



FRMCS subgroup of the Deployment Group - Eleventh Meeting

9th June 2026

10:00 – 12:00

On-line meeting

Participants

Name	Company	Present	Name	Company	Present
1. Jesús Santiago	ADIF	Yes	2. José Alberto González	ADIF	No
3. Sara Caramés	ADIF	No	4. Juan López	AERRL	Yes
5. Aurelie Csizmazia	AERRL	No	6. Pierre Cotellet	Alstom	Yes
7. Arild Nybrodahl	Bane NOR	Yes	8. Jose Antonio Quintano	CAF	Yes
9. Jean-Philippe Gachot	CER	Yes	10. Paweł Bernacik	CER	No
11. Dittrich Jaroslav	CER	Yes	12. Achim Vrielink	DB	No
13. Holger Lietz	DB	Yes	14. Markus Neubacher	DB	No
15. Morten Schläger	DB	Yes	16. Marco Schwarz	DB	No
17. Mario Sela	DB	Yes	18. Karsten Poger	DB	Yes
19. Ralf Marxen	DB	Yes	20. Jens Schaub	DB	Yes
21. Bardo Schettini	EIM	Yes	22. Giuseppe Miccoli	EIM	No
23. Maria Cataldo	FSI	No	24. Leonardo Malesci	FSI	Yes
25. Cataffo Vittorio	FSI	Yes	26. Felice Iusto	FSI	No
27. Antona Gaspare	FSI	Yes	28. Enrico Noviglio	FSI	No
29. Edoardo Manneschi	FSI	Yes	30. Antonio Migliuolo	FSI	Yes
31. Florencia Marchionne	FSI	Yes	32. Joost van Gennip	NS	Yes
33. Johann Lienhart	OEBB	No	34. Erik Hadl	OEBB	Yes
35. David Loeschenbrand	OEBB	Yes	36. Manfred Schienbein	Siemens	No

37. Eric Giraud-Desjuzeur	SNCF	Yes	38. Simon Gouyou-Beauchamps	SNCF	Yes
39. Pascal Désaunay	SNCF	No	40. Eric Le Moal	SNCF	No
41. Pipsa Hallner	Trafikverket	Yes	42. Mats Malmström	Trafikverket	Yes
43. Joachim Eriksson	Trafikverket	Yes	44. Dan Mandoc	UIC	No
45. Michael Mikulandra	UNIFE	Yes	46. Jorgen Mattisson	UNIFE	Yes
47. Pasquale Donadio	UNITEL (Comesvil)	No	48. Ulrich Geier	UNITEL (Kontron)	No
49. Olivier Eudes	UNITEL (Kontron)	No	50. David Rothbaum	UNITEL (Ericsson)	Yes
51. Igor Alexandrov	UNITEL (Ericsson)	No	52. Martin Schroeder	ERA	No
53. Giacomo Potenza	ERA	No	54. Wawrzyniec Perschke	DG MOVE	Yes
55. Michaela Strohschneider	DG MOVE	No	56. Karel Van Gils	EU-RAIL	Yes
57. Merve Demirkan	EU-RAIL	Yes	58. Alfonso Lorenzo	Ineco	Yes
59. Álvaro Rodríguez (*)	KPMG	Yes	60. Johanna Nes (*)	Dutch Ministry of Infrastructure	Yes
61. Jos Nooijen (*)	ProRail	Yes			

(*) Álvaro Rodríguez was invited to explain the WG2 cost model, and Johanna Nes and Jos Nooijen were invited to explain the Dutch FRMCS plan.

Agenda

1. Introduction
 - 1.1 Foreseen usage of Cooperation Tool
2. Minutes of last meeting
3. FRMCS deployment plans
 - 3.1 Swedish plan
 - 3.2 Dutch plan
4. FRMCS DpG activities
 - 4.1 State of play
 - 4.2 Programme Dashboard
5. AOB

Minutes of the Meeting

1. Introduction

Karel Van Gils welcomed the members to the 11th FRMCS Deployment Group meeting.

He introduced the agenda, which was agreed.

Karel Van Gils announced that the EU-Rail Governing Board, at its April meeting, endorsed both the creation of a DAC Deployment Subgroup to advance EU-Rail's deployment goals, and the inclusion of experts in the subgroups from non-HL DpG members. For example, experts from antenna suppliers or mobile network operators (MNOs) are welcome to join the working groups.

In addition, Karel informed that EU-RAIL published, in 2025, a call to support FRMCS DpG activities. The FRMCS Insight consortium is expected to be contracted and to start supporting these activities in the coming weeks.

1.1. Foreseen usage of Cooperation Tool

Karel explained the background and the reasons behind the proposal to use the Cooperation Tool for plenary meetings of the FRMCS Deployment Group. It is foreseen that the HL DpG will take a decision at the July meeting (see meeting presentation¹). *[Action: roll-out cooperation tool for FRMCS DpG communication after HL DpG confirmation]*

2. Minutes of last meeting

There were no comments on the minutes of the previous plenary meeting; therefore, the minutes of the meeting held on the 20 January 2026 were approved. *[Agreement]*

Regarding the action list, all actions were closed (i.e., actions 1 and 3) except for the action requesting ERA to provide an overview of planned testing activities beyond MORANE-2, which is still in progress (i.e., action 2). Karel explained that a request was sent to ERA, and a formal response is still pending. This action is still open in order to obtain an answer from ERA by the September plenary meeting.

