



European Freight DAC Delivery Programme

enabled by Europe's Rail

Moving European Rail Freight Forward

Plenary meeting of DAC National Contact Points (NCPs)

Keir Fitch, Head of Unit C4, DG MOVE | Giorgio Travaini, Executive Director, EU-Rail Jens Engelmann, EDDP Programme Co-Manager, EU-Rail Libor Lochman, EDDP C/SEE ambassador, EU-Rail





(1	Introduction and purpose of the meeting	Keir Fitch Giorgio Travaini	14:00 – 14:05
(2	Tour de table - participants to shortly introduce themselves	All participants	14:05 – 14:15
(3	Role of DAC national contact points	Libor Lochman	14:15 – 14:35
(4	Update on most important developments by the European DAC Delivery Programme	Giorgio Travaini, Jens Engelmann	14:35 – 14:50
(5	Update from participants on DAC related activities at national level	NCPs	14:50 – 15:10
(6	Any other business: remaining questions by participants	All participants	15:10 – 15:25
(7	Conclusion	Keir Fitch	15:25 – 15:30





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DAC National Contact Points



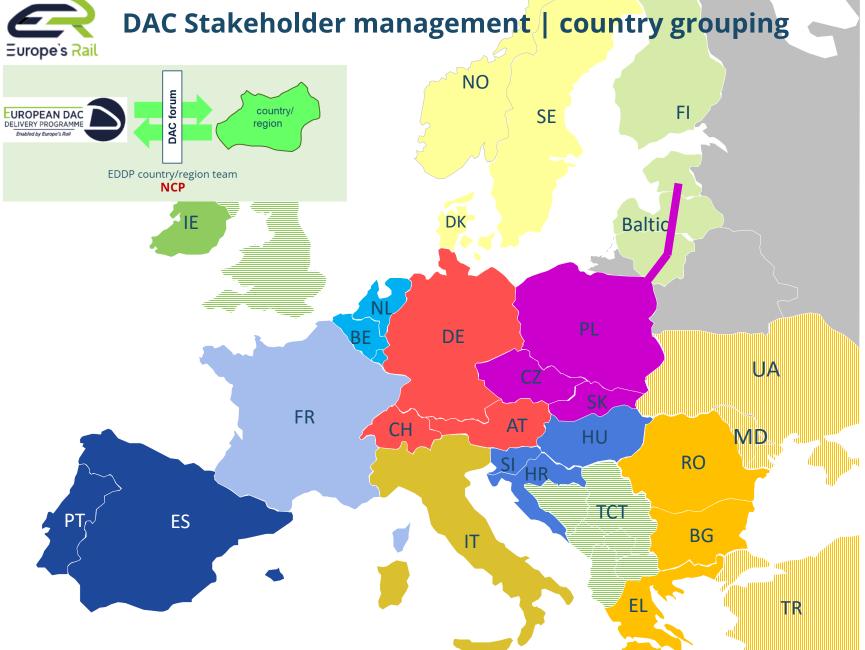
DAC – National Contact Points | motivation

Experience in relations with stakeholders around DAC in the last years showed the need for single points of contact at national level (EU and other countries operating 1 435 mm network).

Important NCP role:

- Contact point for the stakeholders and EDDP
- Helps coordinate DAC related activities in the country
- > Collates/communicates the sector feedback
- Co-organise the DAC meetings (fora) in cooperation with the EDDP management & country/region team







Current status of DACcord WP9 work, not yet JU-accepted

Group

EU **EU Institutions/bodies**

FR FR (4F)

DACH DE, AT, CH

BE, NE, LU Benelux

Central CZ, PL, SK, Rail Baltica

Southern HU, SI, HR

Eastern BG, RO, EL, (TR), (MD),

(UA)

