



## Deliverable D 8.1

### DAC Migration Roadmap Review III

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## 1. Executive Summary

This summary describes the activities in the DACcord WP8 and the performed work on the **DAC migration roadmap** from project month M25 until M36.

The tasks to be carried out on the DAC migration roadmap under this programme / DACcord project could be driven and developed further compared to plan in support to the EU-Rail JU and in cooperation with all parties involved in the different EDDP work areas and their interfaces, including the European Commission and the European Union Agency for Railways, leading to the current status of the detailed planning of the EDDP's work areas with their respective workstreams and deliverables.

The regular review of the sequential interim results of the EU-Rail project "DACFIT" on vehicle retrofit preparedness in the EDDP Work Area C and their inclusion in the EDDP overarching risk management finally drew the general attention clearer on the very problematic issue of retrofitting resp. re-authorisation of locos retrofitted with DAC. It also helped to create respective work items under the lead of the European Union Agency for Railways (ERA), after an attempt to stipulate a "European Locomotive Summit" had failed for various (not DACcord-related) reasons.

An important decision could be made via Work Area C on the abandon of the necessity for a mechanical manual uncoupling on wagon side (instead: wagon-side push-button uncoupling). Moreover, a discussion on a more flexible approach to migration (full deployment) could at least start, taking into account of especially the developments on vehicle fleet readiness.

The work on funding and financing (Work Area D), which – in conjunction with the stakeholder management activities - successfully secured at least the funds for the Pioneer DAC Trains in 2024, was temporarily paused. Actions like Cost-Benefit Analysis (CBA) update require further hardened input from the fleet analysis, and the identification of funding and financing opportunities for general deployment will only be meaningful after feedback from Pioneer Trains. More evidence collected will then restart these activities, e. g. via up-to date CBA data from Pioneer Trains operation.

The main achievements in the overall DAC migration roadmap management in Reporting Period 3 were

- › Regular review of the DACFIT project state of play and consolidation of its challenges into the regular overall and overarching FP5/EDDP/SPT4 risk management
- › highlighting and escalating further the challenge of loco retrofit and re-authorisation, leading to the creation of respective ERA work streams
- › decision on mechanical manual uncoupling version for full deployment and Pioneer DAC Trains
- › overall management of the DAC migration roadmap and overseeing its execution

The objective of WP8 has been fully achieved and all tasks have been successfully performed, even if the way until a feasible migration scenario for full deployment will still be long, due to the above factors.

**The respective work within the DACcord project hereby ends, at the end of Reporting Period 3.**

## 2. Abbreviations and acronyms

Abbreviation / Acronym	Description
CBA	Cost-Benefit Analysis
CEF	Connecting Europe Facility
CER	Community of European Railway and Infrastructure Companies
CSEE	Central and South-Eastern Europe (countries)
CTO	Chief Technology Officer (of a company)
DAC	Digital Automatic Coupler
EDDP	European Digital Automatic Coupler (DAC) Delivery Programme
EIM	European Rail Infrastructure Managers
ERA	European Union Agency for Railways/ European Railway Agency
EU-Rail (JU)	Europe's Rail (Joint Undertaking)
FDFTO	Full Digital Freight Train Operations
FP	(EU-Rail) Flagship Project
GMP	General (DAC) Master Plan
IM	Infrastructure Manager
NCP	National Contact Point (in ministry)
OEM	Original Equipment Manufacturer
PM	Programme Management
PMO	Programme Management Office
RU	Railway Undertaking
SH	Stakeholder
SM	Stakeholder Management
TSI	Technical Specification for Interoperability
UIC	Union Internationale des Chemins de Fer
WA	(EDDP) Work Area
WP	Work package

### 3. Background

The project DACcord provides management competencies to support the EU-Rail JU for the continuation of the professional management of the activities of the European DAC Delivery Programme (EDDP), enabled by the EU-Rail JU and established in the EU-Rail JU work programme, in which European Rail Freight Sector and manufacturers are united to strive for the Europe-wide introduction of a Digital Automatic Coupler.

The present document constitutes the **Deliverable “D 8.1 DAC migration roadmap review III”** of the DACcord project’s **WP 8 “DAC migration roadmap III”** in the framework of the European DAC Delivery Programme within Flagship Area 5 as described in the EU-RAIL MAWP, and contributes as well to / interacts with the Flagship Project 5 TRANS4M-R (see Figure 1).

DACcord beneficiary **railiable** was in charge of this work package, in close cooperation with members of the below depicted EDDP work areas especially C and D and all other EDDP members.

DACcord beneficiary **UIC** has performed quality and plausibility checks on the report produced.

For easier referencing, the identification of the areas and activities of the overall DAC programme has been set to the following nomenclature:

Work area	Activity	Title/content
A	A1	EU-Rail Flagship Project 5 TRANS4M-R, “Full Digital Freight Train Operations”
	A2, 3	FP5 FDFTO “Sounding Boards” for FP5 Technology and Operational Rules
B (EDDP & Stakeholder management)	B1	EDDP programme / risk management
	B2	EDDP Stakeholder management
C (Migration) <i>(scope of this deliverable)</i>	C1	Fleet analysis and retrofit engineering
	C2	Retrofit Capacity (workshops, workforce, components)
	C3	Migration strategies & retrofitting plan (incl. traffic analysis etc.)
	C4	Infrastructural and IT adaptations
	C5	Placing into service plan/measures (for operations/staff)
D (Economics) <i>(scope of this deliverable)</i>	D1	Funding & financing plan (for DAC pre- and full deployment)
	D2	Cost-Benefit Analysis (CBA) incl. updates
	D3	Investment plan & procurement framework plan
	D4	Other regulatory & legal framework plans (e. g. GCU)
E (EC and ERA-related)	E1	Efficient & suitable authorisation process/requirements; preparing draft TSIs
	E2	TSI revisions
F (EU-Rail System Pillar)	F	Standardisation of Technical and Operational Rules, preparing inputs to TSI drafting, driving EU standardisation
G	-	the (planned) pre-deployment (Pioneer) Trains project





## 4. Objective/Aim

The main objective of DACcord WP8 is/was **to refine and, where resources can be made available, manage the DAC migration roadmap (actions) towards deployment in the months 25-36 of the project** (cf. Grant Agreement).

The execution of the actions of the roadmap is not an objective of this WP.

For doing this, railiable worked closely with the EDDP members and the wider rail freight sector via the EDDP/FP sounding boards and in close cooperation with former WP 10 (stakeholder management), specifically refining, optimising and interfacing with FP5, SP and others the existing actions of the DAC migration roadmap in EDDP.

*Table 1 DAC migration roadmap activities covered by this review*

<b>DAC migration roadmap activities at the day of proposal submission</b>	<b>Reference after ID allocation</b>	<b>Scope of this review</b>
<ul style="list-style-type: none"> <li>Fleet analysis &amp; engineering (retrofit readiness)</li> </ul>	C1	<b>In</b> (via DACFIT project)
<ul style="list-style-type: none"> <li>Retrofitting capacity plan</li> </ul>	C2	<b>In</b> (via DACFIT project, limited progress)
<ul style="list-style-type: none"> <li>Retrofitting plan (Traffic &amp; customer sidings analysis, operational plan)</li> </ul>	C3	<b>In</b> (via scenario evaluation and “uncoupling” decision)
<ul style="list-style-type: none"> <li>Infrastructural and IT adaptations</li> </ul>	C4	<b>Not in</b> (paused)
<ul style="list-style-type: none"> <li>Placing into service plan</li> </ul>	C5	<b>Not in</b> (planning too early)
<ul style="list-style-type: none"> <li>Funding/ Financing plan</li> </ul>	D1	<b>Not in</b> (paused)
<ul style="list-style-type: none"> <li>CBA (updates)</li> </ul>	D2	<b>Not in</b> (paused)
<ul style="list-style-type: none"> <li>Investment plan &amp; procurement framework plan</li> </ul>	D3	<b>Not in</b> (planning too early)
<ul style="list-style-type: none"> <li>Other regulatory framework plans</li> </ul>	D4	<b>Not in</b> (planning too early)
<ul style="list-style-type: none"> <li>Suitable authorisation process (ERA)</li> </ul>	E1	<b>Partially in</b> (work on Pioneer Trains in addition to the activities reported in FP5)
<ul style="list-style-type: none"> <li>TSI revision (EC)</li> </ul>	E2	<b>Not in</b> (planning too early)

Table 2 Work package 8 tasks (cf. Grant Agreement):

To achieve the EDDP and its interfaces management objectives set out in the overall WP objective, the WP carried out:	Status	Chapter
<p>refining the EDDP DAC migration roadmap (concept) / industrial migration plan towards deployment and the required topics/implementing actions – which are not part of this call</p> <p>managing the DAC migration roadmap risk management plan incl. board reporting</p> <p>Organising regular cross-checks between FP5 DFOT and the different migration roadmap actions</p>	Achieved	5.1
<p>Consolidating regularly the existing basic migration assumptions, findings, reports principles/boundary conditions (instruments, methods, tools, e.g. target scenario, tech packages, retrofit plan, legal and financing instruments, major criteria/ options for overall migration scenario optimisation, ...) for EDDP boards</p>	Achieved	5.2
<p>Applying, where appropriate, the criteria/options for overall migration/deployment optimisation</p>	Achieved	5.3
<p>Managing/overseeing the execution of these actions, where resources available</p>	Achieved	(all)

## 5. WP8 achievements (Months 25-36)

### 5.1. DAC migration roadmap and risk management

The DACcord task consisted in the (cf. Grant Agreement)

- *“Setting-up an EDDP DAC migration roadmap (concept) / industrial migration plan towards deployment by identifying the required topics/implementing actions including milestones, key deliverables, required interactions/interfaces & iterations and related resource availabilities/needs; objective-setting of the actions*
- *Allocating the actions to European, national or company/stakeholder level (e. g. assessment of the retrofit demands per country, per wagon-type and fleets; analysis of all major customer sidings/terminals per country with respect to mixed-coupler fleet operations etc.)*
- *Setting-up, managing of a DAC migration roadmap risk management plan incl. board reporting”*

The predominant EDDP work areas for the **DAC migration roadmap** were/are the **EDDP work areas C and D**.

