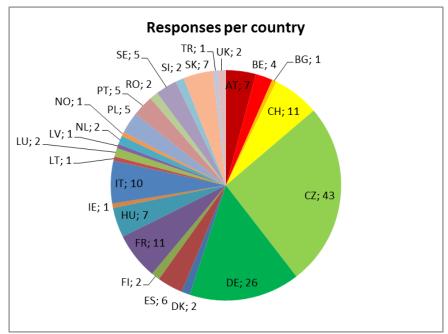


Diagram 5: Number of responses per country

Diagram 6 shows the distribution and the development of responses per country. In most of the countries no change in participating to the survey is observed.

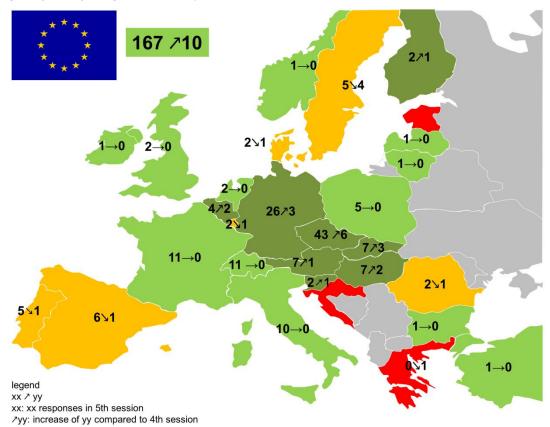


Diagram 6: Evolution of responses per country

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

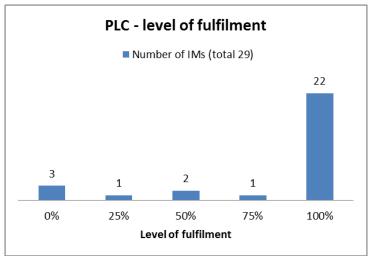


Diagram 7: Common Reference Files - Primary Location Codes (PLC)

Regarding the evolution of PLC implementation, diagram 8 shows 22 IMs with complete implementation out of 29 IMs in the survey. The number of participating IMs has grown more than the ones with complete implementation, which leads to a decline to 76 % of degree of implementation (see diagram 22).

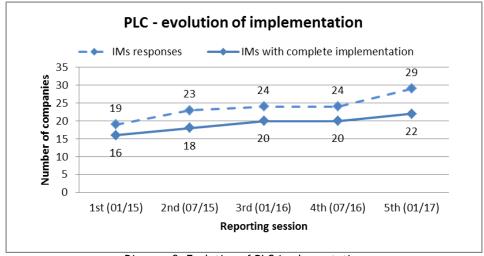


Diagram 8: Evolution of PLC implementation

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#### 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 9) is indicating the existence and use of company codes as part of the Common Reference Files for IMs, RUs 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.

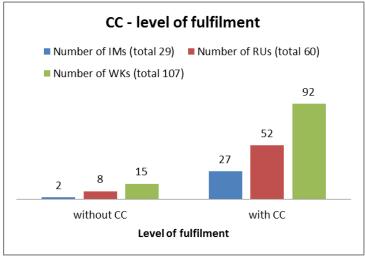


Diagram 9: Common Reference Files - Company Codes (CC)

According to Diagram 10, the number of companies with CCs as well as the degree of implementation grew for all types. Implementation of the CC function depends on and develops similar to participation.

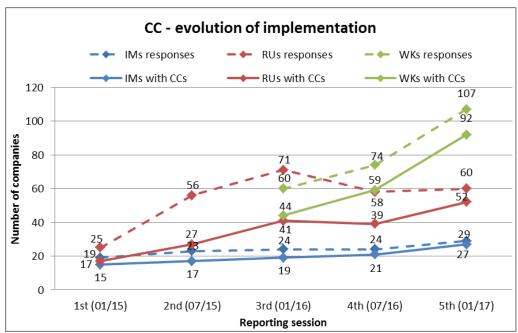


Diagram 10: Evolution of implementation for Company Codes

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#### 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 11 summarises the feedback related to the availability of CI and shows a difference in level of fulfilment between IMs, RUs and WKs. The CI is completely implemented by 18 IMs, 8 RUs and 2 WKs.

