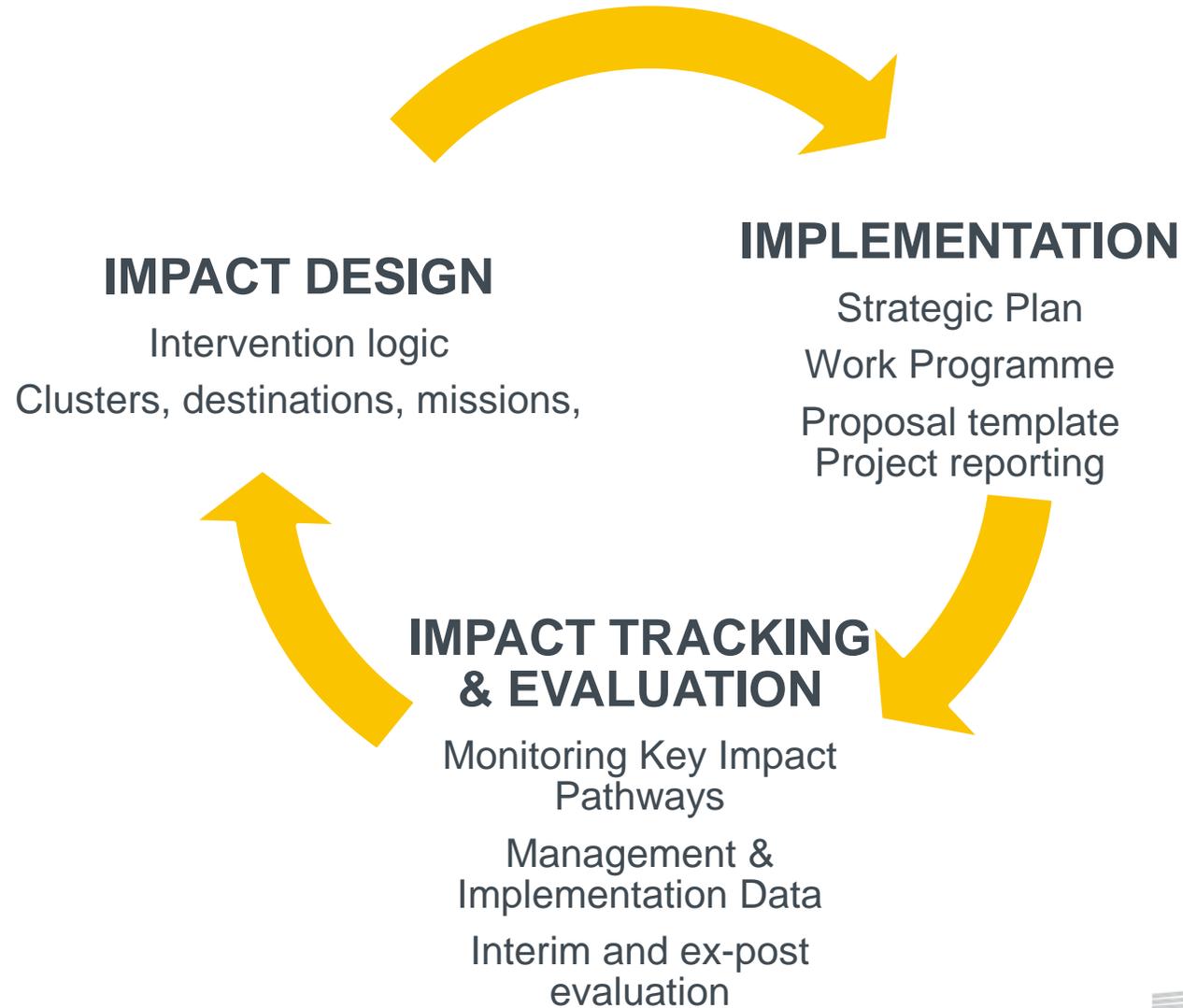# REMOBILISE project

Building collaborative Horizon Europe projects through interclustering

- **Project impact, a strengthened criteria**
- **Structure and funding opportunities on automotive, mobility, energy & ICT**

