



CEF Transport BLENDING FACILITY

Core Network Corridors Fora

June 2019

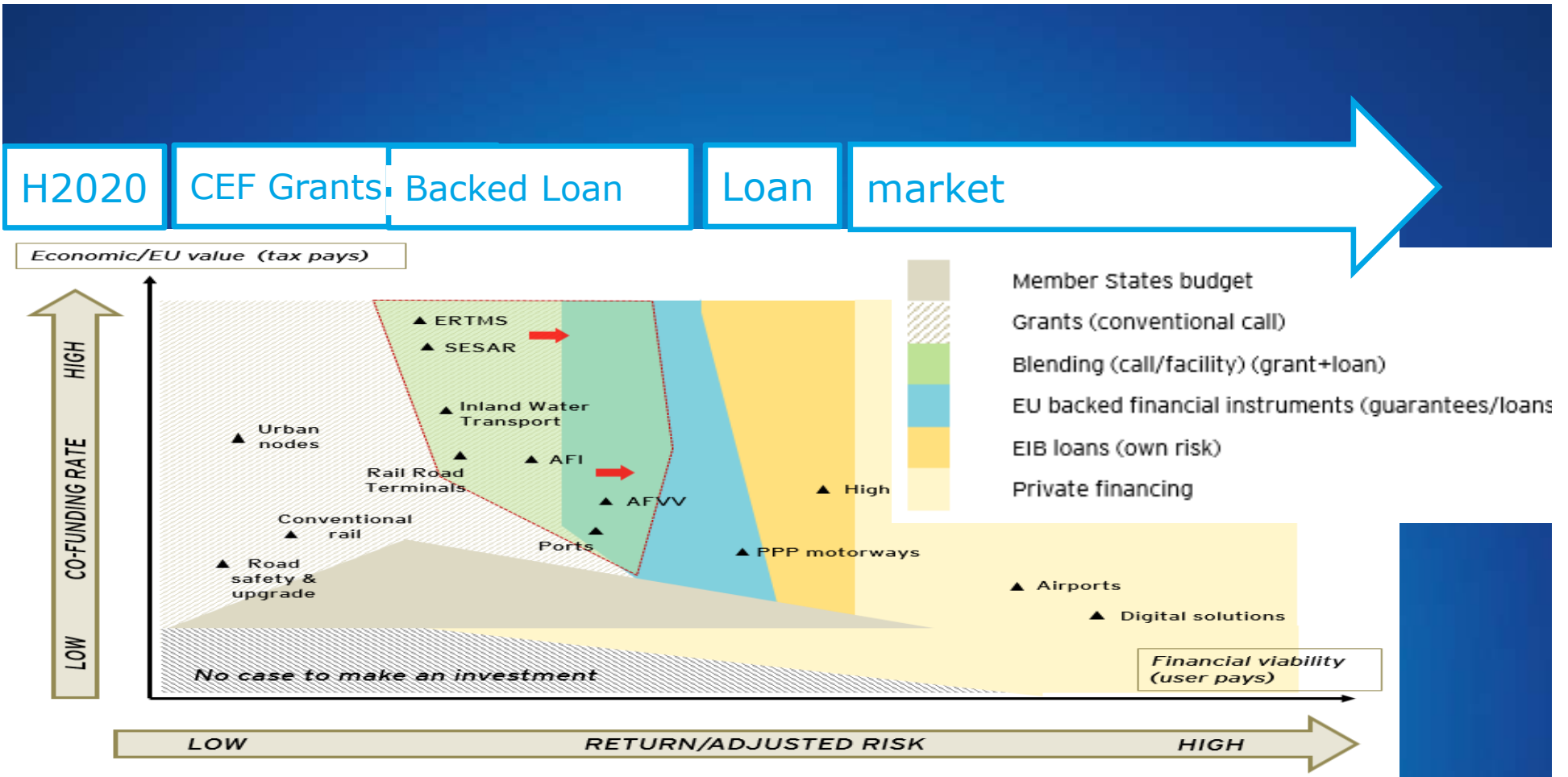
Antongiulio Marin / Julie Buy
Unit B2 Transport Investment
DG Mobility and Transport
European Commission

 @Transport_EU

Mobility and
Transport

CONNECTING
EUROPE

Blending Rational





CEF Blending Call (2017-2018)

