



# EUROPE'S RAIL INFO DAY

ONLINE

4  
October  
2023

Learn about our Call for Proposals 2023 and join a dedicated matchmaking platform until Call closure!



@EURail\_JU



Europe's Rail Joint Undertaking

# AGENDA

## Europe's Rail JU Info Day 2023

<b>09.00 - 09.15</b>	<b>Opening remarks</b>  <i>Kristian Schmidt</i> <i>Director for Land Transport, European Commission</i>  <i>Andreas Boschen</i> <i>Executive Director, SESAR 3 Joint Undertaking</i>  <i>Giorgio Travaini</i> <i>Executive Director a.i., Europe's Rail Joint Undertaking</i>
<b>09.15 - 09.30</b>	<b>Presentation of the Call for Proposals 2023</b>  <i>Giorgio Travaini</i> <i>Executive Director a.i., Europe's Rail Joint Undertaking</i>

# AGENDA

## Europe's Rail JU Info Day 2023

09.30 – 10.00	Europe's Rail Programme open call Topics
09.30 – 10.00	<p><b><i>DESTINATION 1 – Network management planning and control &amp; Mobility Management in a multimodal environment and Digital Enablers</i></b></p> <ul style="list-style-type: none"> <li>• Léa Paties, Senior Programme Manager, Europe's Rail Joint Undertaking</li> </ul> <p><b><i>DESTINATION 8 – Exploratory Research and other activities</i></b></p> <ul style="list-style-type: none"> <li>• Sébastien Denis, Senior Programme Manager, Europe's Rail Joint Undertaking</li> <li>• Carolina Cardea, Programme Manager, Europe's Rail Joint Undertaking</li> <li>• Javier Ibáñez de Yrigoyen, Senior Programme Manager, Europe's Rail Joint Undertaking</li> </ul>
10.00 – 10.15	Coffee break
10.15 – 10.45	Horizon Europe legal and financial guidelines
10.15 – 10.45	<ul style="list-style-type: none"> <li>• Vincent Declerfayt, Head of Corporate Services, Europe's Rail Joint Undertaking</li> </ul>
10.45 – 11.15	Q&A
11.15 – 11.30	European Research Executive Agency - Central Validation Services
11.15 – 11.30	<ul style="list-style-type: none"> <li>• Radu Sora, Team Leader, Validation Planning Team, REA</li> <li>• Maryam Ghandi, Team Leader, Financial Verification Team, REA</li> </ul>

11.30 – 12.30	<b>Networking</b>
11.30 – 12.30	<p><b><i>Match-making session</i></b></p> <p><i>Breakout room 1:</i></p> <ul style="list-style-type: none"> <li>- <i>HORIZON-ER-JU-2023-FA1-SESA: EU-RAIL – SESAR SYNERGY: INTEGRATED AIR AND RAIL NETWORK BACKBONE FOR A SUSTAINABLE AND ENERGYEFFICIENT MULTIMODAL TRANSPORT SYSTEM (Léa)</i></li> </ul> <p><i>Breakout room 2:</i></p> <ul style="list-style-type: none"> <li>- <i>HORIZON-ER-JU-2023-EXPLR-01: NOISE AND VIBRATIONS (Judit)</i></li> </ul> <p><i>Breakout room 3:</i></p> <ul style="list-style-type: none"> <li>- <i>HORIZON-ER-JU-2023-EXPLR-02: FUTURE METRO SYSTEMS (Manuel)</i></li> </ul> <p><i>Breakout room 4:</i></p> <ul style="list-style-type: none"> <li>- <i>HORIZON-ER-JU-2023-EXPLR-03: BIODIVERSITY (Matyas)</i></li> </ul> <p><i>Breakout room 5:</i></p> <ul style="list-style-type: none"> <li>- <i>HORIZON-ER-JU-2023-EXPLR-04: DISRUPTIVE ASSETS MANAGEMENT SOLUTIONS, INCLUDING URBAN USE CASES (Sébastien)</i></li> </ul> <p><i>Breakout room 6:</i></p> <ul style="list-style-type: none"> <li>- <i>HORIZON-ER-JU-2023-EXPLR-05: EXTENDING THE RAIL NETWORK OF PHDS (Carolina)</i></li> </ul> <p><i>Breakout room 7:</i></p> <ul style="list-style-type: none"> <li>- <i>HORIZON-ER-JU-2023-EXPLR-06: DAC FLEET RETROFITTING AND RETROFIT CAPACITY PLAN (Javier)</i></li> </ul>
12.30	<b>End of Info Day 2023</b>

# EUROPE'S RAIL INFO DAY CALL 2023

## OPENING REMARKS

**Giorgio Travaini**

Executive Director a.i., Europe's Rail Joint Undertaking

# EU-Rail

## VISION

**To deliver, via an integrated system approach, a high capacity, flexible, multi-modal, sustainable and reliable integrated European railway network by eliminating barriers to interoperability and providing solutions for full integration, for European citizens and cargo**

## MISSION

**Rail Research and Innovation to make Rail the everyday mobility**



DELIVER AN INTEGRATED EUROPEAN RAILWAY NETWORK BY DESIGN



DEVELOP A UNIFIED OPERATIONAL CONCEPT AND A FUNCTIONAL SYSTEM ARCHITECTURE FOR INTEGRATED EUROPEAN RAIL TRAFFIC AND CCS/AUTOMATION



DELIVER A SUSTAINABLE AND RESILIENT RAIL SYSTEM



DELIVER A COMPETITIVE, GREEN RAIL FREIGHT FULLY INTEGRATED INTO THE LOGISTICS VALUE CHAIN



DEVELOP A STRONG AND GLOBALLY COMPETITIVE EUROPEAN RAIL INDUSTRY

# EUROPE'S RAIL: ONE INTEGRATED R&I PROGRAMME



## SYSTEM PILLAR

OPERATIONAL CONCEPTS

FUNCTIONAL SYSTEM ARCHITECTURE

**A SINGLE COORDINATING BODY FOR THE WHOLE SECTOR EVOLUTION**

OPEN INTERFACES TO OTHER TRANSPORT MODES AND BUSINESSES

SYSTEM REQUIREMENT SPECIFICATIONS

## INNOVATION PILLAR

*TECHNOLOGICAL AND OPERATIONAL SOLUTIONS FOR SERVICES OF FUTURE*

FLAGSHIP PROJECTS

LARGE-SCALE DEMONSTRATIONS

EXPLORATORY AND FUNDAMENTAL R&I

EUROPEAN RAIL TRAFFIC AND MOBILITY MANAGEMENT

DIGITALISATION & AUTOMATION IN TRAIN OPERATIONS

SUSTAINABLE AND DIGITAL ASSETS

COMPETITIVE, DIGITAL, GREEN RAIL FREIGHT

REGIONAL RAIL SERVICES IN LOW DENSITY AREAS

Manage and improve rail traffic at EU level

Adjust rail traffic management in function of the mobility demand

ATO implementation

Digital train operations

Integrated assets testing & life-cycle framework

Zero-emission, silent rail system

New digital customer interaction & innovative rail freight services

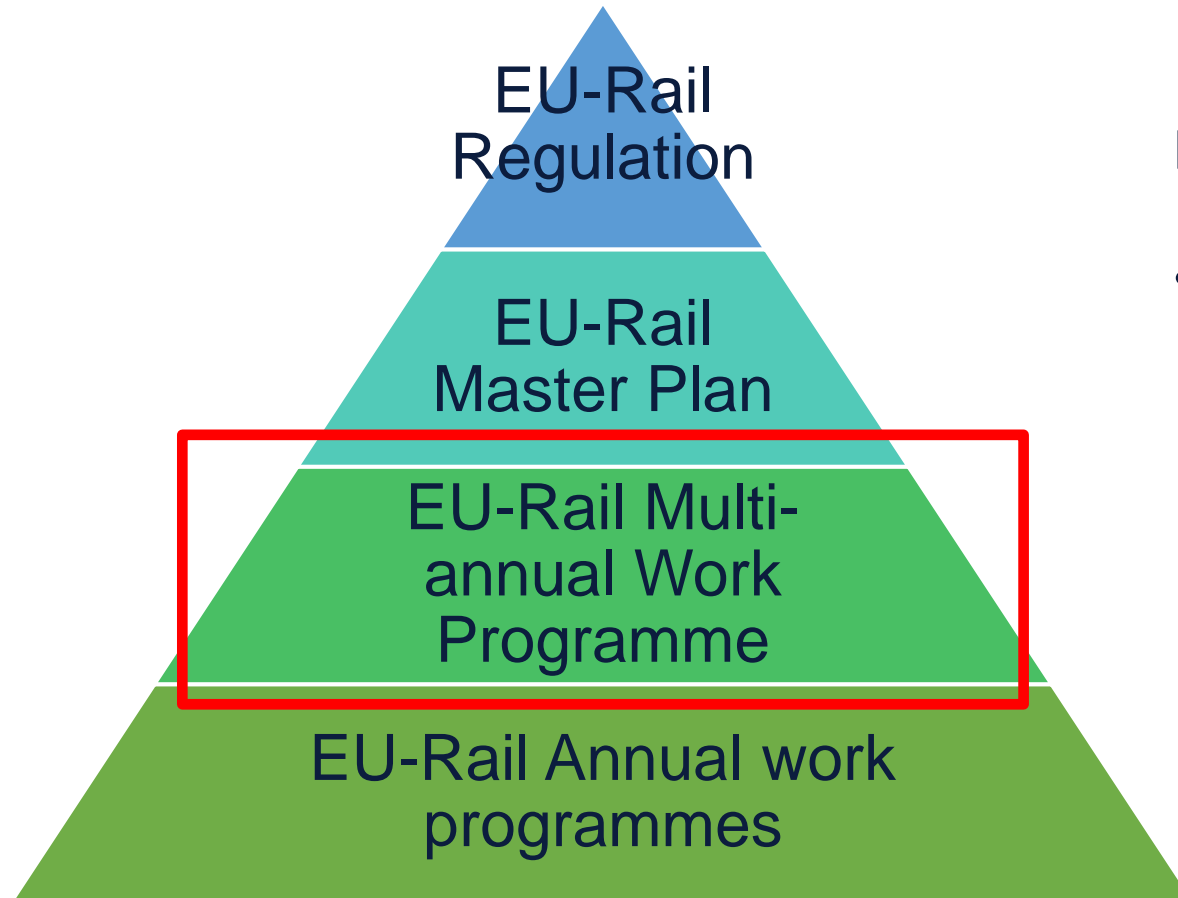
Multimodal and rail freight innovation integration