3. FRMCS deployment plans

3.1. Swedish plan

Mats Malmström, FRMCS Programme Manager in Sweden, presented Trafikverket's plans for FRMCS deployment (see Trafikverket presentation²). Following the presentation, Mats clarified the following points raised by participants:

- Personnel working on tracks and traffic management use GSM-R telephones as a backup if standard communication devices are not operational.

¹ [20260609 FRMCS plenary meeting.pptx](#)

² [FRMCS TRAFIKVERKET DPG 2026-06-09.pdf](#)

- In principle, it is not foreseen to migrate RMR from the 1900 MHz band to the 900 MHz band after the switch-off of GSM-R. It is considered that there will be sufficient radio coverage for all trains and handheld devices. However, further investigation is ongoing to determine whether such migration may be relevant in specific scenarios (e.g. tunnels).
- It is expected that the ERTMS deployment will continue, and that all ETCS lines will be migrated from GSM-R to FRMCS following the voice migration. The exact number of kilometres to be migrated has not yet been confirmed, but the ETCS migration is estimated to take place between 2033 and 2035.
- Rolling stock conversion represents a significant challenge, particularly regarding the adaptation of radio cab equipment. For this reason, rolling stock owners are involved in discussions to assess the feasibility of the plan. The yellow fleet presents additional challenges. Furthermore, enforcing migration of vehicles to ETCS Baseline 3 Release 2 Level 2 in Sweden, followed by migration to FRMCS, also constitutes a challenge.
- Further investigations are required to confirm the absence of interference between FRMCS in the 1900 MHz band (combined with MNO operation) and GSM-R in the 900 MHz band. Additional analysis is also needed to ensure that there are no issues when using GSM-R 900 MHz for ETCS in parallel with FRMCS 1900 MHz for voice, or to determine whether isolation requirements are necessary. Frequency coexistence is a key topic to be addressed by the FRMCS DpG in future meetings.
- It was clarified that, in Sweden, MNO networks will be used as a backup for RMR.
- In Sweden, specific conditions are attached to 5G licences to ensure coverage but only along main railway lines.

3.2. Dutch plan

Joost van Gennip, Jos Nooijen and Johanna Nes presented the Dutch plans on FRMCS deployment (see Trafikverket and NS/ProRail presentation³).

Following the presentation, it was clarified that several factors make the migration of the fleet to FRMCS by 2035 infeasible from the NS perspective. These include, inter alia, the expected publication of FRMCS specifications in the CCS TSI (planned for mid-2029), the availability of ETCS+FRMCS products from suppliers, the timeline for First-in-Class vehicles (with one year considered optimistic), and the estimated duration for vehicle migration (approximately 15 working days per vehicle).

Wawka Perschke clarified that the onboard units should be capable of connecting to both RMR and MNO networks, i.e. they will support both frequency bands.

Karel thanked Sweden and the Netherlands for sharing their FRMCS deployment plans with the participants and encouraged other members to present their plans at future plenary meetings. *[Action:*

³ [FRMCS NL 20260609 v01 ERJU DG PM.pdf](#)

Member States wishing to share their FRMCS deployment plan at the next plenary meeting are invited to inform Karel and Alfonso]

4. FRMCS DpG activities

Karel Van Gils indicated that the presentation shared with the plenary members is a draft of the FRMCS section of the HL DpG presentation for the July meeting. The final version will be circulated once available.

Karel Van Gils introduced the key topics related to FRMCS deployment within a broader context (see meeting presentation).

Wawka Perschke indicated that, based on input from the sector, the European Commission (EC) will circulate a proposal in the coming days addressing the ETCS Baseline 3 / Baseline 4 compatibility topic. The proposal is expected to be submitted for approval to the Railway Interoperability and Safety Committee (RISC).

In addition, Wawka noted that the current approach to ERTMS deployment limits economies of scale, resulting in higher costs and longer timelines for infrastructure managers. The EC is promoting 'ERTMS Deal' the harmonisation of solutions, including engineering rules and interfaces within the CCS architecture (beyond ERTMS interfaces per se). A related paper will be presented at the Connecting Europe Days in September.

David Rothbaum, Mario Sela and Pipsa Hallner provided overviews of the status and outputs of WG1, WG2 and WG3, respectively. Álvaro Rodríguez presented the WG2 cost model. Finally, transversal topics, the FRMCS Deployment Survey 2026, the risk assessment, and the Programme dashboard were presented (see meeting presentation). *[Action: final WG2 cost model to be presented in the next plenary meeting]*

No comments or questions were raised.

5. AOB

Karel Van Gils introduced the agenda for the HL DpG meeting scheduled for 2 July. He also indicated that the next plenary meeting is planned for 15 September, and provided information on the upcoming webinars and FRMCS slots in the EU-Rail/EC/ERA booth during InnoTrans (see meeting presentation).

Action List

No.	Action	Owner	Deadline	Status
1	Bilateral meeting with UNIFE representatives to address their concerns regarding the advice to ERA proposal	Pascal Désaunay	HL DpG meeting in February	Completed
2	Ask ERA to provide an overview of planned testing activities beyond MORANE-2 at the next plenary meeting	Karel Van Gils	Plenary meeting in September	In progress
3	Include an agenda item in the next plenary meeting for Member States wishing to share their FRMCS deployment plans	Alfonso Lorenzo	Plenary meeting in June	Completed
4	Roll-out cooperation tool for FRMCS DpG communication after HL DpG confirmation	EU-RAIL	After HL DpG meeting in July	Open
5	Member States wishing to share their FRMCS deployment plan at the next plenary meeting are invited to inform Karel and Alfonso	All	Plenary meeting in September	Open
6	Final WG2 cost model to be presented in the next plenary meeting	Mario Sela	Plenary meeting in September	Open