- Blending, in the context of the CEF Call, is the combination of **EUR 1.4 bn of CEF grants (for all mode of transport)** with finance from the EIB, notably the EFSI, or with finance from National Promotional Banks or private investors
- **74 projects selected** expected to mobilize up to **€7.9 billion of investment**
- Oversubscription : X 2.5 to 3
- As for a "conventional call", but :
 - Letter of support by public or private financial institutions to be included in the submission
 - Financial readiness evaluated to assess project "maturity" and "impact"
 - Disbursement of grants conditional to financial close

Project selected:

https://ec.europa.eu/inea/sites/inea/files/cef_blending_call_brochure_altogether_20171205_final_web.pdf

http://ec.europa.eu/inea/sites/inea/files/2017_cef_blending_call_brochure_20180926_last.pdf

CEF Blending call

Examples of projects selected

- **EUROP-E: The European Ultra-Charge Roll Out Project** will roll out a pan-EU network of 340 Ultra-Charging (UC) stations in 13 EU countries. EUROP-E is driven by OEM. EUR 40 million CEF's to leverage investment of EUR 200 million. The project is supported by the EIB.
- **The Central European Ultra Charging project**, promoted by the power utilities will deploy and operate a network of 118 Ultra-Fast Charging Stations in Central Europe. EUR 13 million CEF's contribution will leverage investment of EUR 67 million. The project is supported by a commercial bank and a National Promotional Bank.
- **The MEGA-E: Metropolitan Greater Areas project**, promoted by an infrastructure service provider, will introduce 39 multi-modal e-hubs in 10 major cities in Europe. E-hubs will enable ultra-charging and/or inter-modality with e-taxi, e-car sharing, e-logistics or e-buses. EUR 30 million CEF's to leverage investment of EUR 150 million. The project is supported by the a consortium of private banks.

CEF Blending call

Examples of projects selected

- **REMETBUS2 Rotterdam:** The action is part of a global project which aims to employ 265 Electric Buses (BEBs) and 74 charging stations, the first 2 phases the deployment of all the charging stations and 105 BEBs, will be carried out. EUR 3 million CEF's to leverage investment of EUR 42 million.
- **Zero Emission Valley:** The Action is a flagship initiative for the French region of Auvergne-Rhône-Alpes and part of France's "H2Mobilite" programme, which aims to deploy 600 hydrogen refuelling stations in the country by 2030. The Action will deploy 20 stations, out of which 15 will be supplied by onsite electrolysers. It will also procure and lease 1,000 fuel cell vehicles. EUR 10 million CEF's to leverage investment of EUR 51 million.
- **Clean buses in Warsaw:** The Action is dedicated to installing 140 charging slots, five masts with pantographs and the accompanying infrastructure in the depot to be built. It is part of a global project supported by Cohesion Funds involving the purchase of electric buses. EUR 1 million CEF's to leverage investment of EUR 6 million.

Blending Facility

The CEF Blending Facility is a 'cooperation framework' set by an amendment to the MAP.

It will be coordinated by COM, which will engage with Implementing Partners (IP) (i.e. EIB, NPBs) through 'administrative agreements'.

With a view to support Blending operation, defined as operation combining:

- CEF investment grants and/or financial instruments backed by CEF Debt Instrument (CEF DI)
- with financing from the EIB, including under EFSI, or NPBs or private-sector finance institutions and private sector investors

Features

➤ **Threshold Blending Operation**

- CEF grant of min EUR 1 M
- IP Loan of min EUR 5 M

➤ **Budget**

- EUR 100 M ERTMS (unit contributions)
- EUR 100 M (% co-funding rate: Alternative fuels)