The migration roadmap will also be touched more deeply by first results from **work area E** (authorisation processes), as soon as available for the Pioneer DAC Trains (PioDAC) project.

Today, this is starting to be covered in FP 5 TRANS4M-R and in the ERA Topical Working Group Freight, and specifically in the **ERA “retrofitting of vehicles with DAC” work group**. EDDP, FP5, PioDAC members, EC/EU-RAIL etc. gather there for solving the authorisation issues for especially locomotives retrofitted with DAC.

The different parts of the DAC Migration roadmap have been since longer synchronised with and integrated into the overall FP5/EDDP/FP5 risk management exercise, see further down.

### 5.1.1. EDDP / DAC migration roadmap Work Area C

The Cx activities, workstreams and deliverables are shown in Figure 3. The related sub-planning has already been reported in D7.1 in Reporting Period 2 and has not changed, more specifically but also not progressed, due to the prioritisation in favour of especially fleet information / C1.

#### EDDP Work Area C: European coordination for Migration strategies

WORK AREA C: EUROPEAN COORDINATION FOR MIGRATION STRATEGIES		
WORK AREA LEAD: ANDREAS LIPKA		
ACTIVITIES	RESPONSIBLE PERSON	TRAFFIC LIGHT STATUS OVERALL
C1 Fleet Analyses & rtf Engineering (rtf readiness)	Lisa Blumrodt	●
C2 Retrofit capacity (workshops, work-force, components)	DACFIT Partner	●
C3 Migration strategies & retrofitting	Andreas Lipka	●
C4 Infrastructural & IT adaptations	Marcel de la Haye, Bardo Schettini	●
C5 Placing into service plan (safety, workforce training, rulebooks etc.)	[...]	●

Figure 3. EDDP Work Area C activities

The work done in **Work Area C in the activities C1-C4** could finally benefit of the progress from especially the **EU-Rail Project “DACFIT”** whose work packages serve as “providers” to the Migration Roadmap activities C1, C2 and C3.

Figure 4 shows the overview on the DACFIT work plan as presented already in Reporting Period 2.

Preliminary results from **DACFIT / activity C1** have regularly been presented to the EDDP boards and confirm the problematic situation on loco retrofitting, backed by the continued lack of cooperation on the side of especially the loco manufacturers/OEMs.

The main reason quoted on loco OEM side for not being able to provide data is the “lack of a business case”, which means that OEM engineering hours spent on vehicle data analysis would need to be paid. This is budget-wise not possible, neither from of the DACcord project nor from the DACFIT project.

The DACFIT project therefore needed to rely as much as possible on publicly available data, which is only a part of the information required for full evidence.

## C1-C3: migration roadmap | DACFIT planning overview

WP #	WP Name	Lead	Start Date	15.10	15.11	15.12	15.01	15.02	15.03	15.04	15.05	15.06	15.07	15.08	15.09	15.10	15.11	15.12	15.01	15.02	15.03	15.04	15.05	15.06	15.07	15.08	15.09
			End Date	14.11	14.12	14.01	14.02	14.03	14.04	14.05	14.06	14.07	14.08	14.09	14.10	14.11	14.12	14.01	14.02	14.03	14.04	14.05	14.06	14.07	14.08	14.09	14.10
			Year 1												Year 2												
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
WP1	Project Management and Coordination	DB AG			D1	D2	M7			M8				D11													M5 M6
Task 1.1	Financial and Administrative Coordination																										
Task 1.2	Technical Management																										
Task 1.3	Project Quality and Risk Management																										
WP2	Preliminary technical rail freight fleet analysis	k+v												D3													
Task 2.1	Vehicles Type Selection																										
Task 2.2	Technical Analysis and Documentation																										
WP3	Finalisation of technical rail freight fleet analysis	k+v																									D4
Task 3.1	Enrichment of Vehicle Analysis and Documents																										
Task 3.2	Finalization of Qualitative (technical) Analysis and Documentation																										
WP4	Quantitative rail freight fleet analysis	DB Cargo																									D5
Task 4.1	Enrichment of Vehicle Analysis and Documents																										
Task 4.2	Traffic Type Allocation and Prognosis Documentation																										
WP5	Retrofitting processes, times & requirements	VERS																									D6
Task 5.1	Establishing Retrofitting Processes and Workforce Competencies																										
Task 5.2	Validation and Optimization of Retrofitting Techniques																										
WP6	Available and potential retrofit capacity	VERS																									D7
Task 6.1	Cataloging Existing Workshop Capacities																										
Task 6.2	Evaluating Growth Potential and Enhancing Retrofitting Capacity																										
WP7	Retrofitting (capacity) plan	DB Cargo																									D8
Task 7.1	Set Up a Decision Support System (DSS)																										
Task 7.2	Creation of the Retrofitting Capacity Plan																										
WP8	Dissemination, Communication and Exploitation	DB Cargo																									D10
Task 8.1	Dissemination and Communication																										
Task 8.2	Exploitation																										

Figure 4. DACFIT work plan

It must be noted that, at least in the context of the EDDP, neither the JU nor the European Commission (and by far not the DACcord project) can force individual companies to publish business information.

The state of play on DACFIT – especially on locos - was presented in the EDDP Programme Boards (and their subsequent Supervisory Boards) of 02/06/2026 and 09/12/2025. An overview on all remaining DACFIT topics other than locos was presented in the Programme Board of 03/03/2026.

Figure 5 & 6 show the latest situation from the analysis. Already the assessment based on publicly available data leads to a situation where the majority of the investigated locomotive types is apparently affected by the - known - blocking points for easy retrofit (weight, frame stability, ...).

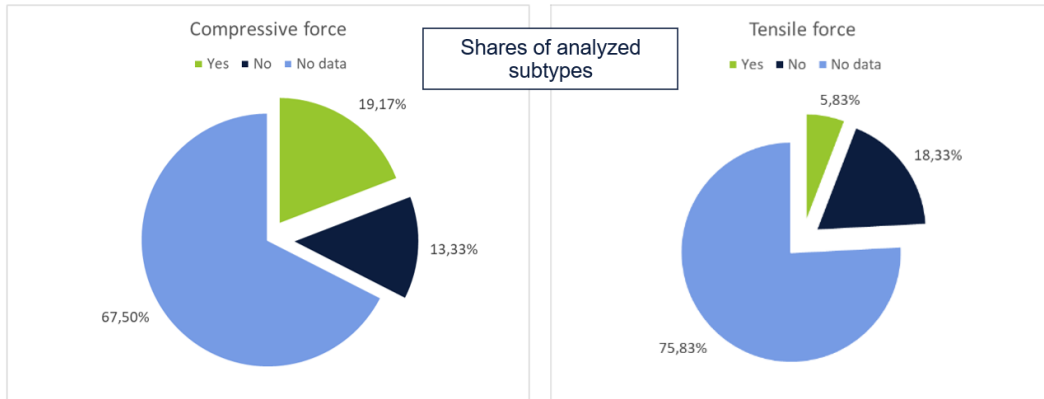
**This situation on fleet retrofittability blocks considerably the technical analysis and therefore migration planning on programme level. It was addressed to the EU-Rail JU and the EDDP boards.**

For migration scenario optimisation, consequently the EDDP Programme Managers proposed

- › To start solving loco issues kicked off from a higher organisational level (“European loco summit” or task force, **see further down**), and
- › to start reflections on building migration scenarios in a more flexible way (**see chapter 5.3**).