W Balkan TCT-countries

Baltic FI, Baltic, Rail Baltica

SE, DK, NO Nordic

IT

Iberian ES, PT

ΙE ΙE

UK



EDDP country groups, NCPs & ambassadors



Groups	Sub-Groups	NCPs	EDDP ambassadors (group)
EU .	EU Institutions + groups + OTIF		EU-Rail & EDDP PM (EU-Rail & Mark Topal/Jens Engelmann)
FR	FR	Henri Vichard	Railenium (Danijela Doric) ; UNIFE (Hugo Tabouret); Wabtech (Laura G.) <mark>TBC</mark>
DACH	DE, AT, CH	Jan Schöning (DE) NN (AT) Wolf-Dieter Deuschle (CH)	DB Cargo (Michael Sünder); UIP (Lisa Gruber); ÖBB (Sarah Bimingstorfer) VAP (CH) most likely to be added
Benelux	BE, NL, LU	Matteus Blommaert, Médarine Maréchal (BE) Marcel Thijs (NL) Pierre Gierenz (LU)	BRFF (Frederick de Backer) <mark>TBC</mark>
Central	CZ, PL, SK	Pavlina Tomkova (CZ) Andrea Neuschlová, Peter Klamo (SK) Maciej Sofinski (PL)	DACcord (Libor Lochman)
Southern	HU, SI, HR	György Lengyel (HU) Ministry of the Sea, Transport and Infrastructure (HR)	RCG (Boglarka Mondvay-Nemeth); DACcord (Libor Lochman)
Eastern	BG, RO, EL, (TR), (MD), (UA)	Ivan Cholakov (BG) Giorgios Danias (EL)	DACcord (Libor Lochman)
W-Balkan	RS, BA, MK, ME, XK (TCT-countries)		DACcord (Libor Lochman); Railenium (Danijela Doric)
Baltics	FI, EE, LT, LV	Ville-Veikkö Savolainen (FI) Kristjan Kaunissaare (EE) Tomas Bieksa (LT) Māris Aizstrauts (LV)	DACcord (Libor Lochman)
Nordics	SE, DK, NO (FI)	Jan Bergstrand (SE) NN (DK) Ole Skovdahl (NO) Ville-Veikkö Savolainen (FI)	Trafikverket (Jan Bergstrand)
Iberian	ES, PT	Jesus Coloma Pérez, Roberto Marín Escribano (ES) Amelia Areias (PT)	CER (João Sarmento) + EU-Rail (Javier Ibanez de Yrigoyen <mark>TBC</mark>) + NN Spain
IT	IT		UIC (Giancarlo de Marco); Mercitalia / FERMERCI (NN); ASSOFERR TBC
IE	IE	Donnacha Stackpoole	ERFA (Conor Feighan) TBC
IMs	IMs		EIM (Bardo Schettini) + Trafikverket (Jan Bergstrand)



DAC Stakeholder management | "DAC Fora"



Regular "DAC fora" / meetings in the European countries/regions

Organised by EDDP country/region team + National Contact Points (NCPs)

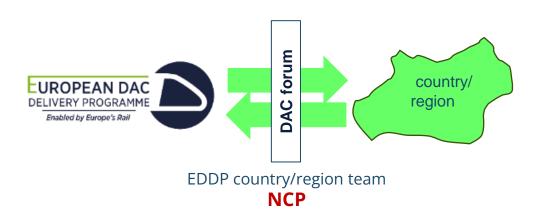
Ca. 2 DAC fora/year per country/region

Objectives:

- => Inform on the state of the play of the different EDDP actions
- <= gather information from the country/region & recruit relevant contributors to EDDP workstreams</p>

Participants:

- national/regional stakeholders
- EDDP country team; NCP
- EDDP PM, all EDDP/FP5/SP work areas (depending on agenda)





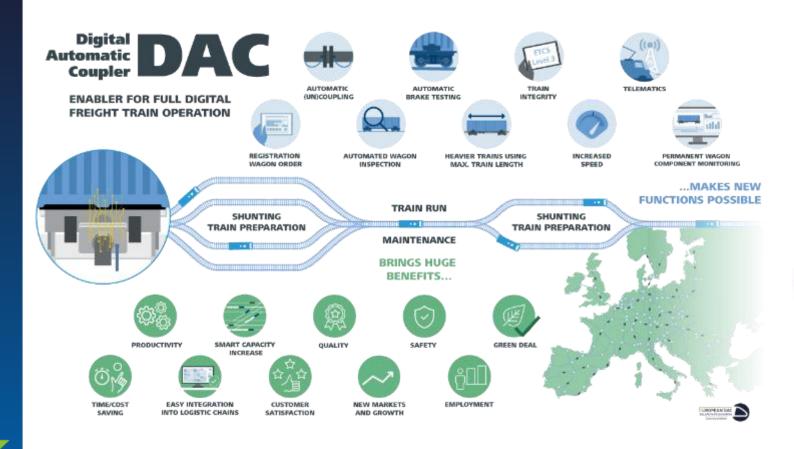


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DAC for Full Digital Freight Train Operations





- more than just a coupler
- key and unique **enabler for numerous applications**
- allowing more use cases to generate a max. possible benefit
- the backbone for "full digital freight train operations" in order to transform European rail freight





All DAC-related work areas and activities



Europe's Rail Flagship Project 5

B-

1 EDDP

2 Stakeholder Management

EC/ERA

Europe's Rail System Pillar

ESOs







DAC/"Full Digital Freight Train Operations"

target operat. proc.

functional reqs.

system architecture tech. development testing & demos tech. specification authoris. dossiers







Technology (mirroring & sector feedback)



Operational
Procedures
(mirroring &
sector feedback)





Fleet Analyses & rtf Engineering (rtf readiness)

Infrastructural

& IT adaptations

Placing into service

plan (safety,

workforce training,

rulebooks etc.)



