



## FRMCS subgroup of the Deployment Group - First Meeting

5<sup>th</sup> September 2024

9:00 – 11:00

On-line meeting

### *Participants*

<u>Name</u>	<u>Company</u>	<u>Present</u>
1. Jesús Santiago	ADIF	Yes
2. José Alberto González	ADIF	No
3. Jean-François Caubet	AERRL	Yes
4. Pierre Cotellet	Alstom	Yes
5. Jose Antonio Quintano	CAF	Yes
6. Jean-Philippe Gachot	CER	Yes
7. Achim Vrielink	DB	No
8. Holger Lietz	DB	Yes
9. Markus Neubacher	DB	Yes
10. Morten Schläger	DB	Yes
11. Bardo Schettini	EIM	Yes
12. Giuseppe Miccoli	EIM	Yes
13. Maria Cataldo	FSI	No
14. Leonardo Malesci	FSI	Yes
15. Luca Di Dio La Leggia	FSI	Yes
16. Cataffo Vittorio	FSI	Yes
17. Arild Nybrodahl	Bane NOR	Yes
18. Johann Lienhart	OEBB	Yes
19. Manfred Schienbein	Siemens	Yes

20. Eric Giraud-Desjuzeur	SNCF	No
21. Simon Gouyou-Beauchamps	SNCF	Yes
22. Pascal Désaunay	SNCF	Yes
23. Pipsa Hallner	Trafikverket	Yes
24. Mats Malmström	Trafikverket	No
25. Dan Mandoc	UIC	Yes
26. Michael Mikulandra	UNIFE	Yes
27. Jorgen Mattisson	UNIFE	Yes
28. Martin Schroeder	ERA	Yes
29. Giacomo Potenza	ERA	No
30. Wawrzyniec Perschke	DG MOVE	Yes
31. Karel Van Gils	EU-RAIL	Yes
32. Alfonso Lorenzo	Ineco	Yes

### *Agenda*

1. Introduction
2. Tour the table
3. State of play FRMCS. Presentation UIC
4. Discussion on ambition subgroup
  - a. Based on 10 point plan
  - b. Adjustments
5. AOB
6. Conclusions and actions

### *Minutes of the Meeting*

#### **1. Introduction**

Karel Van Gils (EU-RAIL) welcomed the members and explained the purpose of the group. He clarified the context of EU-RAIL and the High-Level Deployment Group.

On behalf of the high-level Deployment Group (HL DpG), a subgroup on FRMCS deployment is installed with following first tasks:

1. Make workplan for the group activities for the upcoming period
2. Revise FRMCS subgroup remit position paper and suggest feasible prioritization.

Both documents are for validation and approval in the next High-Level Deployment Group meeting on October 22nd.

Karel Van Gils explained the aim of this kick-off meeting is to challenge and discuss the remit (i.e. 10 point plan), to produce a feasible workplan. The next meeting on 2<sup>nd</sup> October (9 – 11 hours) will be focussed on workplan.

## **2. Tour the table**

Each participant of the meeting introduced himself/herself.

## **3. State of play FRMCS. Presentation UIC**

Dan Mandoc (UIC) introduced the FRMCS state of play (see the presentation).

## **4. Discussion on ambition subgroup**

Karel Van Gils introduced the 10 point plan included in the remit of the FRMCS subgroup (see the presentation). The 10 point plan is discussed by the members, reaching the following clarifications and agreements:

The point 1 is very ambitious to achieve comprehensive, so in the following months the group should define which data to be focused on and that could be collected in the following years before the FRMCS deployment start. A step-by-step approach. A first step will be to collect the available data and then complete when more data is available. A first review of available NIP's don't show much information on FRMCS.

Regarding point 2, it is difficult to now estimate necessary capacities. The estimation will be based on point 1 findings. The differences between the capacity of FRMCS providers and the application providers (e.g. ETCS) should be considered. A roadmap planning should be presented for the big roll-out around 2030 including capacity, products to deliver and availability of logistic chain. NSA's to be added to the list of stakeholders.

In advance to perform a financial analysis (point 3), the migration scenarios (point 7) should be defined. Both trackside and on-board deployment should be considered in the analysis. In addition, to define the migration scenarios (point 7), the trackside and on-board data (point 1) should be made available in an iterative process. Also, the elements covered by "trackside" and "on-board" concepts should be clearly defined in the analysis. The group concluded that concrete financial numbers are not available as of today.