## 2. Frame stability – linked to crash speed topic

- Most critical: missing information
- Secondly: Suggestion of a high proportion not sufficiently resistant to the forces\*



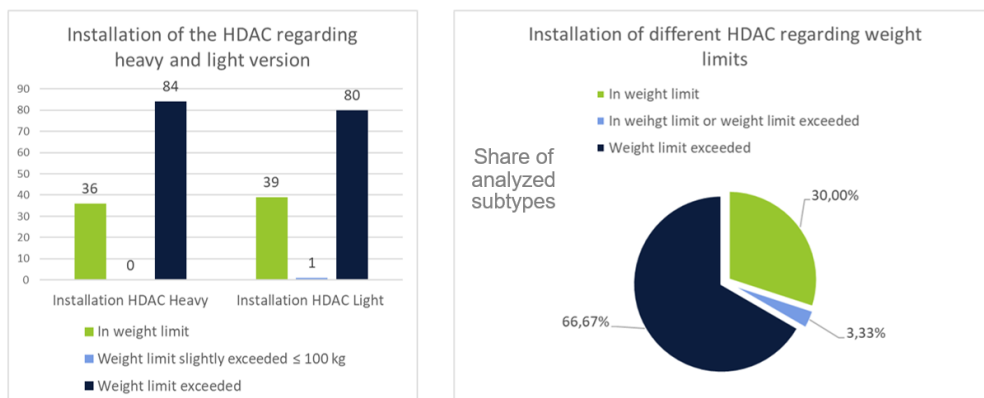
\*) used sources lead to certain risk of mis-interpretation even for those rated with yes or no

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Figure 5. DACFIT state of play locomotives - 09/12/2025

## 3. Locomotive weight

- Results mainly based on ERATV and weighing protocols, simplified assessment
- Despite all the problems with obtaining data, it is already clear that the issue of weight needs to be addressed urgently.



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Figure 6. DACFIT state of play locomotives - 09/12/2025

## Main loco DAC blocking points for authorization (TSI requirement) – needing a formal way forward

Used in UNIFE-EC-EU-Rail-ERA (-EDDP) meeting 25/09

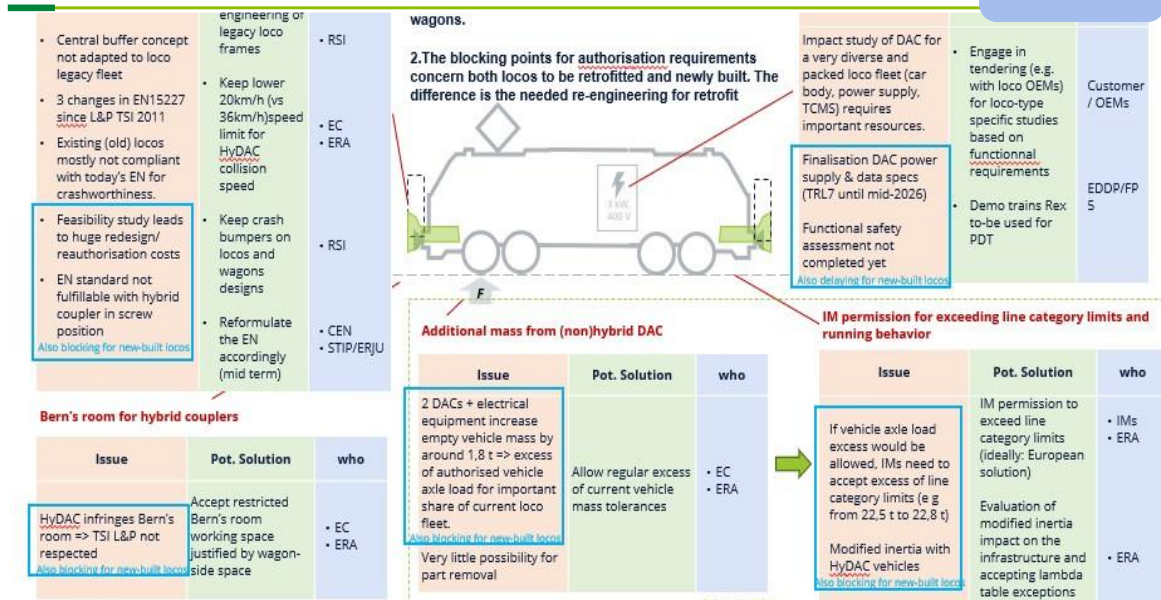


Figure 7. draft overview on locomotive retrofit issues, in order to stipulate a "European loco summit"

## 5. A draft plan to tackle the loco retrofit issues

Specific loco retrofit/authorisation subgroup(s) to the existing ERA  
 "100 Pio trains authorisation" WG (OM) to tackle the topics below in a task-force manner

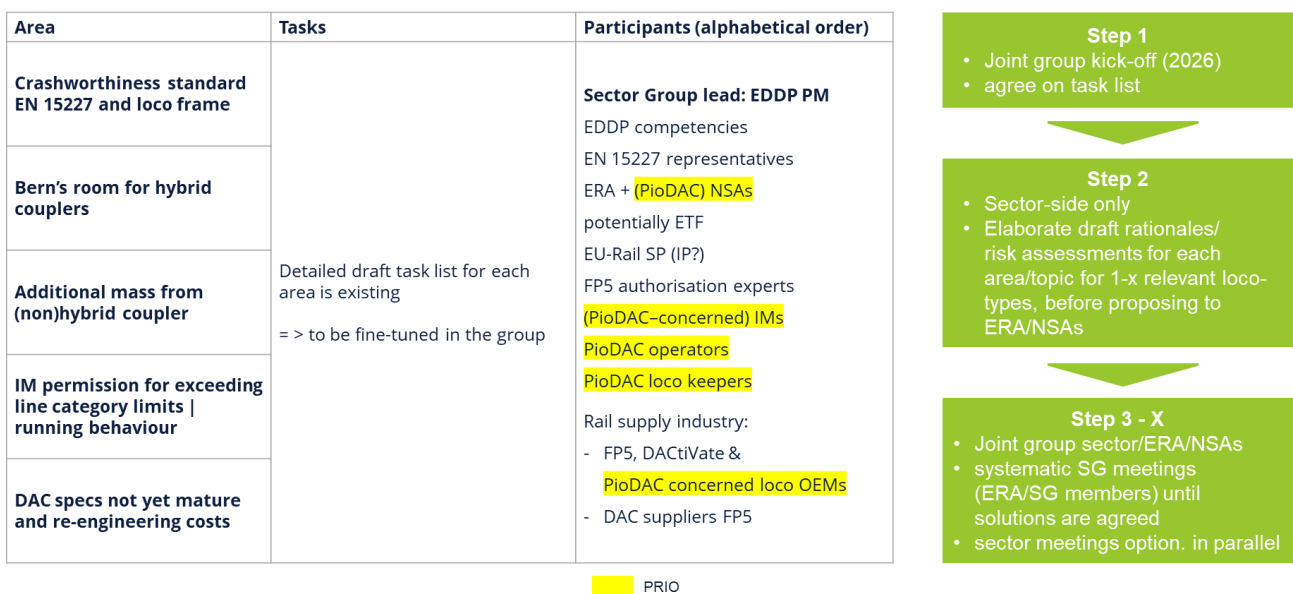


Figure 8. draft plan to tackle the locomotive retrofit issues

The loco retrofit issues were acknowledged by the boards, whereas the idea of organising a **“European loco summit”** (presented orally in the 16/09/25 PB) was not taken up and addressed back to the existing ERA work groups for solution-finding.

The next, alternative proposal (09/12/25 PB) was to **organise the production of the technical rationales and documents for solving the issues in a task-force manner**, especially for the PioDAC trains, led by the EDDP PM (figure 8). This was not taken up neither by the EDDP/PioDAC members who preferred to solve these issues through their individual contributions in the existing ERA work groups, so that these topics will remain open with an uncertain result after the end of the DACcord project.

To inform the boards also about the state of play of the **remaining activities in the DACFIT project**, the **“topics other than locos”** were presented as a “final summary within the DACcord project period” in the EDDP Programme Board on 03/03/2026 and the Supervisory Board of 20/3/2026 (figure 9).

Main points reported were:

- › a time reduction for DAC installation into freight wagons by around 30% was made in workshop installation tests
- › more freight wagon types than planned were technically analysed (but of course far from completing the full fleet picture)
- › more than 1400 potential workshops for retrofitting across Europe had been identified.

To contribute to the improvement of the situation on the freight wagon side, UIP announced in the same meetings the creation and provision of “DAC-rail”, a web portal for collection and analysis of wagon data, where wagon keepers can deliver technical wagon data on a voluntary basis to improve the transparency on fleet retrofitting preparedness (figure 10).

The **Activity C4 “Infrastructural and IT adaptations”**, initially planned to start now (**see D4.1**), was finally not kicked off by the C4 responsables, as this work will only become really relevant as soon as a solution for especially the locomotive weight issues will be found and can be discussed with IMs and as soon as the Pioneer Trains project will deliver more evidence on the DAC impact on IT systems.

The **Activity C5 “Placing into service plan”** etc. can be performed partially in the Pioneer DAC Trains project. In any case no action is needed here before any valid perspective on full deployment will exist.

## C: DACFIT other topics than locos | state of play

### Information topic

Major progress in “design to retrofit” (installation time reduction)

Freight wagon technical analysis

Workshop capacity overview

Decision support system

### State of play

- › **Nov 2024:** DACFIT installation test (mechanical part of DAC models) recommended improvements to the OEMs regarding “design to retrofit”
- › **Sep 2025:** second measurement with improved DAC models
- › All manufacturers' products improved: **workshop time reduced by ca. 30%**
- › More wagon types analysed than expected
- › more than 1,400 potential workshops identified
- › being set up with a MVP

### Way forward

- › Further evidence in DACFIT and PioDAC
- 
- › basis for hardening in second half of DACFIT project
- › evaluate different migration plans based on number of vehicles, technical data, freight stations, workshops, etc.