Retrofit capacity (workshops, workforce, components)

Migration strategies

& retrofitting plan

(traffic & customer

sidings analysis,

operational plan)



Funding & Financing plan

2 CBA (updates)





Investment plan & procurement framework plan

4 Other regulatory & legal framework plans





development of efficient & suitable authorisation process & requirements

preparing TSI drafts for the EC





TSI revision





Operational procedures standardization (plan & execution)

Technical
harmonisation:
preparing inputs for
ERA TSI drafting
process & driving
EU standardisation

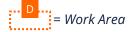
Alignment of rail & DAC system architecture

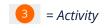






Executing European standardisation









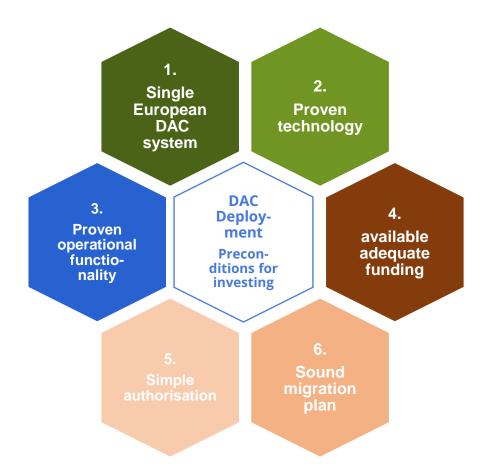




Preconditions for investing in DAC deployment



(= everything that needs to be proven before investment decisions will be taken)

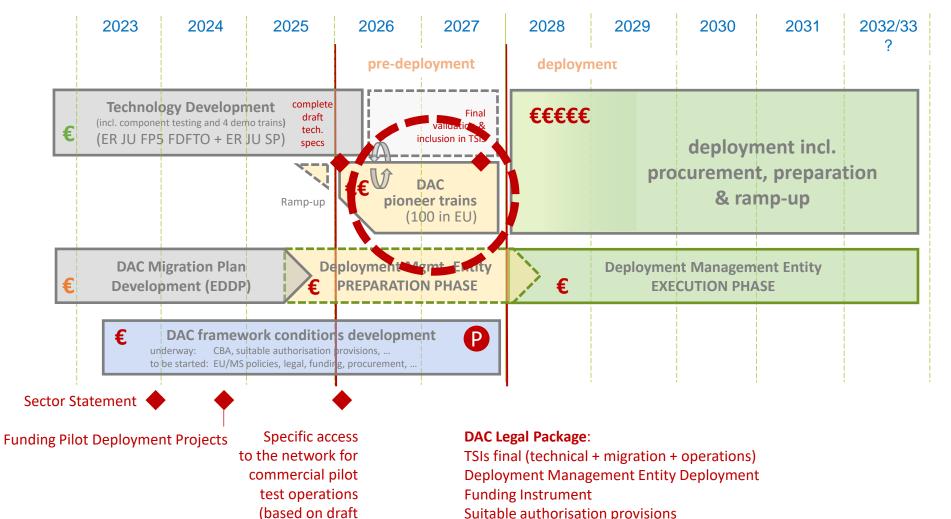


- DAC-Technology (incl. additional DAC based technology) and DAC-operations/ functionalities are clearly defined (tech. package) and harmonised (Single European DAC System)
- 2. The **technology** meets all essential requirements in particular in the area of RAMS (reliability-availability-maintainability-safety/security) proven through large demonstrations
- 3. The **operational functionalities/use cases** bring the expected benefits proven through large demonstrations incl. safety aspects
- 4. Positive **CBA incl. adequate funding programs** (by EU and MS) available for all European wagon and locomotive operators and keepers (as they will have to invest), considering the individual/regional conditions such as the cases where upgrading is not possible/feasible
- 5. Respective authorisation provisions are available to ensure a **facilitated**, **rapid authorisation process** and mitigate authorization risks for wagons and locos (incl. availability of relevant documentation)
- 6. A **sound migration plan** is set, guaranteeing simultaneous deployment in Europe (sector agreement and legal framework) based on available and adequate funding programs, established capacities for production and upgrading of wagons and locomotives, staff training, and availability of the necessary infrastructure and IT adaptations