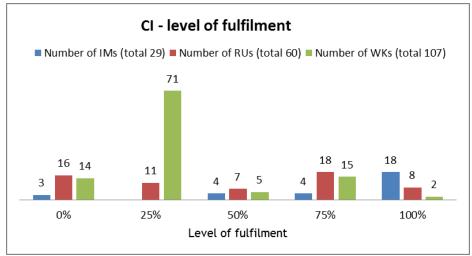


Diagram 11: Common Reference Files - Common Interface (CI)

The development of complete implementation of the CI over time according to diagram 12 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 about 15 % of responding companies, the majority of RUs is still developing. For WKs completion is negligible, projects have not started yet or are at initiating phase. RSRD<sup>2</sup> has yet not implemented the CI. WKs using RSRD<sup>2</sup> therefore form part of the 25 % level.

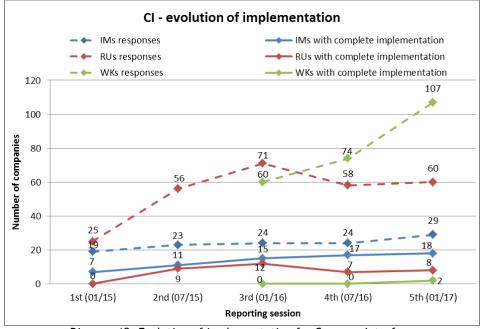


Diagram 12: Evolution of implementation for Common Interface

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

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 hosted 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 13 indicates 12 IMs and 9 RUs with 100 % level of fulfilment. This leads to a degree of implementation for IMs and RUs having reported to the JSG Reporting Tool of about 40% for IMs and 15% for RUs.

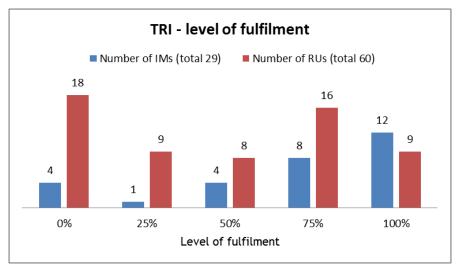


Diagram 13: Train Running Information (TRI)

Regarding diagram 14, both the number of IMs having implemented the TRI and the degree of completion more than doubled in comparison to the 4<sup>th</sup> reporting session. For RUs, no development of those figures can be observed.

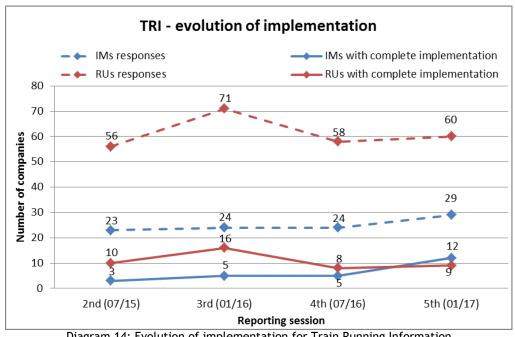


Diagram 14: Evolution of implementation for Train Running Information

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Diagram 15 gives an impression about the state of implementation by IMs in countries across Europe. The IM having the longest network has been taken as relevant for the country. For countries still in development the current planned end date and the respective level of fulfilment is shown in diagram 15.

# EU-comparison IM -Train Running Information

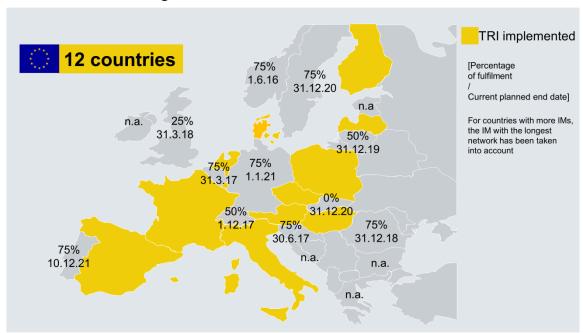


Diagram 15: Implementation of TRI of IMs across European countries

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#### Train Composition Message (RUs)

The Target Implementation Milestone for realisation of the Train Composition Message as part of the Train Preparation Function according to the TAF TSI Masterplan is end of 2018. Train Composition Message is mandatory to be sent by RUs.