Figure 9. DACFIT state of play other topics than locos – 03/03/2026 PB and 20/03/2026 SB



EASY-TO-USE WEBPORTAL FOR CREATING TRANSPARENCY

### Webportal & data base for collection & analysis of wagon data

- › Developed by UIP & DB Cargo, operated by RSRD<sup>2</sup>
- › Neutral governance, not funded or co-financed by public sector; usage of DAC-rail free of charge
- › Data & document collection (dimension of installation space, absorption force, type identification, vehicle connection)

### Planning of migration and deployment is getting closer

- › Total number of wagons / wagon types to be retrofitted must be figured out now
- › Identification of scope of modernization („easy“ / „challenging“ / „impossible“) needed
- › Work is mandatory to determine
  - installation complexity,
  - workshop capacities
  - overall investment amounts

**Dear wagon keepers, please join in collecting data via DAC-rail! Contact: [dac@uiprail.org](mailto:dac@uiprail.org)**

Figure 10. DAC-rail / UIP wagon technical database – 03/03/2026 PB and 20/03/2026 SB

## 5.1.2. EDDP / DAC migration roadmap Work Area D

**In work area D, Activity D1** (funding and financing plan) successfully secured, in conjunction with the stakeholder management activities, the funds for the Pioneer DAC Trains in 2024. Further progress achieved in the Pioneer DAC Trains project (PioDAC) will support allocating potential budgets, but the assumption is that this might happen not before first successful PioDAC operations in 2027/28/29.

**Activity D2** encompasses the CBA. CBA updates require further hardened input from the fleet analysis, and DAC procurements in the PioDAC project, so any CBA updates will take place in later years, as soon as real-life data will be available.

For the **Activities D3** (Investment plan & procurement framework plan) **and D4** (Other regulatory framework plans), any planning remains too early at this stage (Figure 11). Investment/procurement planning for full deployment can be prepared when the Pioneer DAC Trains have proven the fulfilment of the EDDP preconditions. The Pioneer Train project will certainly provide initial input to such planning. The planning horizon is therefore rather out of scope of the DACcord project. Other regulatory frameworks (incl. General Contract of Use / GCU) will also be better identified during the Pioneer Trains.

Therefore, the activities **in Work Area D were temporarily paused until further notice.**

A successful Pioneer DAC Trains phase (between 2027-29) will give more basis and evidence collected for a restart of these activities, e. g. via up-to date CBA data from Pioneer Trains operation.

WORK AREA D: FUNDING AND FINANCING		
WORK AREA LEAD: ESTELLE BACCONNIER		
ACTIVITIES	RESPONSIBLE PERSON	TRAFFIC LIGHT STATUS OVERALL
D1 Funding & Financing plan	[...]	
D2 CBA (updates)	Mitchell van Balen	
D3 Investment plan & procurement framework plan	[...]	
D4 Other regulatory & legal framework plans	[...]	

Figure 11. EDDP Work Area D overview

### 5.1.3. Overarching risk management FP5/EDDP/other

Regular catch-up meetings on the progress of the work **in Work Areas C & D for managing the risks from the different activities** and for the preparation of the various topics of the EDDP work programme in view of board meeting reporting were scheduled throughout the year (participants: work area lead & co-lead participated, often assisted by other work area members).

They were complemented with various additional in-depth meetings on specific work area topics. Status updates from those meetings were integrated in the subsequent board meetings.

The **Work Area C & D alignment meetings** in reporting period 3 took place (via videoconference) on

April 2025	01, 15, 17, 28, 29	October 2025	14
May 2025	13, 21	November 2025	04, 07, 13
June 2025	03, 17, 24	December 2025	01, 09
July 2025	08, 15, 19	January 2026	05, 20, 27
August 2025	--	February 2026	10, 24
September 2025	02, 09, 16, 18, 23	March 2026	02, 10, 17, 23, 31

The monitoring of the progress in the different EDDP workstreams and assessing the risk of (non-) achievement **was integrated into the bigger programme risk perspective on** FP5, EDDP work areas and System Pillar Task 4 (SP T4). Such integrated view identified the critical and urgent items in the **overall programme risk management system (since November 2024, see in detail D4.1 on Programme/ Risk Management).**

This system encompasses all risks from EDDP Migration Roadmap areas including their assessment on probability and severity and impact on the overall programme in the shorter (Pioneer Trains) and longer perspective (full deployment). Figure 12 & 13 show an extract of the Work Area D and C workstreams and their risks in the overall risk log.

Figure 14 depicts again the **DAC DFETO top risks map** including top risks from the Migration Roadmap (see middle of the picture), status as per March 2026 (shown in Programme and Supervisory Boards).

To the known risks, the **major risks for the Pioneer DAC Trains of non/late delivery of the DAC components in their different steps (see D5.1)** were added.

Follow-up and potential mitigation can only be done during the Pioneer Trains phase, in continuation in joint risk management workshops to be taken up by a potential DACcord successor project.

STEP 01: RISK IDENTIFICATION										STEP 02: RISK EVALUATION									
ID	Category	Risk Origin	Title	risk for FP5	risk for PDI's	risk for full deployment	Raised by	Responsible	Impact Description	Probability	Severity (time)	Severity (budget)	Severity (scope)						
20	External	B. 2. (Stakeholder Mgmt.)	Tasking	YES	YES	YES	10.11.2024	EDDP	EDDP/PM	Strong delay or cancellation of full deployment	Medium	+100 years	no DAC required						
29F	Technical	C. 1 (Fleet Analysis and RfE Eng)	European Loco Fleet Technical State unknown	YES			10.11.2024	EDDP	DAC/IT PC	Delay or impossibility to start loco retrofit	High	+10 years	- x vehicle types						
29F	Technical	C. 1 (Fleet Analysis and RfE Eng)	European Loco Fleet Technical State unknown	YES			10.11.2024	EDDP	DAC/IT PC	Delay or impossibility to start loco retrofit	High	+10 years	- x vehicle types						
26	Technical	C. 1 (Fleet Analysis and RfE Eng)	Wagon Fleet Technical State unknown	YES			10.11.2024	EDDP	DAC/IT	Delay or impossibility to start wagon retrofit	Medium	+10 years	- x vehicle types						
27	Technical	C. 1 (Fleet Analysis and RfE Eng)	Vehicle Quantities unknown	YES			10.11.2024	EDDP	DAC/IT	No quantification of budget and migration planning possible	Medium	+ 1 year	+ xx mn EUR						
28	Organisational	C. 1 (Fleet Analysis and RfE Eng)	Geographical scope of migration/vehicle fleet missing for cross-border integration	YES			10.11.2024	EDDP	EDDP/PM	Insufficient consideration of European vehicle fleet for migration + impact on migration scenarios and operations.	Medium	+ 2-4 years	+ 300 mn EUR						
34	Technical	C. 2 (RfE/CFI capacity)	Non-compliance with requirements for a full roll-out leading to technology/redesign	YES			10.11.2024	EDDP	EDDP/PM	Longer auth. and certification times and higher costs per retrofittable loco type	High	+15 years per loco type	+0.5 mn EUR per loco type						
35	Technical	C. 3 (Migration strategies & RfE)	Missing standardized interfaces in the power and data system parallel to interface A, of the mechanical connection	YES			27/01/2025	EDDP	EDDP/PM	FP5 products not designed for minimally invasive implementation later improvements with time and costs increase	High	tdb	tdb						
36	Technical	C. 3 (Migration strategies & RfE)	Missing standardized interfaces in the power and data system parallel to interface A, of the mechanical connection	YES			27.01.2025	EDDP	EDDP	FP5 products not designed for minimally invasive implementation later improvements with time and costs increase	?	tdb	tdb						
37	Operational	C. 3 (Migration strategies & RfE)	Missing loco migration strategy & retrofitting plan	YES			08.11.2024	E. Lohmeier	EDDP C3	Delay or impossibility of deployment	High	+100 years	-10 bn budget required						
38	Operational	C. 3 (Migration strategies & RfE)	Size of the vehicle fleet for big bang migration unknown	YES			10.11.2024	EDDP	EDDP C3	European wagon fleet as separability of traffic flow/fleet is not sufficient for the migration	High	+100 years	-10 bn budget required						
39	Organisational	C. 3 (Migration strategies & RfE)	Missing coordination between DAC/ETCS/FRMCS retrofit and authorisation	YES			10.11.2024	EDDP	EURAIL Deployment Group	Availability of assets disrupted due to misalignment between ETCS/DAC/FRMCS programmes. Workshop and auth. capacities cannibalized. Potentially operational disruptions. Missed opportunity for synergies in retrofitting operations leading to excessive costs	High	+ 3-6 years	No ERTMS						
40	Technical	C. 4 (Infrastructure & IT side)	Infra & IT adaptations unknown	YES			10.11.2024	EDDP	EDDP C4	Infra & IT not prepared. IMs not prepared to arrival of DAC	High	+ x years	+ y mn EUR						
44F	Financial	D. 1 (Funding & Financing P)	Not enough EU and national funding and financing available	YES			10.11.2024	EDGE/DP	SF4C topic 9 CBA, Funding & Financing	Postponement or cancellation of the full deployment	High	+100 years	-13 bn EUR budget required						
45	Financial	D. 1 (Funding & Financing P)	No decision on funding of DAC ready for all new vehicles	YES			10.11.2024	EDDP	SF4C topic 9 CBA, Funding & Financing	All current and future new built vehicles not "DAC ready" after DAC ready technical definition due to non-availability of funding need to be retrofitted more expensively	High								
46	Financial	D. 1 (Funding & Financing P)	Decision on funding of DAC full deployment incl. Deployment Manager	YES			10.11.2024	EDDP	SF4C topic 9 CBA, Funding & Financing	No funding, no DAC	High	+100 years	-13 bn EUR budget required						