On migration scenarios (point 3), reference was made to the ERA study: [Study on migration of railway radio communication from GSM-R to other solutions by Systra.pdf \(europa.eu\)](#) (attached). The group would appreciate to receive any relevant study from all the stakeholders involved in the group and beyond. [NOTE after meeting: a Teams SharePoint folder for this group will be set up]. On migration both infra and rolling stock assets should be included, and also the differences between the scenarios (financial,

risks, capacity, etc). The scenarios should be accessible for top management to make decisions on which scenario to choose.

The EU-wide coordination of FRMCS deployment (point 4) looks relevant, especially for cross border sections (point 6) and for regulatory framework (point 5), e.g., coordination in the evolution of the Technical Specifications of Interoperability (TSIs).

Other relevant point for FRMCS deployment to be considered by the group, especially for the migration phase, is if the railway FRMCS frequencies used by MNOs should be mandatory or optional for trackside and on-boards deployments. EU-wide coordination on this point looks relevant for FRMCS deployment.

The governance should also be faced by the group, based on a two-layer basis/approach (workstreams): the technical layer and the legal, economical and political layer. Experience from DAC could be relevant, especially, for point 4. A good governance to proceed the work is considered as very critical. The governance used for DAC deployment (EDDP programme) can be used as a good solid basis.

Quick authorization of vehicles and tracks equipped with FRMCS is key (point 5). It does not only mean a simplification of the process but could also be a reduction on the number of technical options (e.g., harmonization/standardisation) that difficult the authorization process and the documentation that should be provided by the applicants.

Cross-border issues and private-public interfaces are considered relevant for the coordination of the FRMCS deployment from both technical and legal/economical point of view (point 6).

In addition to comments indicated above on migration scenarios, for point 7, the different implementation of FRMCS in the Member States identified in point 1 should be considered (e.g., FRMCS deployment is based on MNO's, FRMCS deployment keeping the GSM-R system or class B radio systems, etc.). The number of migration scenarios defined should be limited to make affordable the financial analyses (point 3). The "voice" and "ATO" systems should be added and considered when defining the migration scenarios.

The topic related to the incompatibility between FRMCS and ETCS Baseline 3 is currently analysing by the CTO Council. The CTO Council findings should be considered for defining migration scenarios (point 7) and for the risk analysis (point 8), e.g., if baseline light products are deployed, delays on the availability of the FRMCS product could be faced. An open point for consideration and further discussion is on the scope of the work, e.g., does the group start with Level 2 Baseline 4 assets, or do we also take the different starting point in different countries and companies into consideration. The conclusion of the discussion tended towards the second statement and take different starting positions into account.

Regarding point 9, the alignment with other major rail transformation programs (e.g., satellite positioning, ATO, DAC...) should be considered to define the migration scenarios, the economic analysis, etc. The roll out should consider, to a certain extend, those new technology and not only FRMCS deployment. For further discussion in the High-Level Deployment Group.

According to CCS TSI 2023, ATO system is already part of the ERTMS system. However, according to the available National Implementation Plans so far received, most of the Member States has no plans on ATO deployment. Therefore, ATO seems to be not a priority point.

No comments on point 10 (subgroup recommendations), that will include the findings of the FRMCS subgroup base on the 10 points list actions.

The relation between points and the order of the actions should be faced in the following meeting, based on an adjusted '10-point plan' [*Action: adjust the '10-point plan' by considering the subgroup comments*] and clarified in the FRMCS subgroup workplan.

## 5. AOB

There is no other business.

## 6. Conclusions and actions

Jean-François Caubet (AERRL), Pipsa Hallner (Trafikverket) and Wawrzyniec Perschke (DG MOVE) volunteered to work on a concept workplan to be discussed in the next meeting. [*Action: Draft a FRMCS subgroup workplan*]

Karel Van Gils thanked all members for their transparency, contribution and commitment, and he closed the meeting at 11:02.

### *Action List*

No.	Action	Owner	Deadline	Status
1	Adjust the '10-point plan' by considering the subgroup comments	Karel Van Gils Alfonso Lorenzo	Mid-September	Open
2	Draft first FRMCS subgroup workplan to discuss in 2 <sup>nd</sup> meeting	Karel Van Gils Alfonso Lorenzo Jean-François Caubet Pipsa Hallner Wawrzyniec Perschke	October FRMCS subgroup meeting	Open