The function is reported for the first time in this reporting session. However, already thirty-eight of sixty participating RUs started implementing the TCM.

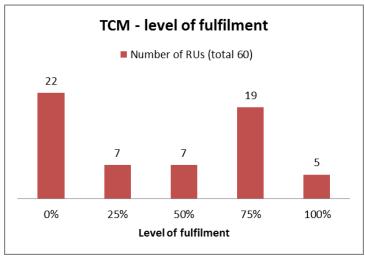


Diagram 16: Train Composition Message (TCM)

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#### Wagon and InterModal Unit Operational database (RUs)

The Target Implementation Milestone for realisation of the Wagon and InterModal Unit Operational database function (WIMO) according to the TAF TSI Masterplan was 2016.

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

This TAF TSI function contains some unclear requirements and the criteria for fulfilling it have not yet been defined. This results in the low degree of implementation of about 3 % (diagram 16 and 17).

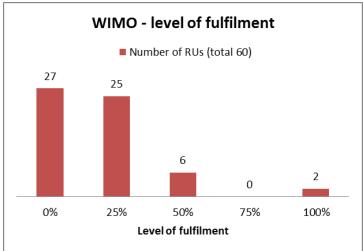


Diagram 17: Wagon and InterModal Unit Operational database

Diagram 17 indicates the very low degree of completion for WIMO with no sign of improvement over time.

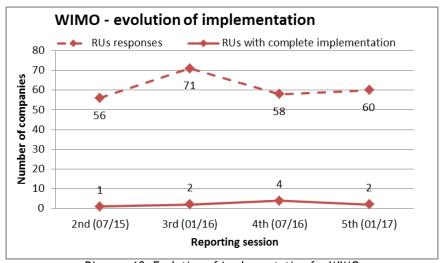


Diagram 18: Evolution of implementation for WIMO

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#### 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 %.

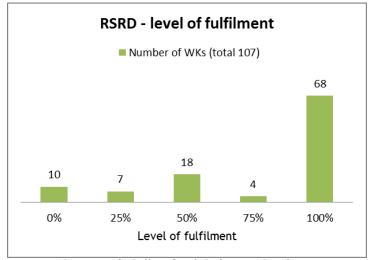


Diagram 19: Rolling Stock Reference Database

Following the higher number of companies using RSRD<sup>2</sup>, fulfilment of the function rises accordingly. However, the implementation rate went down compared to the 4<sup>th</sup> report (see diagram 24).

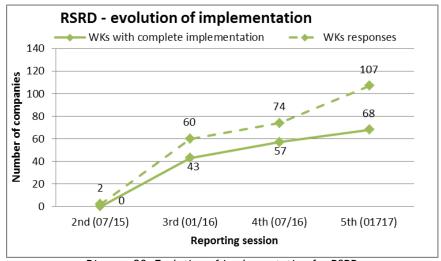


Diagram 20: Evolution of implementation for RSRD

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#### Reasons for not starting implementation of TAF TSI functions

Companies could declare in a dedicated answer for each TAF TSI function one reason why they did not yet start implementing it. Diagram 21 gives a summary of the reasons selected by the companies.

85 % of the companies with 0 % of completion selected one reason for not starting any activity yet. The respective choices are quite evenly distributed among the 123 answers.

The number of companies declaring insufficient awareness of TAF TSI requirements has decreased from the previous report by about 45 %.

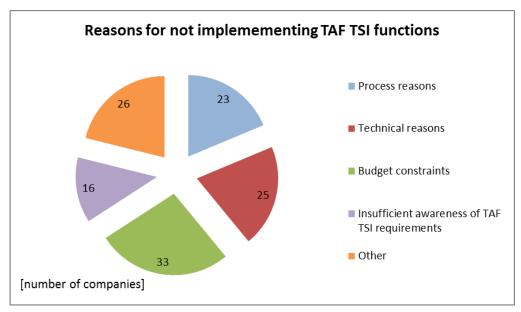


Diagram 21: Reasons for not starting implementation of TAF TSI functions

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#### 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 is the relation of companies per type having implemented to the companies per type having replied to the query in per cent.