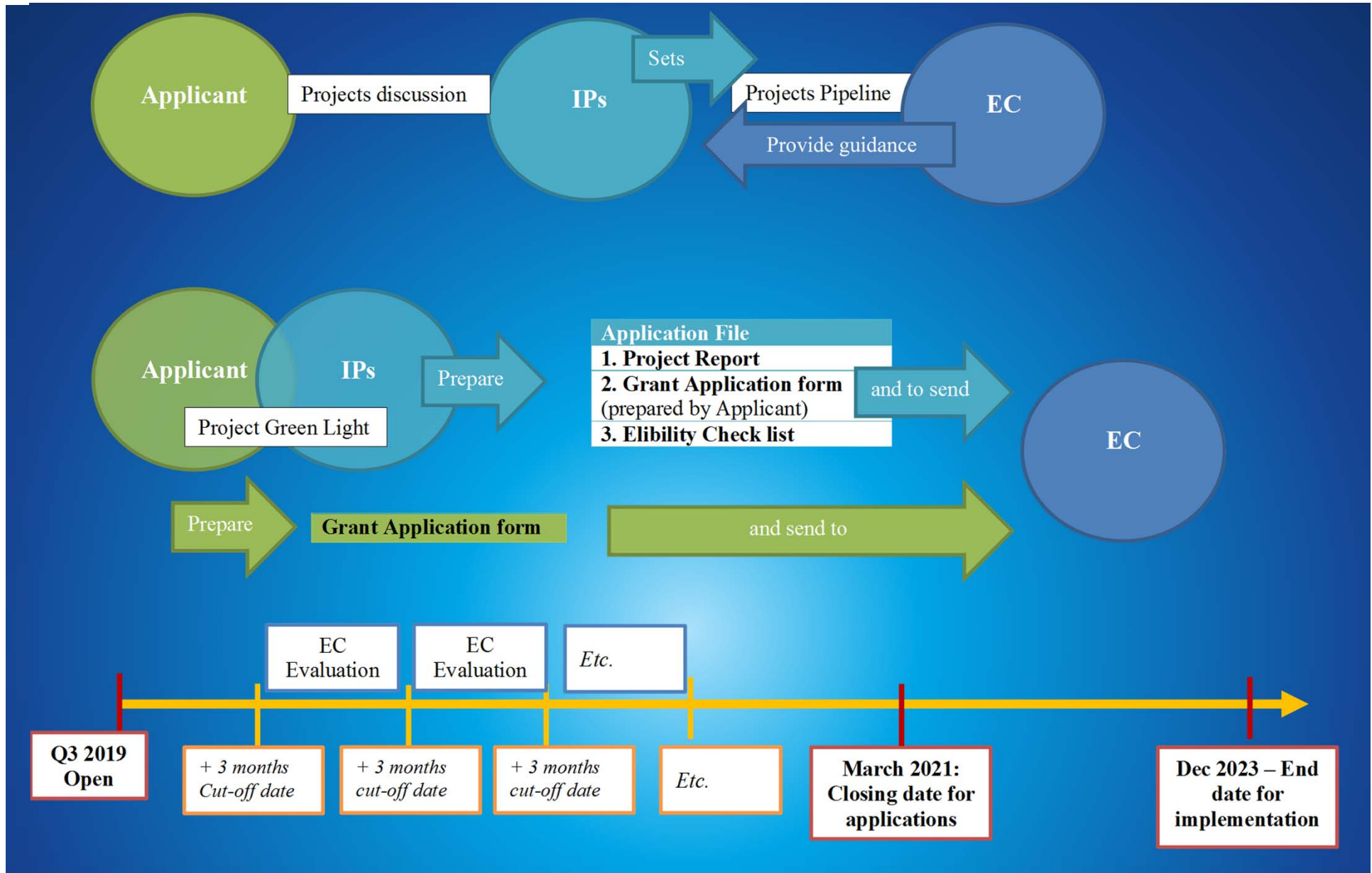
*MS and other EU programs can invest in the CEF Blending Facilities
'new Art 16 a CEF Reg)*

Budget with possible replenishment up to 20% (flexibility)

➤ **Timeline**

- Actions can be implemented until 2023
- Opening call: Q3 2019
- Rolling basis until March 2021

Processes



Priority 1 - Alternative fuels

Type of Alternative Fuel technology	Infrastructure	Mobile assets		
		Trucks and buses	Vessels	Railway vehicles
CNG	10%	10%	/	/
LNG	10%	10%	15%	/
Electricity	15%	20%	20%	/
Hydrogen	20%	20%	20%	20%

- **Mobile assets:** co-funding rates apply only to the eligible costs understood as the difference between the costs of a conventional solution and the costs of the innovative technology solution.
- **LNG trucks:** the grant amount shall not exceed EUR 3000 per vehicle.
- **Dedicated electric charging infrastructure for the use of battery-electric buses in public transport,** the co-funding rate is set at 20% of the eligible costs.
- **LNG vessels in inland navigation:** the co-funding rate is set at 20% of the eligible costs.