New system approach to regional rail services in low density areas

## DEPLOYMENT GROUP

FUTURE SOLUTIONS DEPLOYED IN A COORDINATED AND CONSISTENT WAY AT EUROPEAN LEVEL, TAKING INTO ACCOUNT ALTERNATIVE ROLLOUT SCENARIOS, BEHAVIOURAL AND ORGANISATIONAL CHANGES, SYNERGIES WITH OTHER MODES OF TRANSPORT

# Navigating the EU-Rail key documents of a Programme approach



Focus on the

- **MAWP:** It defines how the EU-Rail JU has designed its R&I activities to achieve the general and specific objectives set out in the SBA through an Integrated Programme:
  - *System Pillar (tasks)*
  - *Innovation Pillar*
    - *7 Flagship Areas + TT*
    - *Exploratory and Other activities*
  - *Deployment group*



**ALL EU-RAIL CALLS ARE OPEN TO ALL  
ELIGIBLE ENTITIES IN ACCORDANCE  
WITH HORIZON EUROPE**

# EU-Rail Work Programme 2023-2024 Budget

Year 2023 and 2024	Type of call	Value of the actions	Maximum EU-Rail co-funding	Non-funded activities	Target contributions from Members in case of award	Indicative publication date
Call for Proposals–Exploratory Research to be launched Q4 2023 and activities starting as from Q2 2024	Open	23.3	21.2	2.1	0	Q4
Which includes - Call for Proposals – EU-Rail SESAR Synergy: Integrated air and rail network backbone for a sustainable and energy-efficient multimodal transport system; to be launched Q4 2023 and activities starting as from Q2 2024	Open	7.1(*)	2.5(*)	2.1	0	Q4

(\*) Total EU-funding 5.000.000 EUR, of which 2.500.000 EUR by EU-Rail, 2.500.000 from SESAR. Foreseen as Innovation Action with up to 70% funding.



# EU-Rail Call 2023: Opening: 4 October 2023; Deadline for submission: 7 February 2024, 17h

## Call structure (see also annex VIII of the EU-Rail [Work Programme 2023](#) [2024](#))

- ❖ **Expected outcome:** describes the expected developments within the destination topic and the links with other Destinations.
- ❖ **Scope:** identifies the expected capabilities/enablers that should be developed through R&I activities

DESTINATION 1 – Network management planning and control & Mobility Management in a multimodal environment and Digital Enablers – topic:

Topics	Type of Action	Expected TRL	Expected EU contribution per project (EUR million)	Number of projects expected to be funded
HORIZON-ER- JU-2023-FA1-SESAR: EU-RAIL – SESAR SYNERGY: INTEGRATED AIR AND RAIL NETWORK BACKBONE FOR A SUSTAINABLE AND ENERGY-EFFICIENT MULTIMODAL TRANSPORT SYSTEM	IA	6	5.0	1



# EU-Rail Call 2023: Opening: 4 October 2023; Deadline for submission: 7 February 2024, 17h

DESTINATION 8 – Exploratory Research and other activities – topics:

Topics	Type of Action	Expected TRL	Expected EU contribution per project (EUR million)	Number of projects expected to be funded
HORIZON-ER-JU-2023-EXPLR-01: NOISE AND VIBRATIONS	RIA	5 to 6	4.1	1
HORIZON-ER-JU-2023-EXPLR-02: FUTURE METRO SYSTEMS	RIA	3 to 4	3.1	1
HORIZON-ER-JU-2023-EXPLR-03: BIODIVERSITY	CSA	-	2.8	1
HORIZON-ER-JU-2023-EXPLR-04: DISRUPTIVE ASSETS MANAGEMENT SOLUTIONS, INCLUDING URBAN USE CASES	RIA	4 to 5	2.7	1
HORIZON-ER-JU-2023-EXPLR-05: EXTENDING THE RAIL NETWORK OF PHDS	RIA	1 to 2	2.0	1
HORIZON-ER-JU-2023-EXPLR-06: DAC FLEET RETROFITTING AND RETROFIT CAPACITY PLAN	CSA	-	1.5	1

## Research Enquiry Service

For questions about research and Horizon Europe, you can contact the Research Enquiry Service via the webform:

[Research Enquiry Service \(europa.eu\)](https://europa.eu)

**[Research Enquiry Service \(link\)](#)**

# EUROPE'S RAIL INFO DAY CALL 2023

**EUROPE'S RAIL PROGRAMME  
OPEN CALL TOPICS**

# EUROPE'S RAIL INFO DAY CALL 2023

## DESTINATION 1

**HORIZON-ER-JU-2023-FA1-SESAR: EU-RAIL – SESAR SYNERGY:  
INTEGRATED AIR AND RAIL NETWORK BACKBONE FOR A SUSTAINABLE  
AND ENERGY-EFFICIENT MULTIMODAL TRANSPORT SYSTEM**

**Léa Paties**

Senior Programme Manager, Europe's Rail Joint Undertaking

# Specific conditions (highlights)

**Expected EU contribution**

EUR 5 million

**Indicative project duration**

36 months

**TRL**

TRL6 (minimum)/ validation activities should be defined accordingly. In particular, activities including system, subsystems model/prototypes in a relevant end-to-end environment.

**Type of action**

Innovation Action

**Linked actions and expected interactions**

The action that is expected to be funded under this topic will be complementary to the following actions:

- FP1-MOTIONAL (GA 101101973)
- FP6 – FutuRe (GA 101101962)

The action that is expected to be funded under this topic will be complementary to the following actions expected to be funded under the topic:

- HORIZON-SESAR-2022-DES-ER-01-WA1-5
- HORIZON-SESAR-2022-DES-ER-01-WA2-6
- HORIZON-SESAR-2022-DES-IR-01-WA5-3



# Expected outcome

- **Operational efficiency:** improved predictability and punctuality for journeys involving both air and railway modes of transport, thanks to a better overall planning and monitoring of operations;
- **Capacity:** a better integration of air and railway modes of transport will enable a better use of existing and future capacity;
- **Resilience:** improved resilience in case of disruption in either railway or air transport modes, or both will contribute to improve the passenger experience;
- **Environment:** optimised operations in rail and air transport due to improved intermodal planning, contributing to the optimisation of fuel-burn and therefore reductions of CO<sub>2</sub> emissions per journey;
- **Passenger experience:** optimised and seamless passenger experience by reducing the inefficiencies and friction points and overall travel time and transfer time between air-rail modes;
- **Cost-efficiency:** the data-sharing-powered applications between air and railway modes of transport will enable increased predictability of traffic flows coupled with increased intermodal network flexibility and resilience. This would in turn help reduce congestion and costs.



# Scope

- **Benchmarking existing integrated rail and air traffic solutions and developing tools** for better integration, such as a **common intermodal operations plan and interface between air and rail traffic management systems.**
- **Real-time information exchange and collaborative decision-making processes** to enhance multimodal journey planning and passenger experience.
- **Disruptions and crisis management**, including data exchange, mitigation measures, and simulation scenarios.
- Propose a **concept of operations**, high-level architecture, consider different operational scenarios and use cases, **validation of requirements/specifications for data exchange** develop and an associated **CBA**. Consider relevant **standards**.