Diagram 22 shows the DI for functions to be implemented by IMs. CC and TRI show a really positive growing trend over time. PLC and CI implementation however decline against the positive evolution of the past compared to the last report. This might partly be explained by relatively high growth of IMs taking part.

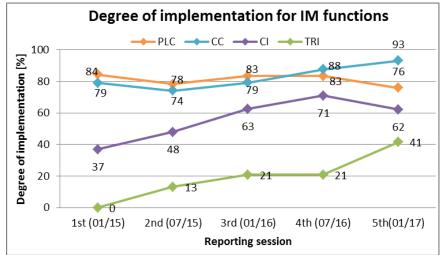


Diagram 22: Reported DI for mandatory IM functions

Diagram 23 indicates the evolution of implementation for RU-functions. Generally the proportion of RUs having finished implementation is considerably lower than for IMs. The DI for the CC shows a positive evolution reaching 87 %, but the other RU functions stagnate at a low level of implementation. The TCM message is not shown yet as it is reported for the first time in the present session.

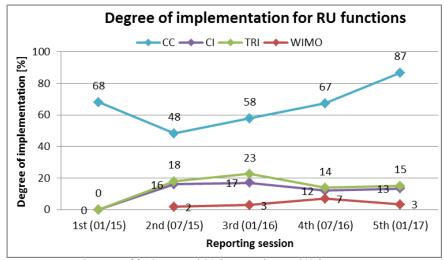


Diagram 23: Reported DI for mandatory RU functions

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Diagram 24 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 decreases. With 2 WK having CI in production, the respective DI is negligible.

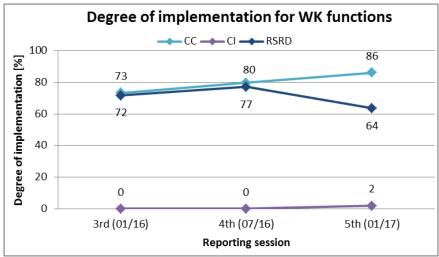


Diagram 24: Reported DI for mandatory WK functions

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#### 5. INTENTIONS FOR IMPLEMENTATION

#### Common sector tools

Participants of the questionnaire could select all common sector tools in use to meet the requirements of the TAF TSI. The number of companies having indicated using such tools are summarised in diagram 25.

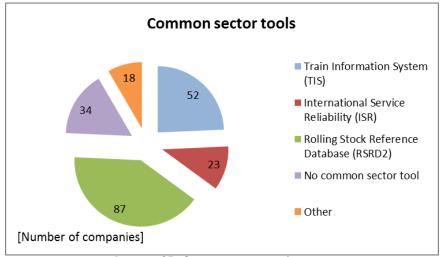


Diagram 25: Common sector tools in use

In respect to the responses received for TRI, TIS is for example in use by about 55 % of the companies (IMs and RUs). A similar degree of use results for RSRD2 in proportion to the total number of RUs and WKs.

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#### 6. SURVEY COVERAGE

#### IM survey coverage per country

Diagram 26 shows the length of line km in each country. The numbers in black are the line km of the whole country taken mainly from Eurostat-statistics, while the red number indicates the sum of line km reported by the 29 IMs in this survey. From around 225 thousand line km according to Eurostat more than 205 thousand km are represented in this query.

# EU-comparison IM – line km

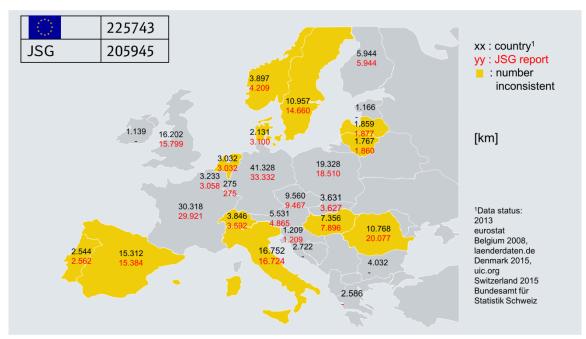


Diagram 26: Coverage for IMs per country in terms of line km

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Diagram 27 displays the IM survey coverage per country in per cent. In cases where the figure reported is higher than the statistical value, the coverage is assumed to be 100 %. The average coverage for IMs for the complete survey is 91 %.