The DAC General Master Plan 01 [June 2023]



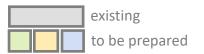


technical specs)

Major amendments/NEW:

- DAC pilot deployment projects
- DAC framework conditions development
- Deployment Management Entity
- **E** Budget and resource need (already funded)
- Budget and resource need (currently mainly unfunded)
- P Determining milestone:

 DAC Legal Package to be implemented before this deadline





Functions and components considered within the pre-deployment trains



The 100 pre-deployment trains shall be equipped with the **DAC basic package**:

- DAC coupler incl. energy and data system
- train composition detection
- Automated brake test
- Train integrity/train length determination
- Automated uncoupling (in-train from loco)

coupler with mechanical or push-button uncoupling from wagon side and including "prevent coupling" function

• (Hybrid coupler for locos and DAC for special wagons, e. g. T3000 – if applicable)



Why large-scale pioneering and a pre-deployment phase is needed



Three objectives:

- 1 Ensure full reliability of the DAC technology
 - DAC technology used in commercial operations
 - Assess the validity of ass<mark>umptions developed in EDDP (Migration) / FP5 (Design)</mark>
 - Assess technology integration by collaboration with FP5 technology providers and suppliers of existing assets
- 2 Prove added value and optimise EDDP processes for full DAC roll-out
 - Gather information for full-scale deployment and roll-out
 - Learn and develop. Create a steppingstone towards full DAC deployment
 - inform and communicate with stakeholders
- 3 Ensure smooth integration of DAC into the overall railway system
 - Ensure (mass) authorisation provisions can effectively be applied
 - Assess interchangeability/broad interoperability with other digital systems on trains, tracks and central IT systems
 - Assess effectiveness of operational rules/rulebook (developed in EU-Rail System Pillar)



There is substantial interest in the PDT initiative: 47 companies intending to participate, more interested to join



Railway **Undertakings**

























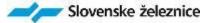


















Wagons & Locos

















Customers









Certain customers anonymized

Others

Suppliers, Workshops, Test centers, Manufacturers, Associations, Govmt., etc.





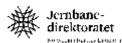






































We have a solid basis to advance with the project, with broad European coverage



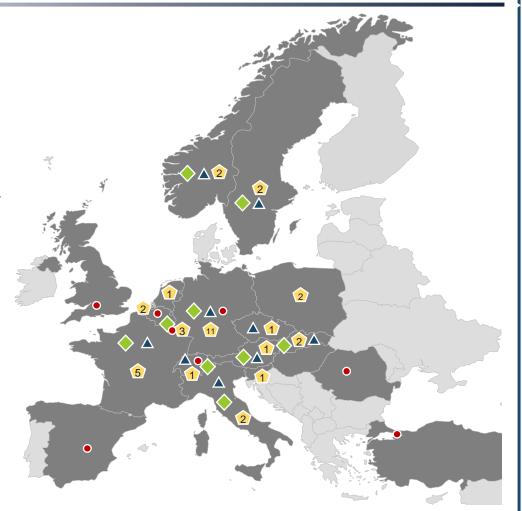
OVERVIEW OF PARTICIPANTS - PIONEER DAC TRAINS INITIATIVE

LEGEND

- = Participation in PDT initiative
- = Total no. of routes, per country
- = Locos
- ▲ = Wagons
- = Other services (e.g. retrofitting)

DRAFT - WIP

STATUS 13.06.24



CONCLUSIONS

- Total of 36 routes (incl. cross-border) confirmed so far
- Good balance of different RU types and geographies
- Many stakeholders have included provisions or conditions to be fulfilled (re. financing, tech. requirements, training, etc.)
- Many stakeholders still need to provide details on traffics, loco and wagon types
- Overall, the contribution is very positive and forms a good starting point for further planning and refinement



To summarise



- We are working on technology, test preparation, migration plans, etc.
- **Pilots in commercial operations across Europe** shall prove the assumptions taken and pave the way towards full deployment
- We now need to bring the exchange with all stakeholders in the different countries on the next level for a better structured input for the overall migration planning (e. g. fleet & traffic info), CBA optimisation, sharing pilot's trains results, funding/financing issues etc.

Therefore we need you, the NCPs:

- **As contact point** for the stakeholders and EDDP
- **To help to coordinate DAC related activities** in the country
- To collate/communicate the sector feedback
- To co-organise the DAC meetings / fora in cooperation with the EDDP management & country/region team