SESAR 3 JU project handbook:

<https://sesarju.eu/sites/default/files/documents/projects/SESAR3ProjectHandbook.pdf>

EU-Rail Governance and Process Handbook: <https://rail-research.europa.eu/wp-content/uploads/2023/01/EU-Rail-Governance-and-Process-Handbook.pdf>

# EUROPE'S RAIL INFO DAY CALL 2023

## **DESTINATION 8**

**Exploratory Research and other activities**

**Sébastien Denis**

Senior Programme Manager, Europe's Rail Joint Undertaking



# Specific conditions

## DESTINATION 8 – Exploratory Research and other activities

### HORIZON-ER-JU-2023-EXPLR-01: NOISE AND VIBRATIONS

**Expected EU contribution**

EUR 4.1 million

**Indicative project duration**

36 months

**TRL**

TRL 5/6

**Type of action**

Research and Innovation Action

**Linked actions and expected interactions**

The action that is expected to be funded under this topic will be complementary to the following actions:

- FP4 – Rail4EARTH (GA number: 101101917)
- Interact with EU-Rail System Pillar for the aspects related to standards and EU-regulations



# Expected outcome

## **Noise:**

Improve EU noise mapping (including methodologies/tools) and to define relevant limit values that could potentially serve as a basis for upcoming revisions of the Technical Specifications for Interoperability on Noise

## **Ground Vibration:**

Feasible solutions on improvement of prediction tools on vibration impact. It should also provide an assessment method on how vibration emissions can be determined and specified independently of location and track influences in the future to determine the effect of the train alone independent from the track



# Scope (1/2)

## **On-board measurements of the rail acoustic roughness**

- Investigate an effective approach for optimised rail reprofiling processes that minimises nuisance to lineside residents and avoid high maintenance costs
- Support the development of the necessary tools enabling the introduction of on-board measurement data for acoustic rail roughness, to support the optimisation of future re-profiling process by minimizing the noise impact of railways

## **Rail optimisation for noise, vibrations, and life cycle costs**

- Investigate how to integrate noise and vibration abatement methods into asset management plans, considering the impact on environmental and health conditions, to optimise the track system for LCC, noise and vibrations simultaneously (including delivery of tools)

## **Noise in curves**

- Deliver Digital Twin approach / engineering tool for noise in curves prediction

## **Transposition and uncertainties of pass-by noise**

- Transposition from one site to another; freight wagons acoustically certification / noise emission of new technologies

## **Ground vibrations Prediction Tool**

- Prediction tool for ground vibration impact supporting urban areas
- Integration in the prediction tool of GIS data concerning track, soil and building data

## **Requirements and specifications for ground-borne vibration emission of rolling stock**

- Analysis/simulation on the most important parameters in vehicle construction responsible for vibration emissions
- Assessment method on how to specify and verify vibration emission of vehicles alone



# Specific conditions

## DESTINATION 8 – Exploratory Research and other activities

### HORIZON-ER-JU-2023-EXPLR-02: FUTURE METRO SYSTEMS

**Expected EU contribution**

EUR 3.1 million

**Indicative project duration**

24 months

**TRL**

TRL 3/4

**Type of action**

Research and Innovation Action

**Linked actions and expected interactions**

- The action that is expected to be funded under this topic will be complementary to the following actions:
- FP1 - MOTIONAL (GA 101101973)
  - FP2 - R2DATO (GA 101102001)
  - FP3 - IAM4RAIL (GA 101101966)
  - Interact with EU-Rail System Pillar for the aspects related to the interface between mainline rail (SERA) and urban mobility systems of which metro is part
  - Consider collaboration with cities participating in the EU Mission for Climate-Neutral and Smart Cities





# Expected outcome

Identify new requirements, develop new concepts, and implement early stages of development of the solutions based on new emerging technologies (automation and digitalisation, AI, telecom, etc.).

These new technologies, concepts and new ways of operation shall contribute to a better mass rapid- transport system with:

- **Optimised Capacity – Flexi Demand**, making the most of the existing infra and rolling stock following customer commuting habits, flows and better managing disruptions.
- **Efficient Train Control Systems** that enable cost reductions and better operational response.
- **Sustainable transport system**, applying different technologies and concepts to better manage the total cost of ownership and deliver better energy footprint.



# Scope

## **Workstream 1: Increased adaptability of metros to fluctuations in demand**

Deliver a feasibility study, potentially using simulation tools as Proof of Concept to demonstrate to what extent it is possible to increase the adaptability of metros to fluctuations in demand.

## **Workstream 2: Future of train control**

Deliver a feasibility study, including an analysis of the different trends in train control and existing / future technological solutions as well as a definition of future needs and functional requirements for the different categories of metro systems.

## **Workstream 3: Advantages and trends brought by AI and data science in metro operation for different types of metros (old/new, large/small, etc.)**

Deliver concepts on the most promising AI and data science implementation applications in metro operation, with a cost-effective approach, in different categories of metro systems.



# Specific conditions

## DESTINATION 8 – Exploratory Research and other activities

### HORIZON-ER-JU-2023-EXPLR-04: DISRUPTIVE ASSETS MANAGEMENT SOLUTIONS, INCLUDING URBAN USE CASES

**Expected EU contribution** EUR 2.7 million

**Indicative project duration** 30 months

**TRL** TRL 4/5

**Type of action** Research and Innovation Action

**Linked actions and expected interactions** The action that is expected to be funded under this topic will be complementary to the following actions:

- FP3-IAM4RAIL (GA 101101966)



# Expected outcome

Validation in relevant environment of **three** innovative demonstrators of:

- **assets monitoring solutions and/or**
- **inspections solutions and/or**
- **remotely controlled interventions solutions**

Among the proposed demonstrators, at least two urban specific use cases (metro/tramway/...) shall be addressed.

- No (similar) activities than the ones identified in FP3-IAM4RAIL D2.6 – Definition of Use Cases, including Innovation, Business Assessment, KPIs definition and roadmap (first issue).
- No robotic/unmanned application shall be considered as use case.

- Detail specific, tangible and suitable use cases illustrating the impact of the technologies in concrete solution.
- Enhance the capability for monitoring/inspection solutions evolving towards non-invasive and self-diagnostic systems with no or minimal service disruptions and/or remotely controlled interventions, through the usage of innovative/disruptive technologies concerning data acquisition, data analysis and maintenance decision making.
- The propose innovative solutions should contribute to a significant improvement in reliability, availability, maintainability and safety of the system or work conditions versus state of the art.

# EUROPE'S RAIL INFO DAY CALL 2023

## **DESTINATION 8**

**Exploratory Research and other activities**

**Carolina Cardea**

Programme Manager, Europe's Rail Joint Undertaking



# Specific conditions (highlights)

## DESTINATION 8 – Exploratory Research and other activities

### HORIZON-ER-JU-2023-EXPLR-03: BIODIVERSITY

<b>Expected EU contribution</b>	EUR 2.8 million
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<b>Indicative project duration</b>	36 months
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<b>TRL</b>	-
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<b>Type of action</b>	Coordination and Support Action (CSA)
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<b>Linked actions and expected interactions</b>	<p>The action that is expected to be funded under this topic will be complementary to the following actions:</p> <ul style="list-style-type: none"><li>• FP4 - Rail4EARTH (GA 101101917)</li><li>• FP3 - IAM4RAIL (GA 101101966)</li></ul> <p>Take into account the EU Biodiversity Strategy 2030. Take into account the outcome of the H2020-BISON CSA, which paved the way to an innovative multimodal approach to tackle biodiversity and infrastructure.</p>
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# Expected outcome

- **Applicable recommendations** for developing and improving **cross-cutting biodiversity and climate policies**;
- **Technical methodologies** to evaluate the **environmental efficiency of rail transport infrastructure** and its impact on the ecosystem services and climate challenge;
- **Inclusive assessment framework of the impacts from infrastructure on biodiversity** enabling compiling heterogeneous data;
- **Filling gaps in the accounting of joint carbon and biodiversity "transboundary" impacts** between energy and transport sectors and identify ways to address them;
- User-friendly, open data-driven **carbon emission calculator for use in railway infrastructure projects**, supporting the **PRIME initiative** by achieving a **harmonised / commonly acknowledged environmental scorecard** for rail infrastructure managers.



## **Workstream 1- Bridging the transport infrastructure & energy distribution and production networks together with biodiversity to tackle climate change**

- Promote synergies between transport and energy sectors;
- Develop an inclusive assessment framework of the impacts from infrastructure on biodiversity enabling procurement improvements through harmonised, transparent, and robust data generation;
- Leverage the use of multilateral platform(s) for the preparation of sustainable infrastructure projects and enable the achievement of green bonds;
- Support capacity building via the development of a training program;
- Identify tools to help sector actors integrate biodiversity more thoroughly into their strategic and operational plans.

## **Workstream 2 - Valuing the nature on railways**

- Standardised approach to guide different stakeholders towards effective and efficient land management practices;
- Development of a common European biodiversity metrics to benchmark data on railways.



# Specific conditions (highlights)

## DESTINATION 8 – Exploratory Research and other activities

### HORIZON-ER-JU-2023-EXPLR-05: EXTENDING THE RAIL NETWORK OF PHDS

<b>Expected EU contribution</b>	EUR 2 million
<b>Indicative project duration</b>	No indication provided; applicants should select the most appropriate period for the action.
<b>TRL</b>	TRL 1/2
<b>Type of action</b>	Research and Innovation Action
<b>Linked actions and expected interactions</b>	The action that is expected to be funded under this topic will be complementary to the following action: <ul style="list-style-type: none"><li>• Academics4Rail (GA 101121842)</li></ul>

# Expected outcome

- Further **extend the rail research and innovation “community”** (cooperation / network / alliance) of scientific research entities that was initiated with the Academics4Rail project;
- Realisation of **6-10 PhDs**, teaming up with the industry for the below proposed areas or additional or different scientific areas to be proposed, always in relation to the EU-Rail Programme :
  - Measures and mechanisms to support the implementation of rail technical innovations supporting the decarbonisation of transport
  - Change making for gender equality in rail
  - Education and training in rail
  - Rail enabled urban logistics
  - Fast night train operations

- ***Measures and mechanisms to support the implementation of rail technical innovations supporting the decarbonisation of transport:*** Shall support innovations in overcoming the barriers (market factors, standards, regulations, etc.) that hinder their market deployment.
- ***Change making for gender equality in rail:*** Research on the gender gap in rail companies, focusing on how to improve the experience of women in rail, both as users of rail services (travel behavior, patterns, needs) and as members of the workforce (attractiveness of the rail sector, recruitment, training, spreading excellence, technical cooperation, and promotions).
- ***Education and training in rail:*** Starting from the public outputs of the EU-funded project STAFFER, in the framework of digital transformation and high-tech technologies, the PhD shall address the need of providing rail staff with the needed skills, as well as the necessity of educating people capable to provide such skills to (graduated) students, using suitable teaching and training methodologies - to be possibly standardised across Europe.
- ***Rail enabled urban logistics:*** Shall address how freight rail and freight multimodal terminals may be efficiently and cost-effectively integrated in Logistics City Hubs.
- ***Fast night train operations:*** Shall include a feasibility study (technical, financial, logistics), market analysis, route analysis, fleet assessment.