# EU-comparison IM – line km

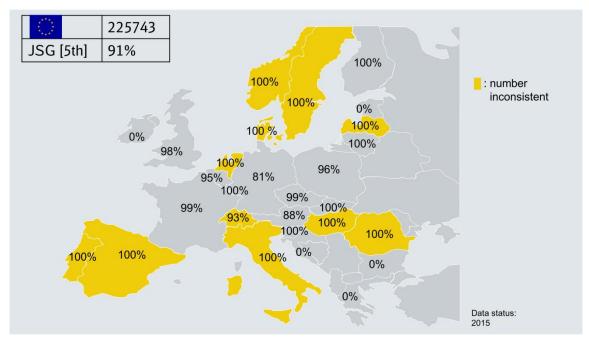


Diagram 27: Coverage for IMs per country in per cent

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#### RU survey coverage per country

60 RUs gave feedback to the 5<sup>th</sup> reporting session. Even with the high number of inconsistent figures, the overall RU survey coverage in the order of about 10 % cannot convince and needs to be improved.

## EU-comparison RU F- Mio tkm

High amount of inconsistent numbers cause of

- Not validated entries
- DB Cargo country tkm not available

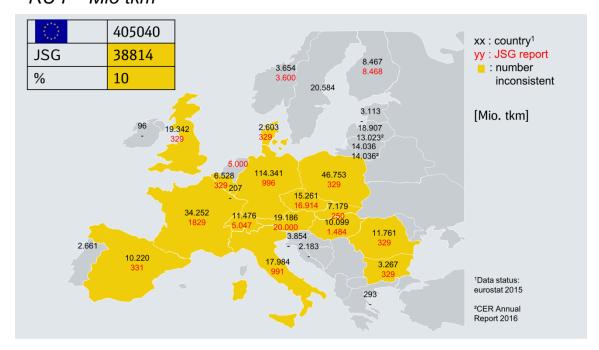


Diagram 28: Coverage for RUs per country in terms of ton km

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#### 7. CONCLUSION AND FINDINGS

The number of companies having responded to the 5th questionnaire is significantly lower than the number of companies having been invited. Hence, the degree of implementation related to invitations is supposed to be about half of DI values reported in this document.

Extrapolating the participation from the Czech Republic to the whole European Union could mean up to 3.000 companies responding to the TAF TSI questionnaire, ten times more than actually. As far as Company Codes are concerned, UIC has allocated with 600 CCs five times more codes than are appearing in this report. Again, there seems to be a large part of the European railway sector not yet covered by this TAF TSI monitoring.

For some TAF TSI functions there is a strong need to precisely define the compliance with TAF TSI regulation. For example there are some unclear requirements and criteria to be precised for fulfilling the WIMO function. Furthermore it is recommended to define next steps to update, maintain and use Primary Location Codes.

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# 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	
Wirth	Finn	DB AG	finn.wirth@deutschebahn.com	

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#### **ANNEX 2: RESPONSES CONTACT LIST**