Figure 12. All DAC-related activities risk log (extract with some DAC Migration Roadmap risks)

STEP 03: RISK MITIGATION				
Mitigations	EDDP PB/SB category	Mitigation Due Date	Mitigation traffic light status	Comment FP5 02/02/2026
? Decide on funding/enforcing of "DAC ready" for new-built after PDTs feedback (ca. as of 2028/29) allocate respective funding in next MFF		01.06.2025	Yellow	
? Decide on funding/enforcing of DAC deployment after PDTs (ca. as of 2028/29) and accepted DAC migration plan allocate respective funding in next MFF	?	2028	Yellow	solution to be found during PioDAC project duration
Conclusion of supplier cross-licensing agreement (signature) Check if there are any showstoppers regarding signature Split approach for Pioneer Trains and Full Deployment	Information	09.12.2025	Yellow	Agreement, shortly before finalisation, report was done by Voith in last EDDP PB, Update by Schuhmacher: when is final really final??
ERA has set-up a workshop series with NSA and ERJU to work on TSI requirements for DAC pioneer trains. Here, crash worthiness needs to be discussed as well. Bilateral meetings serie beteen ERA and FP5 has been agreed upon with crash worthiness being one of the central topics. '- adapt regulatory framework resp. stipulate EC/ERA exemption for Pioneer Trains - work in CEN/TC256/WG02 on passive safety requirements for locos with hybrid couplers to be adapted - Inform PB on formation and mandate of task force for dealing with authorisation risks (leveraging FP5 WP4 group): done but task force did not materialise through missing mandate and financing - Regular report in in PB from 03.2025 and beyond  <b>Organise high-level loco summit (cancelled)</b>	Information	July 2026	Red	ERA has started several Sub Groups with respect to challenges for authorisation of DAC Pioneer Trains. Progress for many other topics, however Crash Worthiness requirements still with no aligned way forward. Next meeting on 11th Feb 2026.
ERA has set-up a workshop series with NSA and ERJU to work on TSI requirements for DAC pioneer trains. Here, crash worthiness needs to be discussed as well. Bilateral meetings serie beteen ERA and FP5 has been agreed upon with crash worthiness being one of the central topics. '- adapt regulatory framework - work in CEN/TC256/WG02 on passive safety requirements for locos with hybrid couplers to be adapted  <b>Organise high-level loco summit (cancelled)</b>	Information	2028	Red	ERA has started several Sub Groups with respect to challenges for authorisation of DAC Pioneer Trains. Progress for many other topics, however Crash Worthiness requirements still with no aligned way forward. Next meeting on 11th Feb 2026.
Comparison of strength validation calculations before 2010 and after 2010 acc. to EN12663 which major deviations can be identified. Alignment on a way forward that for older vehicles with existing strength calculations new calculations do not need to be				A proof of vehicle strength needs to be provided of course. Since 1971 technical rules for vehicle strength

Figure 13. All DAC-related activities risk log (extract with some DAC Migration Roadmap loco risks)

# DAC DFOTO top risks management

Risk	Impact			Tech. Dev.	Pioneer DAC Trains	Deploym.	Mitigation measure	Status of mitig. meas.
	K.O.	potential K.O.	major risk					
TECHNICAL				●	●	●	after positive AsBo assessment on concept: developm. & tests until 3Q26	●
				●	●	●	Earthing via coupler head connection under (AsBo) assessment until 03/26	●
				●	●	●	Target value setting is underway   update in this PB/SB	●
				●	●	●	N/A yet	●
				●	●	●	Tool developed in FPS   validat. in DACTivate   alignm. with ERA ongoing	●
MIGRATION				●	●	●	System Pillar working on collection of national requirements to be implemented for and in PioDAC project (by DAC suppliers)	●
				●	●	●	to be implemented for and in PioDAC project (by DAC suppliers)	●
				●	●	●	to be implemented for and in PioDAC project (by DAC suppliers)	●
				●	●	●	<b>Loco retrofit/authorisation subgroup in ERA WG</b> to address all issues	●
				●	●	●	<b>Loco retrofit/authorisation subgroup in ERA WG</b> to address all issues	●
ECONOMIC				●	●	●	<b>Loco retrofit/authorisation subgroup in ERA WG</b> to address all issues	●
				●	●	●	Stable draft DAC spec for new built published   further updates in 2026	●
				●	●	●	DACTIT project	●
				●	●	●	Set-up work plan & members for EDDP C4 Incl. FPS YA WP	●
				●	●	●	FPS WP19 LCC report under EU-Rail/EC review	●
o				●	●	●	Successful Pioneer Trains   work on next MFF inclusion	●
				●	●	●	Pioneer Trains Grant Agreement signed (PioDAC), Project started	●
				●	●	●	Concept developed in SP: real FCI only after/maybe during Pioneer Trains	●

Figure 14. DAC DFOTO top risks map with impact point in time and mitigation measures (Feb/March 2026)

## 5.2. Regular consolidation of migration assumptions for EDDP boards

The DACcord task consisted, also in this reporting period, in “Consolidating regularly the existing basic migration assumptions, findings, reports principles/boundary conditions (instruments, methods, tools, e.g. target scenario, tech packages, retrofit plan, legal and financing instruments, major criteria/ options for overall migration scenario optimisation, ...) for EDDP boards” (cf. Grant Agreement).

As the different EDDP boards agendas (see Annex 1) demonstrate, all relevant and upcoming migration issues were permanently prepared and reported on board level. The precise migration assumptions dealt with in the EDDP programme boards are reported below, together with their agenda topic number. These topics were partially discussed in the Supervisory Boards in a summarised way.

No Work Area D (economics) items were reported to the Boards in Reporting Period 3.

### EDDP Programme Board 02/06/2025

- |   |                          |                |
|---|--------------------------|----------------|
| 5. Manual uncoupling version for PDTs and migration             | <b>decision</b>          | [FP5 and WA C] |
| 6. C: Migration roadmap   |                          |                |
| a) DACFIT - State of play                                       | <b>information</b>       | [DACFIT PM]    |
| b) onsite visits in DE on parallel operation of coupler systems | <b>information</b>       | [PM]           |
| c) intermediate evaluation of deployment scenarios              | <b>action/discussion</b> | [PM]           |

### EDDP Programme Board 16/09/2025

- |   |                    |                 |
|---|--------------------|-----------------|
| 5. B1/G/C: “European Loco Summit”   draft concept | <b>information</b> | [PM/EC/EU-Rail] |
|---|--------------------|-----------------|

### EDDP Programme Board 09/12/2025

- |   |                    |             |
|---|--------------------|-------------|
| 4. B1/G/C: DACFIT, especially locos   state of play | <b>information</b> | [DACFit PM] |
|---|--------------------|-------------|

### EDDP Programme Board 03/03/2026

- |   |                    |                 |
|---|--------------------|-----------------|
| 5. C: DACFIT other topics than locos   state of play   UIP Info on DAC-rail | <b>information</b> | [DACFit PC/UIP] |
| 6. E: ERA WG “retrofitting of ... with DAC” (authorisation)   state of play | <b>information</b> | [ERA]           |

### 5.3. Criteria/options for overall migration scenario optimisation

The DACcord WP8 task consisted in “refining the migration/ deployment scenario”. The related topics

- are already work in progress (e. g. authorisation/FP5, RAMSS target values/FP5, technical fleet state/DACFIT, retrofit times/DACFIT etc.) or
- were stipulated via EDDP Boards decision (e. g. the precise version of the manual mechanical uncoupling from wagon side to be considered for migration planning – **see chapter 5.2**)
- are part of already upcoming projects (e. g. loco hybrid coupler)

In respect of the insights over the past periods, the topics in Figure 15 were identified already in Reporting Period 2 as **major criteria for migration optimisation**, impacting target picture and GMP:

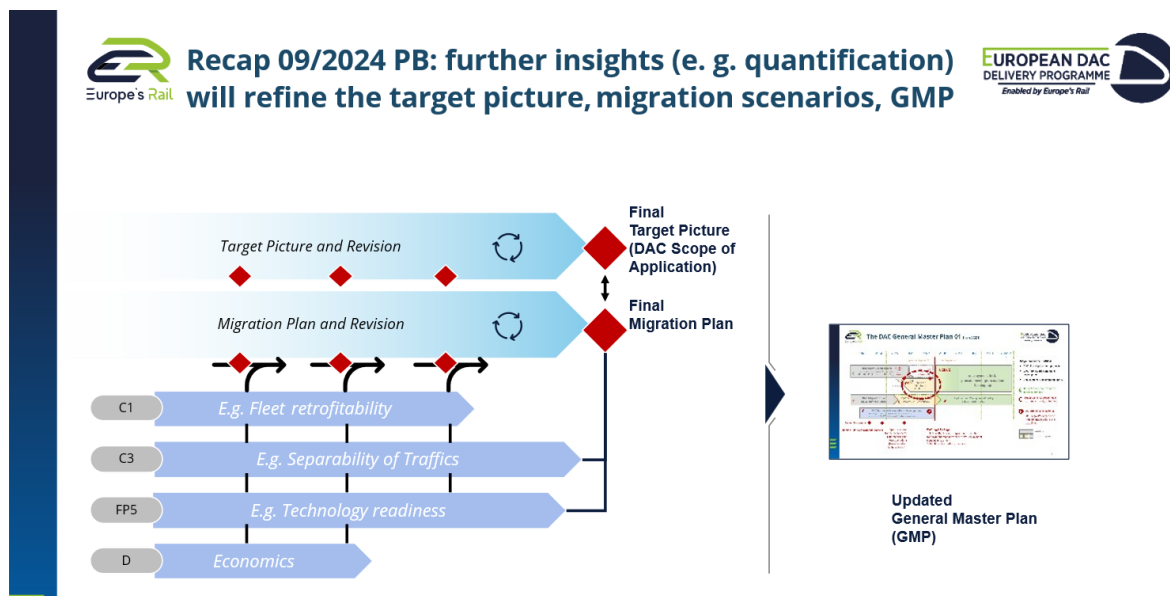


Figure 15. Criteria for overall DAC migration optimisation

- An **unknown technical fleet state and retrofittability** (addressed in Activity C1/DACFIT) leads to an unknown budget and number of and time to retrofit the foreseen assets. This topic will be handed over as “open” to a potential successor project.
- An unknown **separability of traffics** (addressed in Activity C3) leads to an unknown size of mixed traffic and therefore an unknown size of vehicles to plan for “big bang” retrofit, therefore a different target picture. No results available until now due to a lack of information stemming from the sector’s operators (no mitigation possible)

- An insufficient **technology readiness** for the foreseen start of migration leads either to a reduced technical scope for migration or a delay. This is part of the overall risk management which needs to be continued especially during the Pioneer Train project.
- A **too expensive DAC Basic Package** might lead, in worst case, to programme cancellation. A **serial price** can only realistically be established after the Pioneer Trains and a general funding scheme and serial production are under preparation (all happening after the DACcord project).
- an **insufficient level of funding and financing** can lead to a reduction in retrofit scope/amount (target picture) or to a programme cancellation

**These criteria are logical and coherent part of the overall programme's top risks, vital for the migration optimisation and for the "survival" of the programme. Any further optimisation will be relevant only after the above described main criteria have been successfully resolved.**

Very important for avoiding the "vehicle readiness for DAC" issues for all new Rail Freight Rolling Stock produced, the "DAC ready-spec for new built vehicles" is pushed forward in FP5 TRANS4M-R.

### Intermediate evolution and flexibilisation of migration scenarios

Therefore, reflecting about a more flexible approach / stretched scenarios for full deployment became mandatory, especially about the feasibility of a (one) "big bang" for the fleet used in mixed traffic in view of the discovered retrofitability issues. This needs to be deepened in the upcoming years.

The approach was first presented in the EDDP Programme Board of 02/06/2025, see figures 16 & 17.

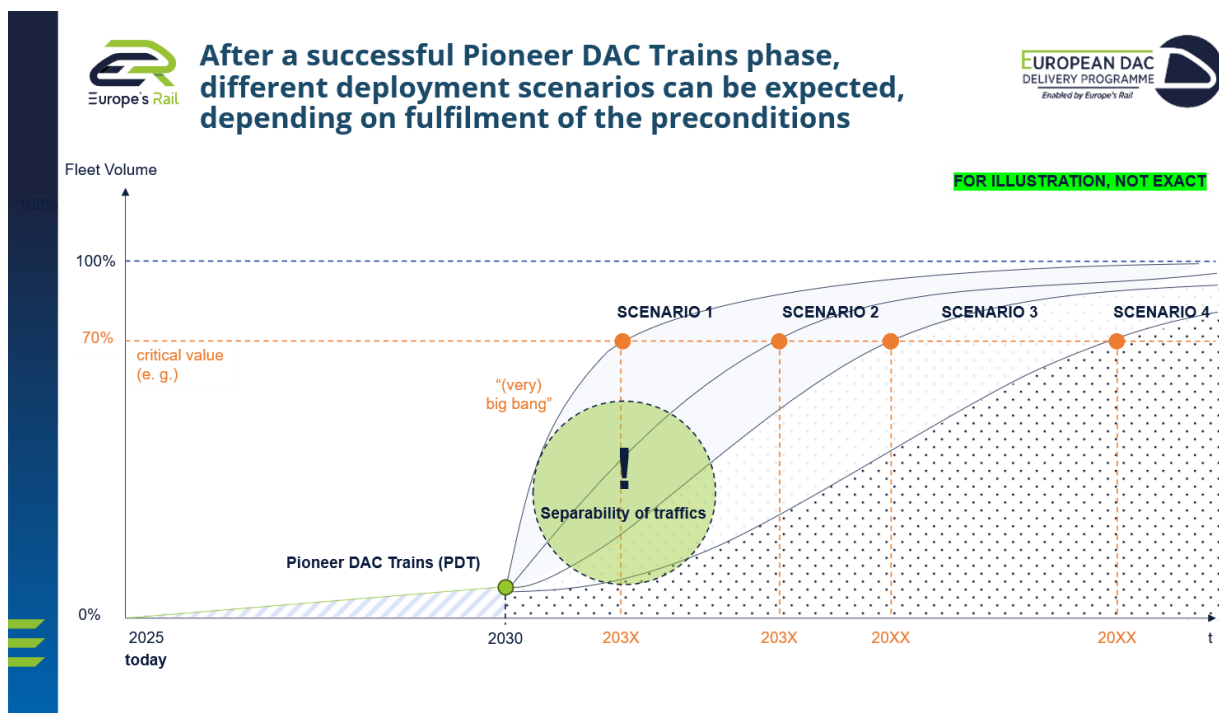


Figure 16. Intermediate evolution and flexibilization of migration scenarios

- DAC full rapid deployment to the entire system requires that all preconditions are met (see scenario 1)
- DAC technology is useful and will therefore also be implemented even if no rapid full deployment / if not all preconditions are met
- In light of current insights (e. g. vehicle fleet retrofittability), focus of the work must now be put on:
  - identifying separability of traffics/allocatability of assets EDDP Work Area C
  - quantifying assets & their retrofittability status EDDP Work Area C
  - making technology work in Pioneer Trains FP5 / Pioneer Trains
- Immediately necessary: DAC ready-specs for new built vehicles (see **topic 9**)

Figure 17. Conclusion on intermediate evolution of migration scenarios

## Manual uncoupling version for Pioneer DAC Trains and migration

One specific optimisation criterion already addressed in the 2021-2023 DACcelerate project is that freight wagons must, for all migration scenarios, dispose of a **“manual uncoupling from wagon side system”**. It was not yet decided if this should be realised by a **mechanical solution** (pull/push bar on wagon side) – **“DAC 4”** - or directly by e. g. an **electric push-button** on wagon side – **“DAC 5”**. This open point bound resources in the FP5 TRANSM-R project due to the parallel development of solutions.

Therefore, the FP5 DAC suppliers triggered a positioning of the EDDP on these options and requested a decision which version to use in Pioneer Trains and for full deployment.

Work area C members and Programme Management then identified the abandon of the mechanical solution as possible, under the precondition – for full deployment - that the electronic DAC components in wagons (which are necessary for a push-button solution)

- are prepared for a 2-step mounting process (“DAC-ready” and then during retrofit) and
- can be mounted and placed into service “rapidly” in pop-up workshops during a “simultaneous retrofit” phase. “Rapidly” still needs to be precised, but would be around 15-30 mins per wagon.

Detailed rationale and decision see figures 18 & 19. This condition has a strong impact on the final development of components for the later serial production (“retrofit-friendly”).