# EUROPE'S RAIL INFO DAY CALL 2023

## **DESTINATION 8**

**Exploratory Research and other activities**

**Javier Ibáñez De Yrigoyen**

Senior Programme Manager, Europe's Rail Joint Undertaking

# Specific conditions

## DESTINATION 8 – Exploratory Research and other activities

### HORIZON-ER-JU-2023-EXPLR-06: DAC FLEET RETROFITTING AND RETROFIT CAPACITY PLAN

**Expected EU contribution**

EUR 1.5 million

**Indicative project duration**

24 months

**TRL**

-

**Type of action**

Coordination and Support Action

**Linked actions and expected interactions**

The action that is expected to be funded under this topic will be complementary to the following actions:

- FP5-TRANS4M-R (GA 101102009)
- DACcord (GA 101121855)
- Interact with EU-Rail System Pillar for the aspects related to the TSI compliance aspects and planning and with the European DAC Delivery Programme groups



# Expected outcome

Within the scope of the S2R freight innovation pillar (IP5), rail stakeholders have been working on the **freight Digital Automatic Coupler (DAC)**.

In addition to the mechanical and pneumatic coupling, DAC will integrate digital communications and energy for the rail freight. DAC is an enabler that will enhance the performance and safety of rail freight as it will eliminate manual interventions

By transmitting data and power through the freight train unit, DAC will allow addressing the operational gaps to increase the competitiveness of rail freight

- **A plan for a full-scale European DAC upgrading/retrofitting of existing freight locomotives and freight wagons.**
- **The identification and assessment of the retrofitting capacity, and develop an implementation plan.**

All project deliverables will be of Public nature to ensure a broad exploitation of the results and take up in the context of the European DAC Delivery Programme (EDDP).

## Workstream 1: Fleet retrofitting readiness

- Collect and analyse the **status of wagons and locomotives in operations in Europe**, including the following elements:
  - Locomotives difference between shunting and mainline ones and the possibility to have hybrid coupling or DAC only
  - Wagons based on the type of traffic (Core Wagonload System (CWS), intermodal,...)
  - TSI compliance and safety level achieved (e.g. inner-coupling for rakes)

## Workstream 2: DAC Retrofitting capacity plan

- Identify the **required workshop capacity and locations** (in Europe), workforce skills for retrofitting of locomotives, freight wagons and other on track machines, as well as the planned/required retrofitting rolling stock quantities.
- Propose a **DAC retrofitting plan** considering the optimisation of workshop locations and the major sidings/terminals in Europe and related vehicle fleets.
- **Develop a comprehensive retrofitting capacity plan**, including concrete operational and technical recommendations.
- Propose **recommendation** based on the analysis on **how mobile workshops could cover the retrofit needs**.



# EUROPE'S RAIL INFO DAY CALL 2023

## LEGAL GUIDELINES

**Vincent Declerfayt**

Head of Corporate Services, Europe's Rail Joint Undertaking

# New features in the Horizon Europe proposal



## NEW FIELDS IN PART A

- Researchers table – needed to follow up researchers careers (HE indicator)
- Role of participating organisation
- Self-declaration on gender equality plan



## FIELDS MOVED FROM PART B TO PART A

- Ethics self-assessment
- Security questionnaire (**NEW!** in all HE proposals)



## NEW IN PART B

- Glossary of terms.
- Consistency on the use of terminology is ensured in all project phases
- Explanations on what exactly should be included in each section.



# Exclusion

- **EDES-DB check: before evaluation, before award and before GA signature**
- **Applicants subject to administrative sanctions or in the following exclusion situations cannot participate:**
  - ✓ bankruptcy,
  - ✓ in breach of social security or tax obligations,
  - ✓ grave professional misconduct,
  - ✓ fraud, corruption,
  - ✓ significant deficiencies in complying with main obligations under another EU GA/contract,
  - ✓ shell company.
- **Applicants will also be refused if:**
  - ✓ during award, they misrepresented information required for participating or failed to supply that info;
  - ✓ previously involved in the preparation of the call, entailing a distortion of competition (conflict of interest).



# Eligibility – Gender Equality Plan

- Having a gender equality plan is an **eligibility criterion for Public bodies, higher education establishments and Research organisations from Member States and Associated Countries.**
- It must cover:
  - ✓ publication: formal document published on the institution's website and signed by the top management
  - ✓ dedicated resources: commitment of resources and expertise in gender equality to implement the plan
  - ✓ data collection and monitoring
  - ✓ sex/gender disaggregated data on personnel and annual reporting based on indicators
  - ✓ training: awareness raising/training on gender equality and unconscious gender biases for staff
- A **self-declaration** will be requested **at proposal stage.**
- **If the proposal is selected, declaring having a GEP will be necessary before Grant Agreement signature.**

# Who is eligible for funding?



## EU COUNTRIES

- Member States (**MS**)
- Overseas Countries and Territories (**OCTs**) linked to MS.



## NON-EU COUNTRIES

- Countries associated to Horizon Europe (**AC**)
- **Low and middle income** countries: See [HE Programme Guide](#).
- Other countries when announced **in the call or exceptionally** if their participation is **essential**



## SPECIFIC CASES

- Affiliated entities established in countries eligible for funding.
- EU bodies
- International organisations (IO):
  - International European research organisations are eligible for funding.
  - Other IO are not eligible (only exceptionally if participation is essential)

# Associated Countries



- For the purposes of the eligibility conditions, a legal entity based in a third country **officially candidate for association** to Horizon Europe **is eligible**.
- However, the signature of the grant agreement will be subject to the positive conclusion of the association negotiation.
- They will be treated as entities established in an Associated Country, if the Horizon Europe **Association Agreement with the third country concerned applies at the time of signature of the Grant Agreement**.

# Associated Countries



➤ The association agreements with the following countries have now started to produce legal effects (either through provisional application or their entry into force):

1. Albania
2. Armenia
3. Bosnia and Herzegovina
4. Faroe Islands
5. Georgia
6. Iceland
7. Israel
8. Kosovo
9. Moldova
10. Montenegro
11. New Zealand
12. North Macedonia
13. Norway
14. Serbia
15. Tunisia
16. Turkey
17. Ukraine

# Associated Countries



Until association agreements start producing legal effects either through provisional application or their entry into force, transitional arrangements are applicable with regard to the following countries, with which association negotiations are being processed or where association is imminent:

1. Morocco
  2. United Kingdom
- ***UK** is expected to become an associated country to HE as of 1 January 2024 and that association would apply only for award procedures implementing 2024 budget and onwards (e.g., calls for proposals and prizes).*
  - *Legal entities established in **Switzerland** are currently not covered by the transitional arrangement.*
  - ***Liechtenstein** does not intend to associate to Horizon Europe.*



# Non-associated third countries

- Any legal entity, regardless of its place of establishment, including legal entities from non-associated third countries or international organisations, is **eligible to participate** (whether it is eligible for funding or not), provided that the conditions laid down in the HE Regulation are met, along with any other conditions laid down in the specific call topic.
- **EXCEPTION: entities subject to EU Restrictive Measures**
- Non-associated third country applicants must submit their proposals as '**Associated Partner**'.
- As part of a frequent question, Switzerland is currently a non-associated third country

# Evaluation – award criteria

**Same criteria as in H2020**

Same three award criteria: '**Excellence**', '**Impact**' and '**Quality and efficiency of implementation**'.

**But specific EU-Rail sub-criteria - Annex VIII of the EU-RAIL AWP**

Part D of the Horizon Europe Work Programme 2023-2024 General Annexes applies regarding the award criteria, scores and weighting, **with the following additions:**

- Excellence: *quality of the proposed joint activities to achieve the deliverables*
- Impact: *quality and credibility of the action to contribute achieving the EU-Rail Master Plan objectives and the expected impact of the EU-Rail Multi-Annual Work Programme*
- Quality and efficiency of the implementation: *Appropriateness of the project management structure and quality of the proposed coordination*

# Scores and Weighting

- Evaluation scores will be awarded for the criteria
- For full applications, **each criterion** will be scored **out of 5**.
- The **threshold** for individual criteria will be **3**.
- The **overall threshold**, applying to the sum of the three individual scores, will be **10**.
- To determine the **ranking** for IAs, the score for **'Impact'** will be given a **weight of 1.5**. Weighting is only used for the ranking (not to determine if the proposal passed the thresholds)
- Proposals that pass the individual threshold AND the overall threshold will be considered for funding, within the limits of the available call budget.