Nr.	Member State	Type of Company	Company name	Reporting Entity
1	AT	IM	ÖBB-Infrastruktur AG	
2	AT	RU/WK	Rail Cargo Austria AG	
3	AT	WK	Logistik Service GmbH	RSRD <sup>2</sup>
4	AT	WK	Bahnbau Wels GmbH	RSRD <sup>2</sup>
5	AT	WK	Felbermayr Transport- und Hebetechnik GmbH & Co KG	RSRD <sup>2</sup>
6	AT	WK	Propangas AG	RSRD <sup>2</sup>
7	AT	WK	GATX Rail Austria GmbH	RSRD <sup>2</sup>
8	BE	RU	B Logistics	
9	BE	IM	Infrabel	
10	BE	WK	Inter Ferry Boats N.V.	RSRD <sup>2</sup>
11	BE	WK	Xpedys SA/NV	RSRD <sup>2</sup>
12	BG	RU/WK	DB Cargo Bulgaria	DB Cargo AG
13	СН	IM	BLS-Netz AG	
14	СН	RU	SBB Cargo	
15	СН	RU	BLS Cargo	
16	СН	RU/WK	DB Cargo Switzerland	DB Cargo AG
17	СН	IM	SBB AG, Division Infrastruktur	
18	СН	WK	VTG Cargo AG	RSRD <sup>2</sup>
19	СН	WK	Diversified Investments SA	RSRD <sup>2</sup>
20	СН	WK	WASCOSA AG Luzern	RSRD <sup>2</sup>
21	СН	WK	TRANSWAGGON AG	RSRD <sup>2</sup>
22	СН	WK	MITRAG AG	RSRD <sup>2</sup>
23	СН	WK	Ermewa SA, Geneva branch Vápenka Čertovy schody	RSRD <sup>2</sup>
24	CZ	WK	a.s.	
25	CZ	WK	NH-TRANS,SE	
26	CZ	RU/WK	Advanced World Transport a.s.	
27	CZ	WK	ŠKODA AUTO a.s.	
28	CZ	RU	IDS CARGO a.s.	
29	CZ	RU	EP Cargo a.s	
30	CZ	RU	RegioJet	
31	CZ	IM	Jindrichohradecke mistni drahy	
32	CZ	WK	Lovochemie, a.s.	RSRD <sup>2</sup>
33	CZ	RU	TCHAS ŽD s.r.o.	
34	CZ	RU/WK	UNIPETROL Doprava,s.r.o.	
35	CZ	WK	LOKO TRANS s.r.o.	
2.4			LTE Logistik a Transport	
36	CZ	RU	Czechia s.r.o.	RSRD <sup>2</sup>
37	CZ	WK	ArcelorMittal Ostrava a.s.	ויזעח-
38	CZ	RU	SLEZSKOMORAVSKA DRÁHA	

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Nr.	Member State	Type of Company	Company name	Reporting Entity
	-		a.s.	
20			Rail Cargo Operator - CSKD	
39	CZ	WK	s.r.o.	
40	CZ	WK	Railway Capital, a.s. (PLC)	
41	CZ	wĸ	ČR - Správa státních hmotných rezerv	
40			Správa železniční dopravní	
42	CZ	IM	cesty, státní organizace	
43	CZ	IM/RU	PDV RAILWAY a.s.	
44	CZ	WK	Coal Services a.s.	
45	CZ	WK	VÁPENKA VITOŠOV s.r.o.	
46	CZ	WK	Vendys & V s.r.o.	
47	CZ	RU/WK	ČD Cargo, a.s.	
48	CZ	WK	CZ BENET CZ s.r.o.	
49	CZ	RU	TONCUR	
50	CZ	RU	Ostravská dopravní	
30	CZ	l KO	společnost, a.s. KOTOUČ ŠTRAMBERK,spol.	
51	CZ	WK	s r.o.	
52	CZ	RU/WK	Ceske drahy, a.s.	
53	CZ	WK	V.K.S. Vagon Komerc Speed	
54	CZ	RU	BF Logistics, s.r.o.	
			Elektrizace železnic Praha,	
55	CZ		a.s.	
56	CZ	wĸ	Spolek pro chemickou ahutní výrobu, a.s.	
57	CZ	WK	KKB spol s r.o.	
58	CZ	RU	METRANS Rail s.r.o.	
59	CZ	WK	KOS Trading a. s.	RSRD <sup>2</sup>
60	CZ	RU	DBV-ITL, s.r.o.	
61	CZ	RU/WK	SD-Kolejová doprava, a.s.	
			Českomoravský cement,	
62	CZ	WK	a.s.	
02	CZ	WK	Felbermayr Transport- und	
63	CZ	WK	Hebetechnik spol.s.r.o.	
64	CZ	WK	RYKO PLUS spol. s r.o.	RSRD <sup>2</sup>
65	CZ	WK	Railco a.s.	
66	CZ	WK	Lafarge Cement, a.s.	
67	DE	RU	SBB Cargo Deutschland GmbH	SBB Cargo International
68	DE			DB Cargo AG
00	υE	RU/WK	DB Cargo AG MEG Mitteldeutsche	DB Cargo AG
69	DE	RU/WK	Eisenbahn GmbH	
70	DE	RU/WK	RBH Logistics GmbH	DB Cargo AG
71	DE	IM	DB Netz AG	
72	DE	WK	ERR European Rail Rent GmbH	RSRD <sup>2</sup>
73	DE	WK	voestalpine Rail Center Königsborn GmbH	RSRD <sup>2</sup>