## Manual uncoupling for PDTs and migration

### Background

- Discussions were ongoing on the need yes/no of implementation of DAC4 manual uncoupling in Pioneer DAC Trains.
- Since it is scope of the DAC Basic Package, it is requested to clarify if DAC4 manual uncoupling shall be implemented in Pioneer DAC Trains and in full deployment (see Notes: *“\*\*coupler with mechanical ... uncoupling from wagon side”*)
- Higher focus in FP5 is on DAC5 and push button solution. Thus, the amount of manual uncoupling levers in FP5 is limited
- Corresponding (confirming) requirements have been already formulated by EDDP WA C in 10/2023 and submitted to Polarion (at feature level, IPTRANS-2038 etc.):  
*“All components of the digital & electrical equipment need to be prepared for the 2-step mounting process of DACready” (plus its related requirements for electrical connection in wagon pairs)*

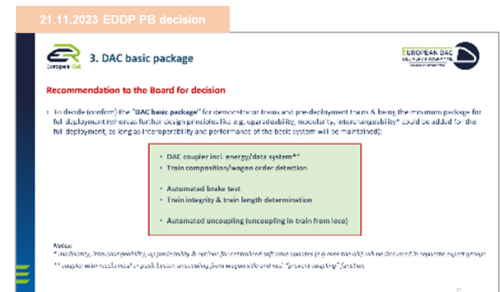


Figure 18. Manual uncoupling version for Pioneer DAC Trains and migration - background

## Manual uncoupling for PDTs and migration

After FP5 and EDDP WA C alignment:

### Recommendation to the Board for decision

1. in order to renounce on a mechanically operated “manual uncoupling from wagon side” functionality (DAC 4) **for full DAC deployment (entire system)**, the existing requirements for **rapid mounting of DAC train functions** / of electronic DAC components (incl. push button etc.)\* need to be fulfilled as **necessary precondition** in the DAC technology development **at a later stage** and validated **before such full deployment**.
2. the mechanically operated “manual uncoupling from wagon side” functionality (**DAC4**) is **abandoned/is not necessary for full DAC deployment (and for Pioneer DAC Trains), if 1. is fulfilled**

\* *“All components of the digital & electrical equipment need to be prepared for the 2-step mounting process of DACready” (plus the related requirements for electrical connection in wagon pairs): as formulated in 10/2023 and submitted by EDDP Work Area C to FP5/Polarion at feature level, IPTRANS-2038 etc.*

Figure 19. Manual uncoupling version for Pioneer DAC Trains and migration – (recommendation for) decision

## 6. Conclusions

In the third DACcord project year M25 to M36, it was possible to drive further the DAC migration roadmap and its different work areas.

Important supporting EU-Rail JU projects, e. g. DACFIT on fleet and workshop analysis, which reflect 1:1 the requirements laid down in the Migration Roadmap planning, now provided substantial work for work area C. Still, the access to data in the sector is so difficult that especially the area of locomotives retrofitting remains a key area of concern for full migration. Escalation was done from DACcord site; concrete solutions need to be found first in the locomotives retrofitting for the Pioneer DAC Trains.

The issues were regularly followed up in the overarching FP5/EDDP/SPT4 risk management. There, the main criteria for migration scenario optimisation (technology readiness, technical fleet state, funding/financing and, implicitly, separability of traffics) have been integrated as top risks and are therefore fully reflected in the overall programme management portfolio. Continuation also needs to be done after the end of the DACcord project.

Work Area D (economics) work needs to restart during/after the Pioneer Train phase, especially on budgetary resources for a full deployment.

As a recommendation from the DACcord project at its end, the **next steps** in the DAC migration roadmap management (by whomever it will be continued) should be:

- › to learn from the Pioneer DAC Train execution, especially on loco retrofit
- › to re-assess the migration options with this gained evidence
- › to draw the respective consequences for full deployment planning (incl. funding needs)
- › to seamlessly integrate further new EU-Rail projects supporting the migration roadmap

**This work ends with this reporting period 3, constituting the end of the DACcord project.**



## 7. References

For an overall information on the programme and its related work areas, refer to:

<https://rail-research.europa.eu/european-dac-delivery-programme/>

All project deliverables can be found in the related parts of the Europe's Rail Cooperation Tool IT environment (programme members only).

## 8. Appendix

### EDDP Programme Board agendas

 <b>PB Agenda</b>	
1. Introduction, Welcome, adoption of the Agenda	[EU-Rail / EC]
2. Review of actions since the last PB	[EU-Rail / PM]
<b>EDDP and migration roadmap</b>	
3. B1: DAC DFDTO Risk Management Workshop   state of play	<i>point type</i> <b>information</b> [PM]
4. B1: Suppliers' cross-licence agreement   state of play	<b>information</b> [FP5 SPOC 4]
5. Manual uncoupling version for PDTs and migration	<b>decision</b> [FP5 and WA C]
6. C: Migration roadmap	
a) DACFIT - State of play	<b>information</b> [DACFIT PM]
b) onsite visits in DE on parallel operation of coupler systems	<b>information</b> [PM]
c) intermediate evaluation of deployment scenarios	<b>action/discussion</b> [PM]
<b>FP5-TRANS4M-R/DFDFO</b>	
7. FP5-TRANS4M-R   state of play	<b>information</b> [FP5]
8. RAMSS target values   state of play	<b>information</b> [EU-RAIL]
9. Draft technical spec for new built / "DAC ready" & its communication	<b>information</b> [FP5]
10. WP19 LCC assessment by the JU   State of play (oral update)	<b>information</b> [EU-Rail]
<b>System Pillar (Task 4)</b>	
11. State of play	<b>information</b> [EU-RAIL]
12. AOB and closing	
- state of play EU-Rail tender "engineering solutions"	[EU-RAIL]
- short report from last DAC Fora	[PM]

Figure 20. EDDP Programme Board agenda 02/06/2025 (on-site Brussels / EU-Rail premises)

 <b>PB Agenda</b>	
1. Introduction, Welcome, adoption of the Agenda	[EU-Rail / EC] 14h00 – 14h05
2. Review of actions since the last PB	[EU-Rail / PM] 14h05 – 14h10
<b>EDDP and migration roadmap</b>	
3. Overview on DAC-related topics   update	<i>point type</i> <b>information</b> [EU-Rail/PM] 14h10 – 14h20
4. G/C: EU-Rail tender "engineering solutions"   state of play	<b>information</b> [EU-RAIL] 14h20 – 14h30
5. B1: "tiger team"   intermediate results	<b>information</b> [EU-Rail/PM] 14h30 – 14h45
6. B1: 3 <sup>rd</sup> DAC DFDTO Risk Management Workshop	<b>information</b> [PM] 14h45 – 14h55
7. B1: Suppliers' cross-licence agreement   state of play	<b>information</b> [FP5 SPOC 4] 14h55 – 15h00
8. B1/G/C: "European Loco Summit"   draft concept	<b>information</b> [PM/EC/EU-Rail] 15h00 – 15h15
9. B2: Stakeholder Management: overview dissemination/comm activities	<b>information</b> [PM] 15h15 – 15h25
10. B1: Need for overarching project coordination after e.o. EDDP/DACcord	<b>discussion</b> [UIP] 15h25 – 15h45
<b>FP5-TRANS4M-R/DFDFO</b>	
11. FP5-TRANS4M-R   state of play (main risk points)	<b>information</b> [FP5] 15h45 – 16h00
12. DAC Basic Package "medium detail spec" (e.g. for nat. funding schemes)	<b>information/decision</b> [FP5] 16h00 – 16h10
13. WP19 LCC assessment by the JU   state of play (oral update)	<b>information</b> [EU-Rail] 16h10 – 16h20
<b>System Pillar (Task 4)</b>	
14. State of play	<b>information</b> [EU-RAIL] --
15. AOB and closing	16h20 – 16h30

Figure 21. EDDP Programme Board agenda 16/09/2025



## PB Agenda



1. Introduction, Welcome, adoption of the Agenda		[EU-Rail / EC]	14h00 – 14h05
2. Review of actions since the last PB		[EU-Rail / PM]	14h05 – 14h10
<b>EDDP and migration roadmap</b>			
3. G: PioDAC (Pioneer DAC Trains CEF Project)	<i>point type</i> <b>information</b>	[PioDAC PC]	14h10 – 14h30
4. B1: "tiger team"   results and next steps	<b>information</b>	[EU-Rail/PM]	14h30 – 14h40
5. B1: 4 <sup>th</sup> DAC FDFTO Risk Management Workshop	<b>information</b>	[PM]	14h40 – 14h50
6. B1: Suppliers' cross-licence agreement   state of play	<b>information</b>	[FP5 SPOC 4]	14h50 – 14h55
7. B1/G/C: DACFIT, especially locos   state of play	<b>information</b>	[DACFit PM]	14h55 – 15h15
8. B2: Stakeholder Management: overview dissemination/comm activities	<b>information</b>	[PM]	15h15 – 15h25
9. B1: Overall project coordination after end of EDDP/DACcord	<b>discussion</b>	[EU-Rail/all]	15h25 – 15h45
<b>FP5-TRANS4M-R/FDFTO</b>			
10. FP5-TRANS4M-R   state of play	<b>information</b>	[FP5]	15h45 – 16h00
11. FP5-TRANS4M-R   Demo trains   state of play	<b>information</b>	[FP5]	16h00 – 16h10
12. FP5-TRANS4M-R   Sounding boards review	<b>information</b>	[FP5]	16h10 – 16h15
<b>System Pillar (Task 4)</b>			
13. State of play	<b>information</b>	[EU-RAIL]	16h15 – 16h25
14. AOB and closing - extension of PB member categories - provisional meeting dates 2026	<b>information</b>	[EU-RAIL]	16h25 – 16h30