# Ethics review

## Same criteria as in H2020

For all funded activities, ethics is an **integral part** of research, and **ethical compliance** is essential to achieve research excellence.

An ethics review process is carried out systematically in all HE proposals, based on a **self-assessment** included in the proposal.

Ethical research conduct implies the application of fundamental ethical principles and legislation, including adherence to the highest standards of **research integrity** as described in the **European Code of Conduct for Research Integrity**.

## Adapted following lessons learnt

- Focus mainly on complex/serious cases
- Reduce number of ethics requirements in funded projects.

# Ethics review

- Projects must comply with ethical principles and applicable EU, international and national law.
- Applicants must have completed the ethics self-assessment as part of their application. For more information, see [How to complete your ethics self-assessment](#).
- Projects involving ethics issues will have to undergo an ethics review to authorise funding and may be made subject to specific ethics requirements.
- These requirements become part of the grant agreement as ethics deliverables, e.g. ethics committee opinions/authorisations required under national or EU law

## New in Horizon Europe

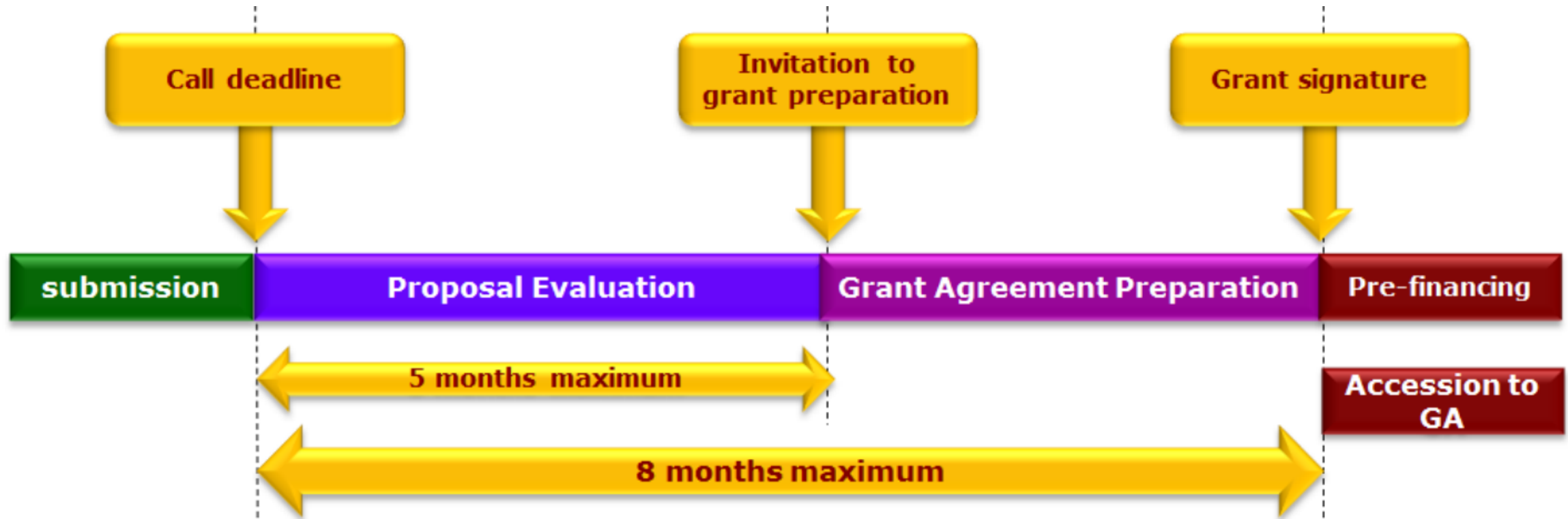
Security issues will be checked **systematically** in all Horizon Europe proposals (in H2020 only proposals submitted to topics flagged as 'security-sensitive' were checked). The checks are based on a **self-assessment** included in the proposal. The focus is on:

- Whether the proposal uses or generates **EU classified information**
- Potential of **misuse** of results (that could be channeled into crime or terrorism)
- Whether activities involve information or materials subject to **national security restrictions**

The checks based on the self-assessment may trigger an in-depth security scrutiny.

# Time to Grant

information on the outcome of the evaluation: around 5 months from the deadline for submission  
indicative date for the signing of grant agreements: around 8 months from the deadline for submission



# What does the HE grant agreement look like?



## e-GRANT

- The HE grant agreement and its management are **fully electronic**: from the signature of the grant until its end, all actions and communications will flow via the F&T Portal



## CORPORATE STRUCTURE

- The HE grant agreement is based on a **Commission-wide model** (so-called '**Corporate Model Grant Agreement**')



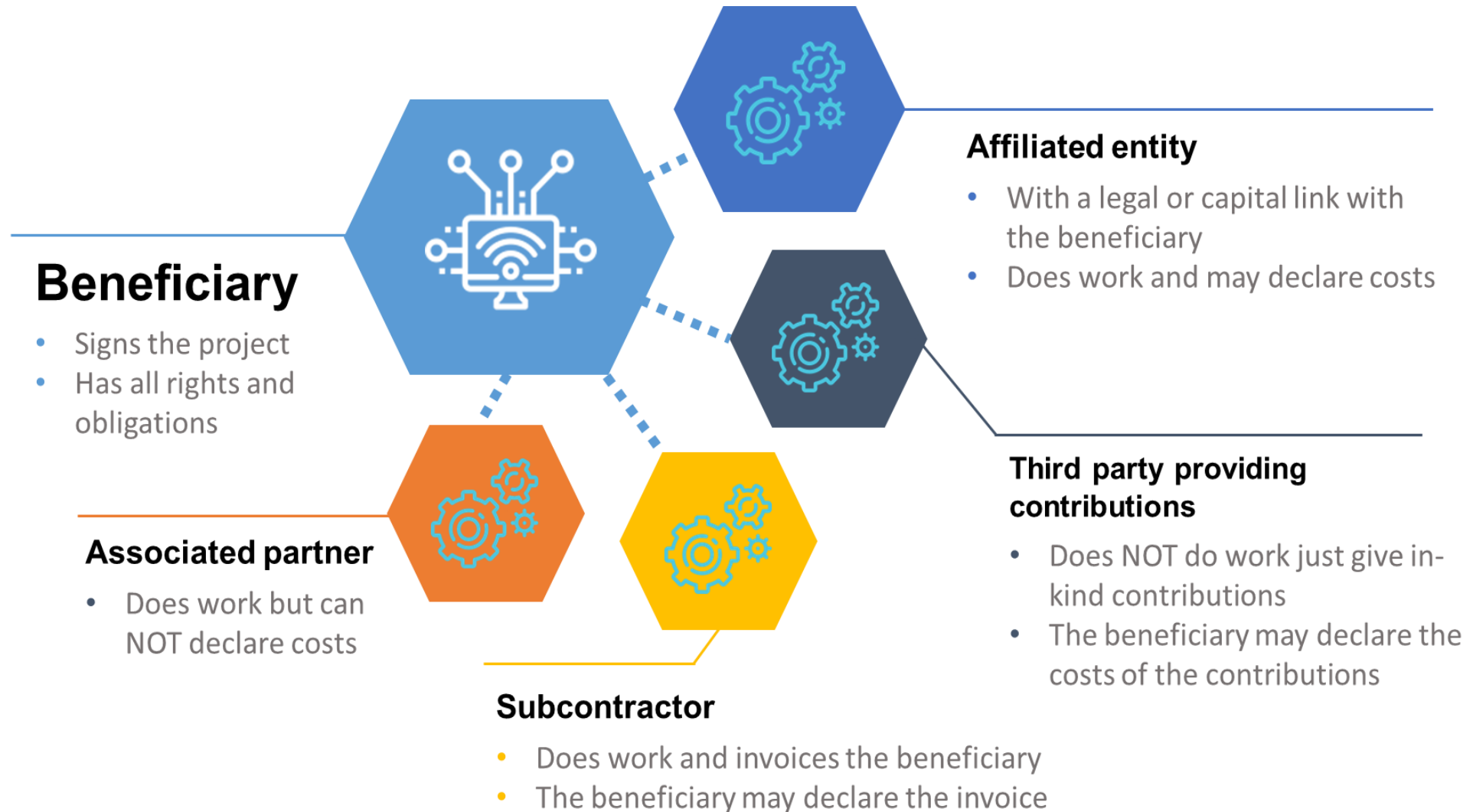
## SPECIFIC ANNEX 5

Some important rights and obligations are part of annex 5:

- **Security**
- **Ethics**
- **Values (i.e. gender mainstreaming)**
- **IPR**
- **Communication, Dissemination, Open Science and Visibility**
- **Specific rules for carrying out the action**



# How can I participate in the grant agreement?



# Affiliated entities



CONSORTIUM

Article 187 (1)(b) of the EU Financial Regulation:

Entities *'that have a link with the beneficiary, in particular a legal or capital link, which is neither limited to the action nor established for the sole purpose of its implementation'*.