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Nr.	Member State	Type of Company	Company name	Reporting Entity
74	DE	WK	Mosolf Automotive Railway GmbH	RSRD <sup>2</sup>
75	DE	wĸ	Petrochem Mineralöl- Handels-GmbH	RSRD <sup>2</sup>
76	DE	WK	VTG Aktiengesellschaft	RSRD <sup>2</sup>
77	DE	WK	Aretz GmbH und Co. KG	RSRD <sup>2</sup>
78	DE	WK	TRANSWAGGON GmbH	RSRD <sup>2</sup>
79	DE	WK	On Rail Gesellschaft für Vermietung und Verwaltung von Eisenbahnwaggons mbH Kombiverkehr Deutsche	RSRD <sup>2</sup>
80	DE	WK	Gesellschaft für kombinierten Güterverkehr mbH & Co KG	
81	DE	WK	BASF SE	RSRD <sup>2</sup>
82	DE	WK	GATX Rail Germany GmbH	RSRD <sup>2</sup>
83	DE	WK	Tyczka Gase GmbH	RSRD <sup>2</sup>
84	DE	WK	Ermewa GmbH	RSRD <sup>2</sup>
85	DE	WK	Logistikgesellschaft Gleisbau mbH	RSRD <sup>2</sup>
86	DE	WK	DAHER PROJECTS GmbH	RSRD <sup>2</sup>
87	DE	WK	AlzChem AG	RSRD <sup>2</sup>
88	DE	WK	VTG Rail Europe GmbH	RSRD <sup>2</sup>
89	DE	WK	NACCO GmbH	RSRD <sup>2</sup>
90	DE	WK	Kurt Nitzer (GmbH & Co.) KG	RSRD <sup>2</sup>
91	DE	WK	Zürcher Bau GmbH	RSRD <sup>2</sup>
92	DE	WK	On Rail - Gesellschaft für Eisenbahnausrüstung und Zubehör mbH	RSRD <sup>2</sup>
93	DK	IM	Banedanmark	
94	DK	RU/WK	DB Cargo Scandinavia A/S	DB Cargo AG
95	ES	IM	ADIF	
96	ES	RU/WK	TF Transfesa	DB Cargo AG
97	ES	RU	FERROVIAL RAILWAY, S.A.	
98	ES	RU	RENFE MERCANCIAS, S.A.	
99	ES	WK	Sociedad de estudios y explotacion de material auxiliar de transportes S.A.	RSRD <sup>2</sup>
100	ES	wĸ	Transportes Ferroviarios Especiales S.A.	RSRD <sup>2</sup>
101	FI	IM	Finnish Trasport Agency	
102	FI	RU	VR-Group Ltd	
103	FR	RU	FRET SNCF	
104	FR	RU	EUROPORTE FRANCE	
105	FR	IM	SNCF Réseau	
106	FR	RU/WK	ECR Euro Cargo Rail SA	DB Cargo AG
107	FR	WK	ATIR-RAIL	RSRD <sup>2</sup>
108	FR	WK	STVA S.A.	RSRD <sup>2</sup>