Figure 22. EDDP Programme Board agenda 09/12/2025



## PB Agenda



1. Introduction, Welcome, adoption of the Agenda		[EU-Rail / EC]	14h00 – 14h05
2. Review of actions since the last PB		[EU-Rail / PM]	14h05 – 14h10
<b>EDDP and migration roadmap</b>			
3. G: PioDAC state of play (milestones, authorisation, critical path, ...)	<i>point type</i> <b>information</b>	[PioDAC PC]	14h10 – 14h40
4. B1: 5 <sup>th</sup> DAC FDFTO Risk Management Workshop (incl. cross-lic. agreement)	<b>information</b>	[PM + FP5 SPOC 4]	14h40 – 14h50
5. C: DACFIT other topics than locos   state of play   UIP Info on DAC-rail	<b>information</b>	[DACFit PC / UIP]	14h50 – 15h00
6. E: ERA WG "retrofitting of ... with DAC" (authorisation)   state of play	<b>information</b>	[ERA]	14h00 – 15h10
<b>FP5-TRANS4M-R/FDFTO</b>			
7. FP5-TRANS4M-R   state of play	<b>information</b>	[FP5]	15h10 – 15h30
8. FP5-TRANS4M-R   Demo trains   state of play	<b>information</b>	[FP5]	15h30 – 15h40
<b>System Pillar (Task 4)</b>			
9. State of play	<b>information</b>	[EU-RAIL]	15h40 – 15h50
<b>General</b>			
10. B1: Overall project coordination after end of EDDP/DACcord	<b>discussion</b>	[EU-Rail/all]	15h50 – 16h20
11. AOB and closing - draft overview on EU and national DAC funding - DACcord objectives self-assessment	<b>information</b>	[EU-RAIL]	16h20 – 16h30

Figure 23. EDDP Programme Board agenda 03/03/2026

## EDDP Supervisory Board agendas

 <h3>SB Agenda</h3>	 <small>Enabled by Europe's Rail</small>
<ol style="list-style-type: none"> <li>1. Introduction, Welcome, adoption of the Agenda</li> <li>2. Review of actions since the last SB</li> </ol>	<p>[EU-Rail / EC] [EU-Rail / PM]</p>
<b>FP5-TRANS4M-R/FDFTO</b>	
<ol style="list-style-type: none"> <li>3. DAC FDFTO Risk Management Workshop   state of play</li> <li>4. FP5-TRANS4M-R   state of play</li> <li>5. Summary of the exchange in the 02/06/25 PB</li> </ol>	<p><i>point type</i> <b>information</b> <b>information</b> <b>information</b></p> <p>[PM] [FP5] [EU-Rail]</p>
<b>EDDP and migration roadmap</b>	
<ol style="list-style-type: none"> <li>6. Manual uncoupling version for PDTs and migration</li> <li>7. Summary of the DACFIT state of play in the 02/06/25 PB</li> <li>8. Intermediate evaluation of deployment scenarios</li> </ol>	<p><b>decision</b> <b>information</b> <b>discussion</b></p> <p>[FP5/PM] [PM] [PM/all]</p>
<b>System Pillar (Task 4)</b>	
<ol style="list-style-type: none"> <li>9. State of play</li> <li>10. AOB and closing - state of play EU-Rail tender "engineering solutions"</li> </ol>	<p><b>information</b></p> <p>[EU-RAIL] [EU-RAIL]</p>

TLP gelb (Adressatenkreis)

Figure 24. EDDP Supervisory Board agenda 30/06/2025

 <h3>SB Agenda</h3>	 <small>Enabled by Europe's Rail</small>
<ol style="list-style-type: none"> <li>1. Introduction, Welcome, adoption of the Agenda</li> <li>2. Review of actions since the last SB</li> </ol>	<p>[EU-Rail / EC]      14h30 – 14h35 [EU-Rail / PM]      14h35 – 14h40</p>
<b>EDDP and migration roadmap</b>	
<ol style="list-style-type: none"> <li>3. Overview on DAC-related topics   update</li> <li>4. G/C: EU-Rail tender "engineering solutions"   state of play</li> <li>5. B1: "tiger team"   intermediate results</li> <li>6. B1: 3<sup>rd</sup> DAC FDFTO Risk Management Workshop</li> <li>7. B1/G/C: Draft overview on DAC loco equipment issues</li> <li>8. B2: Stakeholder Management: overview dissem./comm. activities</li> <li>9. B1: Need for overarching project coordination after e. o. EDDP/DACcord</li> </ol>	<p><i>point type</i> <b>information</b> <b>information</b> <b>information</b> <b>information</b> <b>information</b> <b>discussion</b></p> <p>[EU-Rail/PM]      14h40 – 14h45 [EU-RAIL]          14h45 – 14h50 [EU-Rail/PM]      14h50 – 15h05 [PM]                15h05 – 15h15 [PM/EC/EU-Rail]   15h15 – 15h25 [PM]                15h25 – 15h35 [UIP]                15h35 – 15h50</p>
<b>FP5-TRANS4M-R/FDFTO</b>	
<ol style="list-style-type: none"> <li>10. FP5-TRANS4M-R   state of play (main risk points)</li> <li>11. DAC Basic Package "medium detail spec" (e.g. for nat. funding schemes)</li> <li>12. WP19 LCC assessment by the JU   state of play (oral update)</li> </ol>	<p><b>information</b>      [FP5]                15h50 – 16h00 <b>information/decision</b> [FP5]                16h00 – 16h10 <b>information</b>      [EU-Rail]            16h10 – 16h20</p>
<b>System Pillar (Task 4)</b>	
<ol style="list-style-type: none"> <li>13. State of play</li> <li>14. AOB and closing</li> </ol>	<p><b>information</b>      [EU-RAIL]          -- 16h20 – 16h30</p>

Figure 25. EDDP Supervisory Board agenda 25/09/2025



## SB Agenda



1.	Introduction, Welcome, adoption of the Agenda		[EU-Rail / EC]	14h30 – 14h35
2.	Review of actions since the last SB		[EU-Rail / PM]	14h35 – 14h40
<b>EDDP and migration roadmap</b>				
3.	B1: extension of PB member categories	<i>point type</i> <b>decision</b>	[EU-Rail / EC]	14h40 – 14h45
4.	G: PioDAC (Pioneer DAC Trains CEF Project)	<b>information</b>	[PioDAC PC]	14h45 – 15h05
5.	B1: "tiger team"   results and next steps	<b>information</b>	[EU-Rail/PM]	15h05 – 15h15
6.	B1: 4 <sup>th</sup> DAC FDFTO Risk Management Workshop	<b>information</b>	[PM]	15h15 – 15h20
7.	B1/G/C: DACFIT, especially locos   state of play	<b>information</b>	[PM]	15h20 – 15h30
8.	B2: Stakeholder Management: overview dissemination/comm activities	<b>information</b>	[PM]	15h30 – 15h40
9.	B1: Overall project coordination after end of EDDP/DACcord	<b>discussion</b>	[EU-Rail/all]	15h40 – 16h00
<b>FP5-TRANS4M-R/FDFTO</b>				
10.	FP5-TRANS4M-R   state of play	<b>information</b>	[FP5]	16h00 – 16h05
11.	FP5-TRANS4M-R   Demo trains   state of play	<b>information</b>	[FP5]	16h05 – 16h10
12.	FP5-TRANS4M-R   Sounding boards review	<b>information</b>	[FP5]	16h10 – 16h15
<b>System Pillar (Task 4)</b>				
13.	State of play	<b>information</b>	[EU-RAIL]	16h15 – 16h20
14.	AOB and closing - provisional meeting dates 2026	<b>information</b>	[EU-RAIL]	16h20 – 16h30

Figure 26. EDDP Supervisory Board agenda 18/12/2025



## SB Agenda



1.	Introduction, Welcome, adoption of the Agenda		[EU-Rail / EC]	13h00 – 13h05
2.	Review of actions since the last SB		[EU-Rail / PM]	13h05 – 13h10
<b>EDDP and migration roadmap</b>				
3.	G: PioDAC state of play (milestones, authorisation, critical path, ...)	<i>point type</i> <b>information</b>	[PioDAC PC]	13h10 – 13h30
4.	B1: 5 <sup>th</sup> DAC FDFTO Risk Management Workshop (incl. cross-lic. agreement)	<b>information</b>	[PM + FP5 SPOC 4]	13h30 – 13h35
5.	C: DACFIT other topics than locos   state of play   UIP Info on DAC-rail	<b>information</b>	[DACFit PC / UIP]	13h35 – 13h40
6.	E: ERA WG "retrofitting of ... with DAC" (authorisation)   state of play	<b>information</b>	[ERA]	13h40 – 13h50
<b>FP5-TRANS4M-R/FDFTO</b>				
7.	FP5-TRANS4M-R   state of play	<b>information</b>	[FP5]	13h50 – 14h05
8.	FP5-TRANS4M-R   Demo trains   state of play	<b>information</b>	[FP5]	14h05 – 14h20
<b>System Pillar (Task 4)</b>				
9.	State of play	<b>information</b>	[EU-RAIL]	14h20 – 14h25
<b>General</b>				
10.	B1: Overall project coordination after end of EDDP/DACcord	<b>decision</b>	[EU-Rail/all]	14h25 – 14h50
11.	AOB and closing - draft overview on EU and national DAC funding - DACcord objectives self-assessment	<b>information</b>	[EU-RAIL]	14h50 – 15h00

Figure 27. EDDP Supervisory Board agenda 30/03/2026 (hybrid Brussels/CER premises)