**Affiliated entities in Horizon Europe = Linked third parties in Horizon 2020**

(alignement of labelling/definition in the corporate context)

# Associated Partner (AP)



- Inherited and derived from the **‘International partner’** status in H2020 MGA
- **Corporate terminology** and status with the following features:
  - AP mentioned in Art. 9 and implements action tasks listed in Annex I
  - But without receiving EU funding (costs are not eligible)
  - The beneficiaries must ensure that some of MGA obligations also applied to AP (*i.e. Articles 11 (proper implementation), 12 (conflict of interests), 13 (confidentiality and security), 14 (ethics), 17.2 (visibility), 18 (specific rules for carrying out action), 19 (information) and 20 (record-keeping)*)

# EUROPE'S RAIL INFO DAY CALL 2023

## FINANCIAL GUIDELINES

**Vincent DECLERFAYT**

Head of Corporate Services

Europe's Rail JU

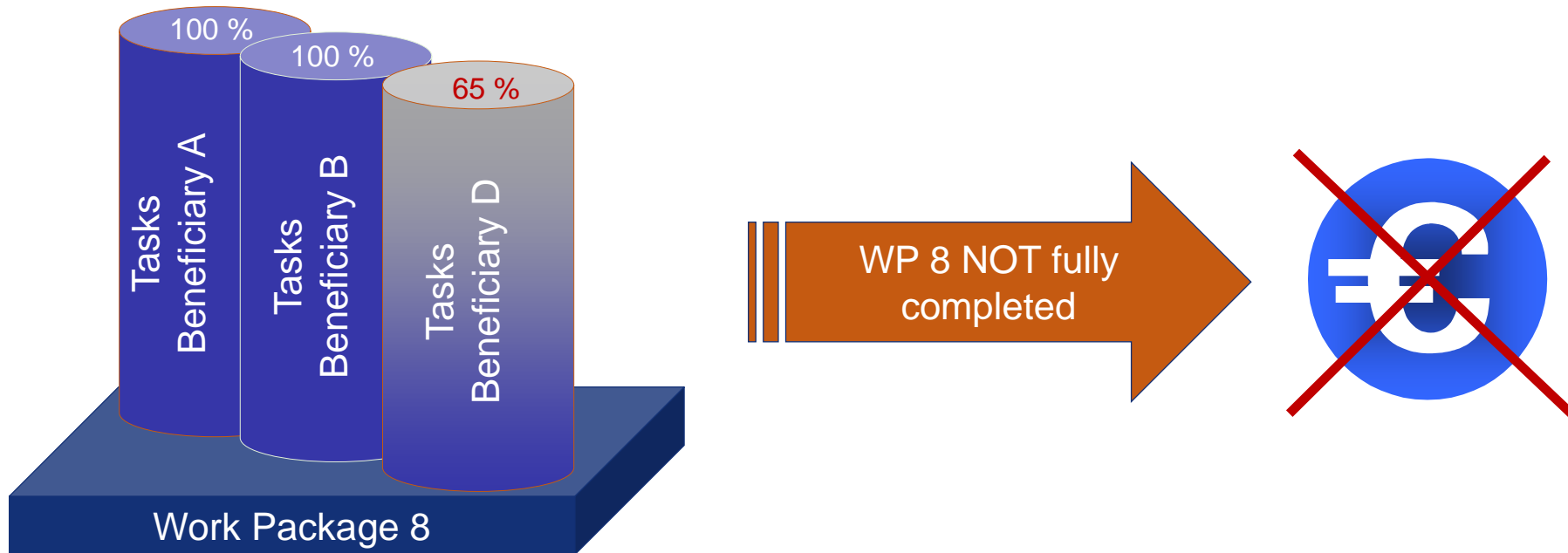
# FINANCIAL GUIDELINES

## Horizon Europe - The next EU Research and Innovation investment Programme (2021-2027) and EU-Rail JU

1. **Model Grant Agreement (MGA) and eligibility criteria**
2. **Lump sum detailed Financial Excel table**
3. **Estimated Members' contributions**

# Lump sum – main differences with standard MGA

Work Package and its work (deliverable, milestones, etc.) importance



# Lump sum – main differences with standard MGA

The grant agreement will set out the lump sum (Max contribution: co-funding) corresponding to the **full accomplishment of the work committed in Annex 1**.

The lump sum for the grant is set out at its signature.





# Submission – Lump Sum Grants

- For lump sum grants, when the amount of the lump sum is not fixed in advance, the estimated budget must be described in a detailed budget table.
- This will be used as a basis for fixing the lump sum amount.
- Decision authorizing the use of lump sum contributions under the HE/EU-Rail Programme:

“The detailed cost estimation per work package and per beneficiary and affiliated entity (if any) shall include only costs that would be considered eligible in an actual costs grant. [...] Where relevant, applicants shall declare that they have followed their own accounting practices for the preparation of the estimated budget”



# Submission – Lump Sum Grants

- As the lump sum is an approximation of the costs actually incurred, the costs included in this detailed budget table must comply with the basic eligibility conditions for EU actual cost grants (see AGA — Annotated Grant Agreement, article 6).
- This is particularly important for purchases and subcontracting, which must ensure best value for money (or, if appropriate, the lowest price) and be free from any conflicts of interest.
- If the budget table contains ineligible costs, the grants may be reduced (even later on during implementation of the project or after they end)

# Lump Sum - Subcontracting

- The principles of subcontracting (ensuring best value for money, no Col, subcontracting of only a limited part of the action, etc.) are still compulsory
- BUT are not considered to be additional cost eligibility conditions
- Consequence: in case of breach, JU may reduce the grant in proportion to the seriousness of the breach instead of rejecting costs.
- The estimated costs for each subcontract DO NOT have to be included in Annex 1 and the total estimated costs of subcontracting per beneficiary are not displayed in Annex 2.
- Nevertheless, costs of subcontracting MUST BE indicated in the “Financial Excel table” and are part of the lump sum.

# Lump Sum Grants: why?

- Lump sum project funding removes all obligations on actual cost reporting and financial audits (Certificate of Financial Statement and ex-post audits) at project implementation phase – i.e. a major reduction of administrative burden
- Focus on performance: shift from focus on financial management and checking costs to focus on scientific-technical content of the projects
- One lump sum share is fixed in the grant agreement for each work package: this amount is paid when the activities in the work package are completed (the payment does not depend on a successful outcome, but on the completion of activities, as confirmed by the JU)

# Lump Sum Grants: keeping records

## We need



- Technical documents
- Publications, prototypes, deliverables
- Who did what?
- ...any document proving that the work was done as detailed in Annex 1

## We don't need



- Time-sheets
- Pay-slips or contracts
- Depreciation policy
- Travel invoices
- ....actual costs

Art 20 lump sum MGA

# Equipment costs

## *Continuity*

Depreciation costs are **by default** eligible.

**By exception**, full costs may be eligible.

## *Further clarity*

**Optional provisions** addressing the specific case of **assets under construction (e.g. prototype)** and their related **capitalised costs**:

- The **full construction costs** (typically the costs of the personnel involved in the construction of the prototype)
- The **full purchase costs** (typically any component, pieces of equipment bought for the prototype)

**HE specific provisions  
*to be considered in submitting the Lump Sum Proposals***

**Personnel costs**

## When?

- **per calendar year** (from January to December)
- except for the months running from the end of the last calendar year until the end of the reporting period. For those months, you must calculate **a separate partial daily rate as follows:**

*{actual **personnel costs** of the person incurred over those months  
divided by*

*{215 / 12 (months) x number of months from the January until the end of  
the reporting period}}*



# Personnel costs: main differences with H2020

- Discontinuation of the different formulas (annual and monthly) and options for productive hours (entailing difficult and error-prone calculations)
- No more 'last closed financial year' rule
- Instead, use of a single corporate daily rate and calendar year approach



**HE specific provisions**

**Indirect costs**

# Indirect costs



## What?

Costs that are only indirectly linked to the action implementation  
(Art. 6(1) General eligibility conditions of the Horizon Europe MGA)

## continuity

**Flat-rate of 25% of the eligible direct costs**, except subcontracting costs, financial support to third parties and exempted specific cost categories, if any.  
(Art. 6(2)(E) Indirect costs of the Horizon Europe MGA)

## NEW

**Possibility to accept actual indirect costs** allocated via beneficiary's usual key drivers in the unit cost calculation for **internally invoiced goods and services**

# **Lump Sum Grant Agreements**

## **Evaluation**

# Lump Sum – evaluation (implementation criteria)

- In complement to the explanation provided in the legal part about the evaluation criteria (previous chapter “excellence / impact / quality and efficiency of the implementation”, for each WP, experts shall in addition :
  - ✓ Check the budget estimate on the basis of relevant statistical data or historical data on previously funded and comparable actions (or based on relevant benchmarks on costs and resources such as market prices)
  - ✓ Assess whether the resources proposed and the split of lump sum shares allows achieving the activities and expected outputs
  - ✓ Verify that proposals include the declaration by beneficiaries of having used their own accounting practices.

# **Lump Sum Grant Agreements**

## **Ex-post controls**

# Lump Sum – ex-post controls

## Checks, reviews and audits for:



Proper implementation of the action (e.g. technical review)



Compliance with the other obligations of the grant:



IPR obligations

Obligations related to third parties (e.g. financial support)

Other obligations (e.g. ethics, visibility of EU funding, etc.)