Priority 2 – ERTMS

Eligible actions:

- On-board: Proposals addressing the fitment, retrofit or upgrade of vehicles with ERTMS baseline 3
- Trackside: ERTMS B3 installation or upgrade, and associated works on interlockings

Unit contributions, derived from unit costs, approach to:

- simplify planning, administration and execution of ERTMS grant provision
- Allow early certainty on levels of CEF grant support to be provided

ERTMS unit contribution

Outputs	Activities	Sub-activities	Categories of vehicle / track-side components	Sub-categories	Unit Contribution (k€)
On-board ERTMS B3 equipped vehicle	Retrofitting of vehicle	Prototype	International	/	900
			National	/	450
		Serial	International	/	110
			National	/	80
	Upgrade of vehicle	Prototype	International	/	600
			National	/	350
		Serial	International	Software	18
			National	Software	15
			International	Software & hardware	55
			National	Software & hardware	55
	Fitment of vehicle				25
Track-side 1 double track km equipped	Deployment		ETCS & associated upgrade costs		90
			GSM-R		20
			Interlockings		80
	Upgrade		/		20

ADVISORY SUPPORT

in the framework of the

**CEF TRANSPORT
BLENDING FACILITY**

The Advisory in the project cycle



UPSTREAM

- **Policy & programme** advice
- **Preliminary** project assessment

PREPARATION

- **Technical advice** to promoters prior to appraisal (demand studies, CBA)
- Advice on **financial structuring** (PPPs, investment platforms & 'innovative' projects)
- Selection (ToR) & supervision of **consultants** for technical and financial studies to support project preparation

IMPLEMENTATION

- Advice on **project implementation**
- **Enhanced monitoring** in delayed projects

CAPACITY BUILDING RELATED TO PROJECTS

Capacity building on technical issues – **Cooperation** centres of expertise - **Dissemination** best practices & case studies – **Needs Assessment** for project advisory support

Advisory Hub offer of support to CEF Transport Blending Facility applicants

As agreed with DG MOVE



High level advice on **existing project documentation** regarding suitability/eligibility/maturity for the Blending Facility.



Introduction to **EIB lending operations**



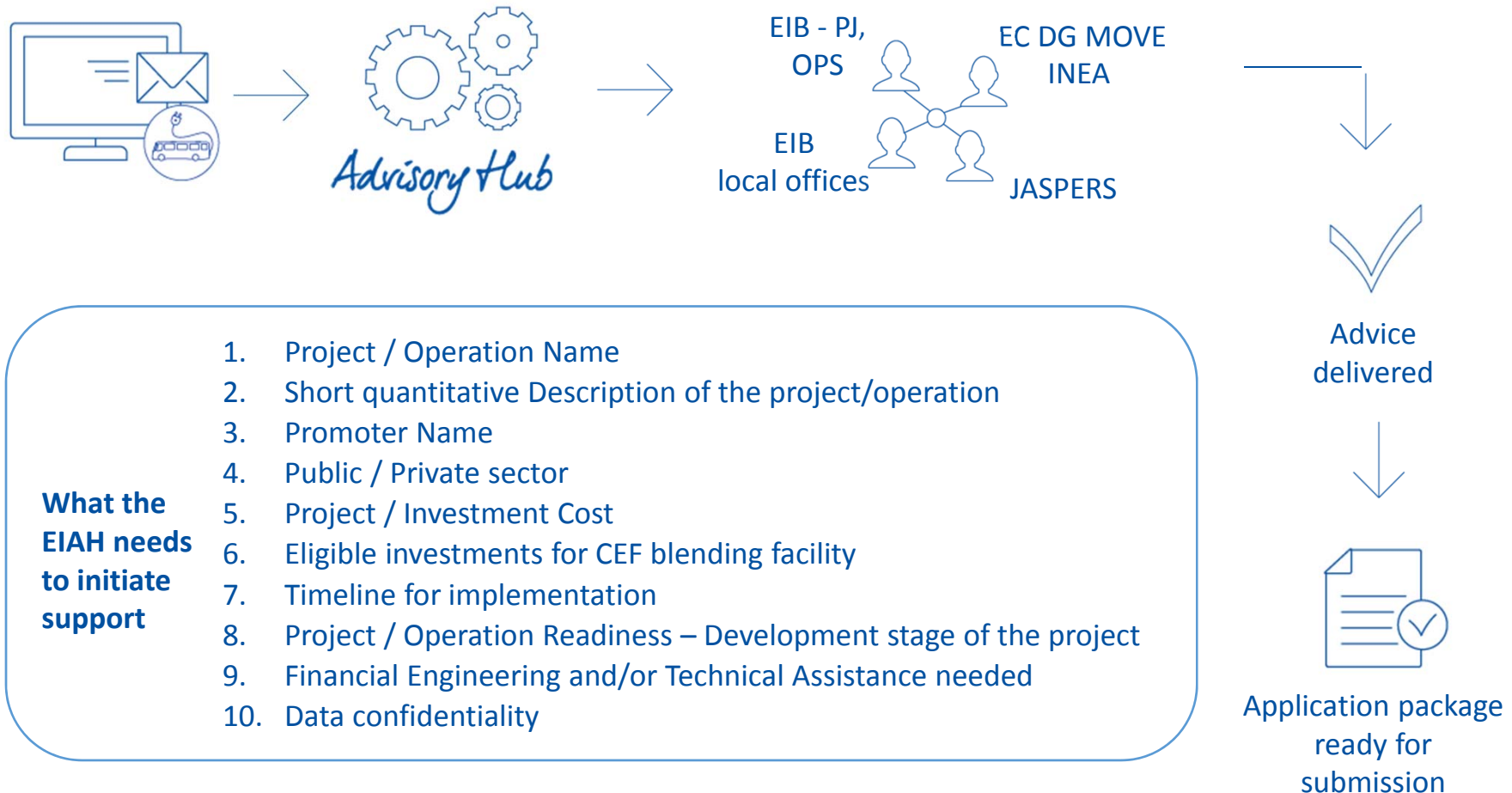
Identification of **major gaps** and areas requiring improvement in:

- **technical preparation** - feasibility studies, market studies, economic cost-benefit analysis, environmental documentation, tendering and procurement, implementation and organisational
- a **first review of PPP readiness** where applicable and
- **financial preparation** - business plan, financial plan



Advice on **terms of reference** for consultants/studies in relation to **technical, financial, procurement** and organisation to implement projects and improve access to finance

How is the CEF Blending Facility support provided?





Useful links:

CEF Transport Blending Facility

<https://ec.europa.eu/inea/en/connecting-europe-facility/cef-transport/apply-funding/blending-facility>

EIAH

<https://eiah.eib.org/>

ELENA

<https://www.eib.org/en/products/advising/elena/index.htm>

JASPERS

<https://jaspers.eib.org/>

Background

3 The Dutch Model for 2017 CEF Transport Blending Call Overview

1	Introduction	7	Abbreviations
2	The Dutch Model for 2017 ...		
3	A possible tailor-made sch ...		
4	Questions & Discussion		
5	Details and back-up slides		
6	Bibliography		

The context in the Dutch market

- ▶ The Netherlands decided to roll-out ERTMS Level 2 Baseline 3 on nearly the whole network as sole signalling system by 2024
- ▶ The national programme is considering as well the Rhine-Alpine corridor's deployment plan. By 2024 ERTMS L2 B3 with STM will be needed
- ▶ About 300 freight locomotives need to be upgraded from ERTMS pre-B2 and B2
- ▶ No immediate positive returns for rolling stock owners' business case

Support provided to freight RUs

- ▶ Three type of support activities:
 1. Prototyping the B3 upgrade of RALP locos
 2. Serial upgrade on 300 locos (multiple types, manufacturers and owners)
 3. Project Management & procurement support
- ▶ Costs of the action:
 - ▶ 72 M€ backed up by EIB loan, NL Ministry, CEF grant 32,4 M€
 - ▶ Repaid by rolling stock owners in 2023, 2024, 2026
- ▶ Works to be completed by 2023 and action coordinated by the NL Ministry of Infrastructure and its dedicated PM team