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Nr.	Member State	Type of Company	Company name	Reporting Entity
109	FR	wĸ	Compagnie Française de Produits Métallurgiques	RSRD <sup>2</sup>
110	FR	WK	Monfer France SASU	RSRD <sup>2</sup>
111	FR	wĸ	SOCOMAC	RSRD <sup>2</sup>
112	FR	wĸ	NACCO S.A.S.	RSRD <sup>2</sup>
113	FR	wĸ	Ermewa SA	RSRD <sup>2</sup>
114	HU	IM	GYSEV Zrt.	
115	HU	RU	MMV Magyar Magánvasút Zrt.	
116	HU	RU/WK	MÁV-START	
117	HU	IM	MÁV	
118	HU	AB	VPE Vasúti Kapacitás- elosztó Kft.	
119	HU	RU/WK	U DB Cargo Hungária Kft.	DB Cargo AG
120	HU	RU	CER Hungary Zrt.	
121	IE	WK	TOUAX Rail Ltd.	RSRD <sup>2</sup>
122	IT	RU	Trasporto Ferroviario Toscano S.p.A.	
123	IT	IM	Ferrovie Emilia Romagna	
124	IT	RU	TX Logistik AG - Filiale	
125	IT	RU	HUPAC SpA	
126	IT	RU	SBB Cargo Italia	SBB Cargo International
127	IT	RU/WK	DB Cargo Italia Srl	DB Cargo AG
128	IT	IM	LA FERROVIARIA ITALIANA S.P.A.	
129	IT	IM	RETE FERROVIARIA ITALIANA	
130	IT	WK	Lotras srl	
131	IT	WK	Monfer Cereali SRL	RSRD <sup>2</sup>
132	LT	IM/RU	JSC "Lithuanian Railways"	
133	LU	IM	CFL	
134	LU	RU	CFL Cargo	
135	LV	IM/RU	LDz	
136	NL	IM	ProRail	
137	NL	RU/WK	DB Cargo Nederland N.V.	DB Cargo AG
138	NO	IM	Bane NOR (former Jernbaneverket)	
139	PL	IM	PKP Polskie Linie Kolejowe S.A.	
140	PL	RU/WK	DB Cargo Polska Spółka Akcyjna	DB Cargo AG
141	PL	WK	GATX Rail Poland Sp. z o.o.	RSRD <sup>2</sup>
142	PL	WK	Felbermayr Immo Sp.z.o.o.	RSRD <sup>2</sup>
143	PL	WK	Tankwagon sp.z.o.o.	RSRD <sup>2</sup>
144	PT	RU	MEDWAY - Operador Ferroviário e Logístico de	
144			Mercadorias, SA	
143	PT	IM	Infraestruturas de Portugal	<u> </u>

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Nr.	Member State	Type of Company	Company name	Reporting Entity
146	PT	RU/WK	TAKARGO	
147	PT	WK	ADP Fertilizantes, S.A.	RSRD <sup>2</sup>
148	PT	WK	CIMPOR - Serviços de Apoio à Gestão de Empresas, S.A.	RSRD <sup>2</sup>
149	RO	RU/WK	DB Schenker Rail Romania SRL	DB Cargo AG
150	SE	IM	CFR	
151	SE	RU	LKAB Malmtrafik AB	
152	SE	RU/WK	Green Cargo	
153	SE	IM	Trafikverket (Swedish Transport Administration)	
154	SE	WK	TRANSWAGGON AB	RSRD <sup>2</sup>
155	SE	WK	Stena Recycling AB	RSRD <sup>2</sup>
156	SI	IM	SŽ Infrastruktura d.o.o. Ljubljana	
157	SI	WK	Adria kombi d.o.o.	RSRD <sup>2</sup>
158	SK	IM	Železnice Slovenskej republiky	
159	SK	RU	Petrolsped Slovakia s.r.o.	
160	SK	RU/WK	Express Group, a. s.	
161	SK	RU/WK	Železničná spoločnosť Cargo Slovakia, a.s.	
162	SK	RU	BULK TRANSSHIPMENT SLOVAKIA a.s.	
163	SK	WK	Ing. Alica Ovciariková A.O.	RSRD <sup>2</sup>
164	SK	WK	Felbermayr Slovakia s.r.o.	RSRD <sup>2</sup>
165	TR	WK	TRANSWAGGON Vagon Isletmeleri Ltd. Sti.	RSRD <sup>2</sup>
166	UK	IM/WK	Network Rail Infrastructure Limited	
167	UK	RU/WK	DB Cargo (UK) Ltd	DB Cargo AG

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#### 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/

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