Art 25 lump  
sum MGA

No financial audits anymore

## **2. Lump Sum detailed Financial Excel table**

# Instructions:

In this tab, all the necessary instructions on how to fill in the table are shown



Europe's Rail Joint Undertaking		
Instructions		
	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid gray; padding: 5px; text-align: center;">Go to Beneficiaries and Affiliated Entities list</div> <div style="border: 1px solid gray; padding: 5px; text-align: center;">Go to Work packages list</div> </div>	
GENERAL INSTRUCTIONS	<p>This workbook enables you to present the detailed estimation of costs of your lump sum project and to calculate the lump sum breakdown per work package and per category. It must be uploaded as an additional document at "Fill in proposal" step of proposal submission. This is mandatory. Please note that if you do not upload the Excel workbook, the proposal submission will be blocked.</p> <p>According to the lump sum scheme, the lump sum share for a Work Package (WP) will be paid only when the entire Work Package has been completed. Please take it into consideration while structuring your proposal. Work Packages should be designed in a way that enables to clearly identify whether the action has been completed.</p> <p>We recommend using Excel 2010 or more recent.</p> <p>The only currency used in this workbook is EURO.</p> <p>Enter only <b>round numbers</b> in this workbook.</p> <p>You have to fill in <b>only</b> the following sheets: 'BE list' - 'WP list' - 'BEx' (one sheet for each Beneficiary) - 'Depreciation costs' (if any) and the column D 'requested grant amount' of the 'Budget for proposal sheet'. The appropriate number of individual Beneficiary sheets ('BEx') will be automatically generated with data from the 'BE list' and 'WP list' sheets.</p> <p>You will have to fill in the 'Budget for the proposal' table in the Part A form of the proposal submission tool, entering the requested EU contribution for each participant. We advise you to fill this Part A budget table column using the totals in the beneficiaries columns of the "Lump sum breakdown" table in this Excel workbook.</p> <p>The format of this Excel workbook is <b>.xlsm</b> because it uses macros to generate automatically some data. <b>Always save it as .xlsm</b>. However, this format cannot be uploaded to the submission system for security reasons. So please also <b>save a copy</b> as an <b>.xlsx</b> or <b>.xls</b> document (and not as .xlsm) and upload it to the proposal submission tool, at Step 5 of the submission process. <b>Always keep a copy of the original .xlsm file</b>.</p> <p>To save the workbook as .xlsx document, in Excel click on <b>"File"</b> and then <b>"Save as"</b>; in the "Save as" dialog box, choose <b>".xlsx"</b> or <b>".xls"</b> from the <b>"Save as type"</b> dropdown list.</p>	
	BE LIST	<p>In the <b>'BE list'</b>, you can add as many Beneficiaries and as many Affiliated Entities as you need. To add Beneficiaries, click on the "Add BE" button; to add an Affiliated Entities, click on the "Add AE" button next to the Beneficiary the Affiliated Entity is linked with.</p> <p>For each Beneficiary and each Affiliated Entity, you <b>must</b> choose the appropriate <b>country</b> in the drop-down menu and enter the correct funding rate. The funding rate of the action is 60% of the eligible costs to achieve the leverage effect established in the SBA. Each consortium may decide internally different funding rates in line with the provisions of Article 34 of Horizon Europe, nevertheless complying with the overall funding rate of 60%.</p> <p>Once you have completed the 'BE list' sheet, you must click the "Apply changes" button to generate the related sheets in the Excel workbook.</p> <p>You can delete a Beneficiary or Affiliated Entity by simply removing the content of the line and leaving it blank. Once your changes are done, you have to click the "Apply changes" button. Be aware that you <b>cannot delete the first Beneficiary</b> of the list. If you delete a Beneficiary from the 'BE list', the BE sheet of this Beneficiary will be saved as a backup only. This sheet will be excluded from the calculation. Please do not forget to also delete the Affiliated Entities linked to this Beneficiary. If you delete an Affiliated Entity, the data of this Affiliated Entity will not be saved as a backup.</p>



# BE List:

In this tab, you should add all the beneficiaries and affiliated entities and **choose the respective funding rate (open field)**. Once completed click on the button “apply changes” and the table will now include a tab for each beneficiary



List of beneficiaries and affiliated entities				
BE/AE nr	BE/AE name	Acronym	Country	Funding rate
BE1	Beneficiary 1	BE1	BE	60%
BE1-AE1	AE 1 (ben1)	AE1	BE	100%
BE2	Beneficiary 2	BE2	DE	100%
BE2-AE1	AE 1 (ben2)	AE1 (B2)	AT	70%
BE3	Beneficiary 2	BE3	PT	40%

Buttons: Add BE, Add AE, Apply changes

Q&A published on EU-Rail website here: <https://rail-research.europa.eu/participate/call-for-proposals/ongoing-call-for-proposals/>

Q&A nr 9, 10 and 18 about the funding rate → in principle 70% or 100%

# WP List:

In this tab, you should add all the work packages defined for the project and their description. Once completed click on the button “apply changes” and the table will now be ready to complete with the financial information from the beneficiaries and their affiliated entities



List of Work Packages			Add WP	Apply changes
<i>WP-number</i>	<i>WP-name</i>	<i>WP-description</i>		
WP1	Work Package 1	Description of Work Package 1		
WP2	Work Package 2	Description of Work Package 2		
WP3	Work Package 3	Description of Work Package 3		
WP4	Work Package 4	Description of Work Package 4		

# BE1, 2, 3 and so on – with or without AE:

- The financial information for each beneficiary and their AE (when applicable) should be added in each respective tab and for each respective work package.
- Only the yellow cells can be filled and all the calculations are based on pre-defined formulas
- At the end of the sheet, you can find a summary with the information concerning all work packages and the total costs foreseen for each beneficiary or affiliated entity

BENEFICIARY CALCULATION SHEET										
summary				BENEFICIARY 1: Beneficiary 1			Affiliated Entity: AE 1 (ben1)			
COST CATEGORY				UNITS	COST PER UNIT	BE TOTAL COSTS	UNITS	COST PER UNIT	AE TOTAL COSTS	BE+AE TOTAL COSTS
<b>COSTS WORK PACKAGE 1: WP1</b>										
<b>A. DIRECT PERSONNEL COSTS</b>										
<b>A.1 Employees (or equivalent)</b>										
			SENIOR SCIENTISTS (or equivalent in the private sector)	10.00	8000.00	80,000.00			0.00	80,000.00
			JUNIOR SCIENTISTS (or equivalent in the private sector)			0.00			0.00	0.00
			TECHNICAL PERSONNEL (or equivalent in the private sector)			0.00			0.00	0.00
			ADMINISTRATIVE PERSONNEL (or equivalent in the private sector)			0.00			0.00	0.00
			OTHERS			0.00			0.00	0.00
			<b>A.2 Natural Persons under direct contract</b>			0.00			0.00	0.00
			<b>A.3 Seconded Persons</b>			0.00			0.00	0.00
			<b>A.4 SME owners and natural person beneficiaries</b>		5,080.00	0.00		5,080.00	0.00	0.00
<b>B. DIRECT SUBCONTRACTING COSTS</b>						0.00			0.00	0.00
<b>C. DIRECT PURCHASE COSTS</b>										
			<b>C.1 Travel and subsistence</b>			0.00			0.00	0.00
			<b>C.2 Equipment (complete 'Depreciation costs' sheet)</b>							
			<i>Equipment</i>			0.00			0.00	0.00
			<i>Infrastructure</i>			0.00			0.00	0.00
			<i>Other assets</i>			0.00			0.00	0.00
			<b>C.3 Other goods, works and services</b>							
			<i>Consumables</i>			0.00			0.00	0.00
			<i>Services for meetings, seminars</i>			0.00			0.00	0.00
			<i>Services for dissemination activities (including website)</i>			0.00			0.00	0.00
			<i>Publication fees</i>			0.00			0.00	0.00
			<i>Other (shipment, insurance, translation, etc.)</i>			0.00			0.00	0.00
<b>D. OTHER COST CATEGORIES</b>										
			<b>D.1 Financial support to third parties (if applicable in the topic specific conditions)</b>			0.00			0.00	0.00
			<b>D.2 Internally invoiced goods and services</b>			0.00			0.00	0.00
			<b>D.3 Transnational access to research infrastructure unit costs (if mentioned as eligible in the topic specific conditions)</b>			0.00			0.00	0.00
			<b>D.4 Virtual access to research infrastructure unit costs (if mentioned as eligible in the topic specific conditions)</b>			0.00			0.00	0.00
			<b>D.5 PCP/PPI procurement costs (if mentioned as eligible in the topic specific conditions)</b>			0.00			0.00	0.00
<b>TOTAL DIRECT PERSONNEL COSTS AND PURCHASE COSTS (A+C)</b>						80,000.00			0.00	80,000.00
<b>TOTAL DIRECT COSTS (A+B+C+D)</b>						80,000.00			0.00	80,000.00
<b>E. INDIRECT COSTS (25% * (A+C))</b>						20,000.00			0.00	20,000.00
<b>F. TOTAL COSTS (A+B+C+D+E)</b>						100,000.00			0.00	100,000.00



# Summary per WP:



In this tab, after completing the individual beneficiary sheets, you will find a summary of the participation of all beneficiaries (including affiliated entities) for all the work packages