CAPEX cash
outflow spread
overtime

Pay back
only
when
ERTMS
is used

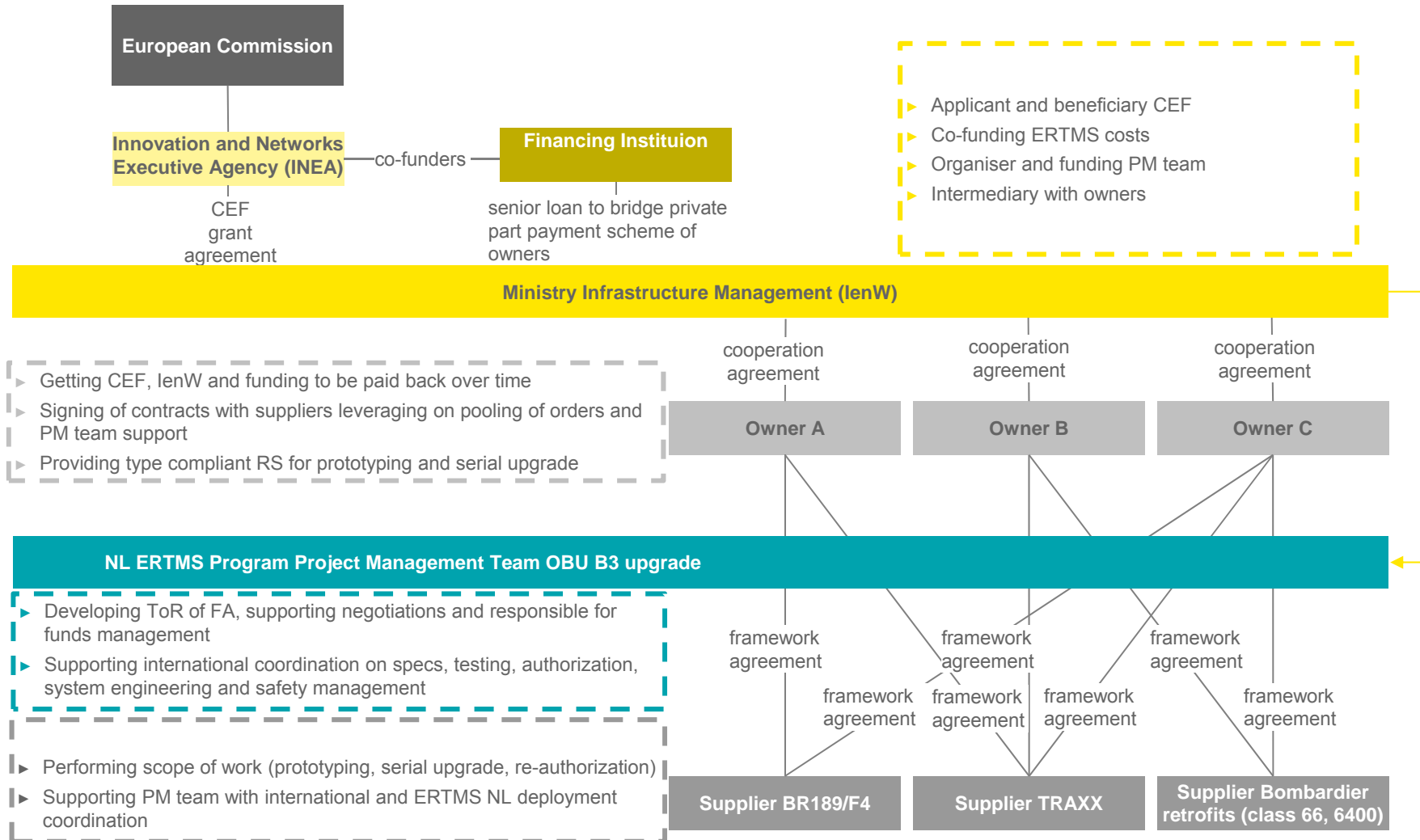
Coordinate
d
deployment

Support
on
prototypin
g and PM

3 The Dutch Model for 2017 CEF Transport Blending Call

The structure and the responsibilities

- 1 Introduction
- 2 The Dutch Model for 2017 ...**
- 3 A possible tailor-made sch ...
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3 The Dutch Model for 2017 CEF Transport Blending Call

Project management and financing structure

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Project management team responsibilities

Whereas the ministry IenW plays a intermediary role and is responsible for the coordination of the funding, the NL ERTMS program and project management of the OBU B3 upgrade is responsible for the following:

- ▶ Fund management from INEA, EIB and Ministry IenW (managing the cash flows and collecting the funding)
- ▶ Project management
- ▶ International and ERTMS NL coordination (specs, tests, authorizations, system integration)
- ▶ Engineering, safety management and similar with EIMs, ERA, NSAs
- ▶ Supporting and initiating framework agreements between owners and suppliers
- ▶ Supporting owners in implementing the contracts
 - ▶ Activity 1: prototyping
 - ▶ Project setup and pre-engineering
 - ▶ Basic and detailed engineering
 - ▶ Integration release ETCS Baseline 3 and GSM/R Baseline 1
 - ▶ Delivery of components
 - ▶ Upgrade work in the Workshop
 - ▶ Testing
 - ▶ NoBo (Notifying Body), DeBo and ASBO activities
 - ▶ Authorization and compatibility related testing
 - ▶ Authorization to place on the market by ERA and NSAs
 - ▶ Activity 2: serial upgrade
 - ▶ Implementaiton of software and hardware when applicable
 - ▶ Test and assessment of conformity with the prototype