SUM OF ALL BENEFICIARIES (including AFFILIATED ENTITIES) FOR ALL THE WORK PACKAGES							
COST CATEGORY	ALL BENEFICIARIES (without affiliated entities)		ALL AFFILIATED ENTITIES		ALL BENEFICIARIES (with affiliated entities)		BE+AE TOTAL COSTS
	UNITS	BE TOTAL COSTS	UNITS	AE TOTAL COSTS	UNITS (TOTAL)	AVERAGE COST PER UNIT	
<b>COSTS WORK PACKAGE: 1 WP1</b>							
<b>A. DIRECT PERSONNEL COSTS</b>							
<b>A.1 Employees (or equivalent)</b>							
SENIOR SCIENTISTS (or equivalent in the private sector)	30.00	240,000.00	0.00	0.00	30.00	8,000.00	240,000.00
JUNIOR SCIENTISTS (or equivalent in the private sector)	0.00	0.00	0.00	0.00	0.00		0.00
TECHNICAL PERSONNEL (or equivalent in the private sector)	0.00	0.00	0.00	0.00	0.00		0.00
ADMINISTRATIVE PERSONNEL (or equivalent in the private sector)	0.00	0.00	0.00	0.00	0.00		0.00
OTHERS	0.00	0.00	0.00	0.00	0.00		0.00
<b>A.2 Natural Persons under direct contract</b>							
<b>A.3 Seconded Persons</b>							
<b>A.4 SME owners and natural person beneficiaries</b>							
<b>B. DIRECT SUBCONTRACTING COSTS</b>							
	0.00	0.00	0.00	0.00	0.00		0.00
<b>C. DIRECT PURCHASE COSTS</b>							
<b>C.1 Travel and subsistence</b>							
	0.00	0.00	0.00	0.00	0.00		0.00
<b>C.2 Equipment (complete 'Depreciation cost' sheet)</b>							
Equipment	0.00	0.00	0.00	0.00	0.00		0.00
Infrastructure	0.00	0.00	0.00	0.00	0.00		0.00
Other assets	0.00	0.00	0.00	0.00	0.00		0.00
<b>C.3 Other goods, works and services</b>							
Consumables	0.00	0.00	0.00	0.00	0.00		0.00
Services for meetings, seminars	0.00	0.00	0.00	0.00	0.00		0.00
Services for dissemination activities (including website)	0.00	0.00	0.00	0.00	0.00		0.00
Publication fees	0.00	0.00	0.00	0.00	0.00		0.00
Other (shipment, insurance, translation, etc.)	0.00	0.00	0.00	0.00	0.00		0.00
<b>D. OTHER COST CATEGORIES</b>							
<b>D.1 Financial support to third parties (if applicable in the topic specific conditions)</b>							
	0.00	0.00	0.00	0.00	0.00		0.00
<b>D.2 Internally invoiced goods and services</b>							
	0.00	0.00	0.00	0.00	0.00		0.00
<b>D.3 Transnational access to research infrastructure unit costs (if required in the topic specific conditions)</b>							
	0.00	0.00	0.00	0.00	0.00		0.00
<b>D.4 Virtual access to research infrastructure unit costs (if required in the topic specific conditions)</b>							
	0.00	0.00	0.00	0.00	0.00		0.00
<b>D.5 PCP/PPI procurement costs (if mentioned as eligible in the topic specific conditions)</b>							
	0.00	0.00	0.00	0.00	0.00		0.00
<b>TOTAL DIRECT PERSONNEL COSTS AND PURCHASE COSTS (A+C)</b>							
		240,000.00		0.00	0.00		240,000.00
<b>TOTAL DIRECT COSTS (A+B+C+D)</b>							
		240,000.00		0.00	0.00		240,000.00
<b>E. INDIRECT COSTS (25% * (A+C))</b>							
		60,000.00		0.00	0.00		60,000.00
<b>F. TOTAL COSTS (A+B+C+D+E)</b>							
		300,000.00		0.00	0.00		300,000.00

# BE-WP person months:

In this tab, after completing the individual beneficiary sheets, you will find a summary of the effort allocated for all beneficiaries (including affiliated entities) for all the work packages



TOTAL PERSON/MONTHS FOR ALL BENEFICIARIES (INCLUDING AFFILIATED ENTITIES) PER WP					
WORK PACKAGES	Beneficiary 1	Beneficiary 2	Beneficiary 2	Total	Percentage
WP1	10.0	10.0	10.0	30.0	40.0%
WP2	10.0	10.0	0.0	20.0	26.7%
WP3	5.0	5.0	5.0	15.0	20.0%
WP4	5.0	5.0	0.0	10.0	13.3%
<b>Total</b>	<b>30.0</b>	<b>30.0</b>	<b>15.0</b>	<b>75.0</b>	<b>100.0%</b>
<b>Percentage</b>	<i>40.0%</i>	<i>40.0%</i>	<i>20.0%</i>	<i>100.0%</i>	

# Lump Sum Breakdown:

In this tab, after completing the individual beneficiary sheets, you will have the necessary information to fill in your annex 2 with a clear description of how much funding will be allocated per beneficiary and affiliated entities based on their declared funding rate



ESTIMATED BREAKDOWN OF THE LUMP SUM PER WORK PACKAGE AND PER BENEFICIARY						
BENEFICIARIES	WP1	WP2	WP3	WP4	Totals	Pct
Beneficiary 1	60,000.00	0.00	30,000.00	0.00	90,000.00	16.2%
AE 1 (ben1)	0.00	100,000.00	0.00	50,000.00	150,000.00	27.0%
Beneficiary 2	100,000.00	0.00	50,000.00	0.00	150,000.00	27.0%
AE 1 (ben2)	0.00	70,000.00	0.00	35,000.00	105,000.00	18.9%
Beneficiary 2	40,000.00	0.00	20,000.00	0.00	60,000.00	10.8%
<b>Totals:</b>	<b>200,000.00</b>	<b>170,000.00</b>	<b>100,000.00</b>	<b>85,000.00</b>	<b>555,000.00</b>	<b>100.0%</b>
<b>Pct:</b>	<b>36.0%</b>	<b>30.6%</b>	<b>18.0%</b>	<b>15.3%</b>	<b>100.0%</b>	

Lump sum share per beneficiary for the GA

# Lump Sum Breakdown into the Budget proposal table:

The lump sum breakdown is used in the budget proposal table for the calculation of the Requested grant amount

## Administrative forms

Proposal ID SEP-210899277

Acronym Test - Nadia DEBZA

## 3 - Budget

Lump sum share per beneficiary for the GA

?

No	Name of Beneficiary	Country	Role	Requested grant amount	Income generated by the action	Financial contributions	Own resources	Total estimated income
1	Baird Consulting Scs	BE	Coordinator	100.00	250	50	0	400.00
Total				100.00	250	50	0	400.00

- Financial contributions: only for Private Members (SBA Art.2(5), the IKOP shall be introduced in the budget proposal table.
- Own resources: exclusively by applicants that are not members: non funded-part of their activities
- Total estimated income: total eligible costs of the action



**3. EU-Rail Programme:  
Specific provisions to be  
considered by the EU-Rail  
Private Members' intending to  
join a consortia for the  
submission of a proposal**

# GA – table for Annex I Part B

## “Estimated Members’ Contributions”

- In accordance with the call conditions:

*“The amount of total in-kind contributions (i.e. in-kind contributions for operational activities and in-kind contributions for additional activities) should be no less than 1.263 times the funding request, in aggregate, of these applicant Private Members.”*

- Any discrepancy shall be well and duly justified.
- For 1€ of JU contribution, the Private Member shall contribute in addition of 1.263€. Consequently, with a Total Project Costs for the action and additional activities of 2.263€

# GA – table for Annex I Part B

## “Estimated Members’ Contributions”

ESTIMATED MEMBERS' CONTRIBUTIONS INDICATIVE VALUE PER MEMBER - PROJECT ACRONYM

<b>Members</b> The amount of total in-kind contributions (i.e. in-kind contributions for operational activities and in-kind contributions for additional activities) should be no less than 1.263 times the funding request, in aggregate, of these applicant Private Members. Any discrepancy shall be well and duly justified. (A)	<b>Maximum grant amount - JU contribution</b> (Total value of the lump sum shares for all WP) (B)	<b>Total Contributions of private members - Indicative value</b> (C)	<b>Pct</b> (D) = (B+C)/B	Justification if applicable (E)
Member 1 (aggregated, of the applicant Private Member)	100,00	126,30	2,2630	
Member 2 (aggregated, of the applicant Private Member)	1.000,00	1.263,00	2,2630	
Member 3 (aggregated, of the applicant Private Member)	10.000,00	12.630,00	2,2630	
Member 4 (aggregated, of the applicant Private Member)	125.000,00	157.875,00	2,2630	
Member 5 (aggregated, of the applicant Private Member)		-	-	
Member 6 (aggregated, of the applicant Private Member)		-	-	
Member 7 (aggregated, of the applicant Private Member)		-	-	
Member 8 (aggregated, of the applicant Private Member)		-	-	
Member 9 (aggregated, of the applicant Private Member)		-	-	
		-	-	

1. Fill in the project acronym

4. Any discrepancy shall be well and duly justified (in case % below 2.263)

2. Fill in the Members name

3. Enter the JU contribution (LS share)

The indicative value of contribution and % are automatically calculated