Information provided by Dutch ERTMS Program (Peter Wilms)

Financing Structure

- ▶ The CEF, IenW and owners cover the project costs
- ▶ The project is split into three cost segments: prototyping, serial B3 upgrade and project management costs
- ▶ The budget is developed by the owners on the basis of sound economic principles and competitive pricing and after consultation with the suppliers
- ▶ The owners have to organize a bank guarantee in advance for their payments
- ▶ Revenues expected after full operation of ERTMS on the corridors of the Ten-T network in the EU (approx. 2030). Repayment is delayed

	CEF	IenW	Owner	Total
Prototyping	50%	25%	25%	100%
Serial B3 upgrade	50%	10%	40%	100%
Project management costs	50%	50%	0%	100%



Milestone	Payment owners contribution (enabled by EIB loan)	Year
Commissioning serial B3 upgrade (B2 lines)	25%	2023
Commissioning B3 line Kijfhoek – Roosendaal (NL)	25%	2024
1 – 2 year(s) after commissioning B3 line Kijfhoek – Roosendaal (NL)	50%	2026

3 The Dutch Model for 2017 CEF Transport Blending Call

Benefits, risks, impacts and actions

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Benefits of the Dutch Model



Structured process empowers clear deadlines and successful completion of the project

Indirect and direct support of the owners on all measures regarding the project





Long-term focus of the repayment schedule enables the implementation of the project

High value for investment and high scaling of the positive effects through this model





Project management team monitors and supports the entire structured process thus increasing reliability of the project in general and for all involved parties

Engagement in the process and the financial involvement of the ministries and the EU enhances trust by owners and suppliers





Flexibility concerning additional financing partners

Key project risks	Impact	Action
CEF request for grant rejected	Costs not covered	The ministry would discuss covering open costs with the owners (probably only major companies would not depend on the CEF grant)
Suppliers of a type or upgrade cannot comply to budget estimated in proposal	Project costs are not entirely covered	lenW and owners will have to share the extra costs (perhaps a ceiling may be agree upon with the suppliers and the implementing body: joint procurement scheme (JPS))
Suppliers of a type cannot comply to deadline CEF (2023)	CEF grant not paid out, upgrade not in time for opening B3 - line	Cancellation type and serial upgrades
New mandatory specifications after project start introduced by EU or MSs	Amendment to upgrade contracts	lenW will bear extra costs in case NL is responsible; in other cases the costs shall be shared between IM and owners
Authorisation of a type or serial upgrades delayed	Upgrade not in time for opening first NL B3-line, potential delay of commissioning B3-line	Penalty claimed at supplier
Supplier is not performing	Low RAM serial upgrade	Penalty claimed at supplier
Owner is not performing	JPS expects budget shortage within a framework contract	Letter of credit provided by owners when joining JPS

CEF Blending + EIB (own risk): ENEL: EV Charging Network in Italy



- **14 000 charging stations & associated connections to the distribution grid by 2022**
- **Slow, fast and ultra-fast**
- **80% urban areas**
- **20% ultra-fast in extra urban areas & motorways**
- **Loan EUR 115m**
- **Project costs EUR 231m**

CEF blending + EIB (EFSI + equity): Allego: EU wide (now in NL, DE, BE and LU)



- 1800 charging stations
- & growing the company
- normal, fast and ultra-fast
- Loan EUR 40m
- Project costs EUR 99m

CEF Blending + ESIF + EIB (own risk) loan Warsaw: Bus Fleet Renewal

- 130 battery electric articulated buses
- 270 CNG buses
- Bus depot with charging infrastructure
- Loan EUR 95m
- Project costs EUR 247m



CEF Blending + CEF DI/EFSI Rotterdam - electric Buses

- Bus fleet renewal
- 105 electric buses
- 103 hybrid buses
- Charging facilities at depot and on-route
- Loan EUR 115m
- Project costs EUR 262m
- and tram & metro track renewal

(under approval)