- **Key networks**
- **Working group : brainstorming on 5 priority topics**

next move
collaboration is the driver

HORIZON EUROPE CYCLE

Impact-driven Framework Programme

IMPACT DESIGN

Intervention logic
Clusters, destinations, missions,

IMPLEMENTATION

Strategic Plan

Work Programme

Proposal template
Project reporting

**IMPACT TRACKING
& EVALUATION**

Monitoring Key Impact
Pathways

Management &
Implementation Data

Interim and ex-post
evaluation

European
Commission

IMPACT DESIGN IN HORIZON EUROPE

THREE TYPES OF IMPACT BASED ON OBJECTIVES

Scientific impact

Promote scientific excellence, support the creation and diffusion of high-quality new fundamental and applied knowledge, skills, training and mobility of researchers, attract talent at all levels, and contribute to full engagement of Union's talent pool in actions supported under the Programme.
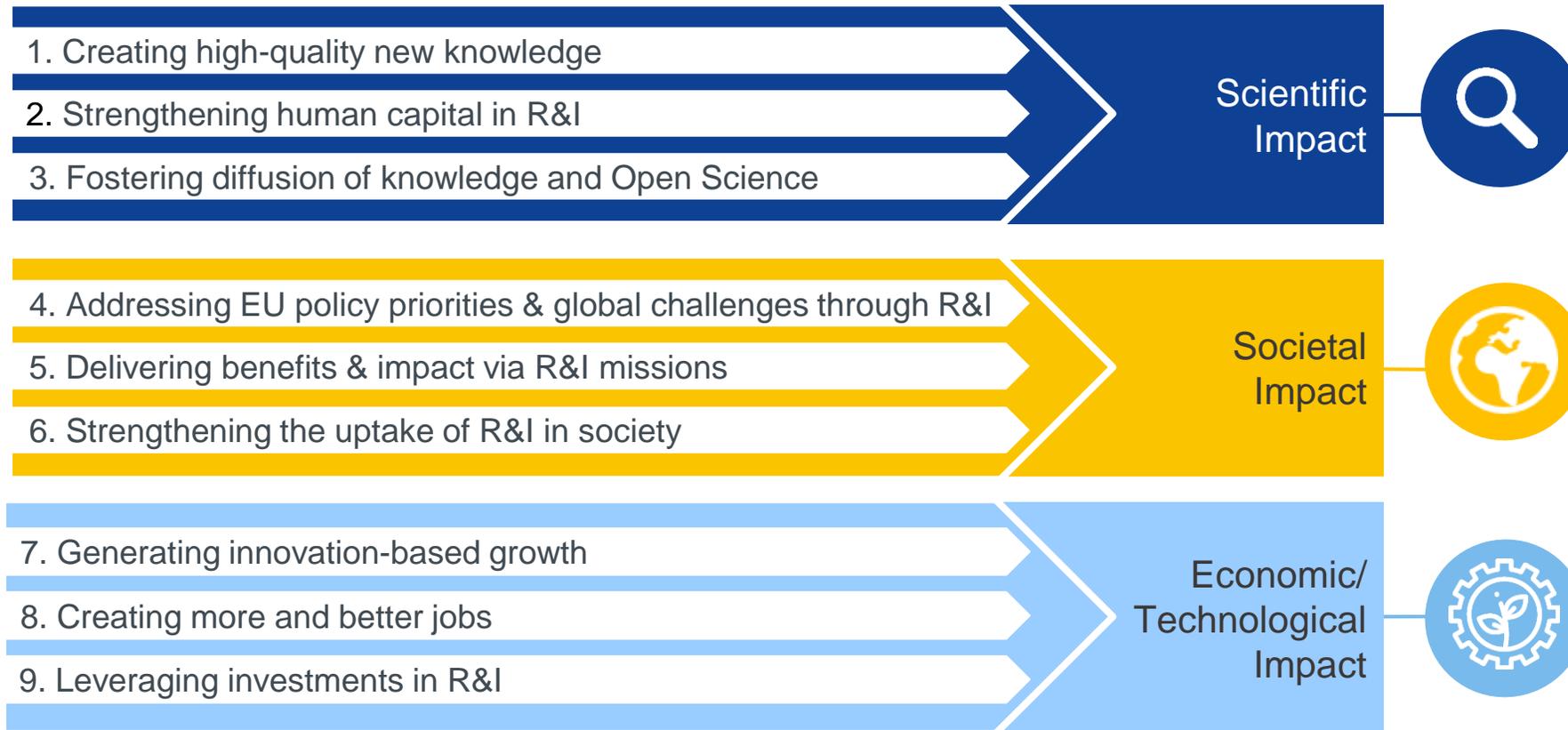
Societal impact

Generate knowledge, strengthen the impact of R&I in developing, supporting and implementing Union policies, and support the uptake of innovative solutions in industry, notably in SMEs, and society to address global challenges, inter alia the SDGs

Economic impact

Foster all forms of innovation, facilitate technological development, demonstration and knowledge transfer, and strengthen deployment of innovative solutions

European Commission

HORIZON EUROPE LEGISLATION defines three types of impact, tracked with Key Impact Pathways

1. Creating high-quality new knowledge
2. Strengthening human capital in R&I
3. Fostering diffusion of knowledge and Open Science

Scientific Impact

4. Addressing EU policy priorities & global challenges through R&I
5. Delivering benefits & impact via R&I missions
6. Strengthening the uptake of R&I in society

Societal Impact

7. Generating innovation-based growth
8. Creating more and better jobs
9. Leveraging investments in R&I
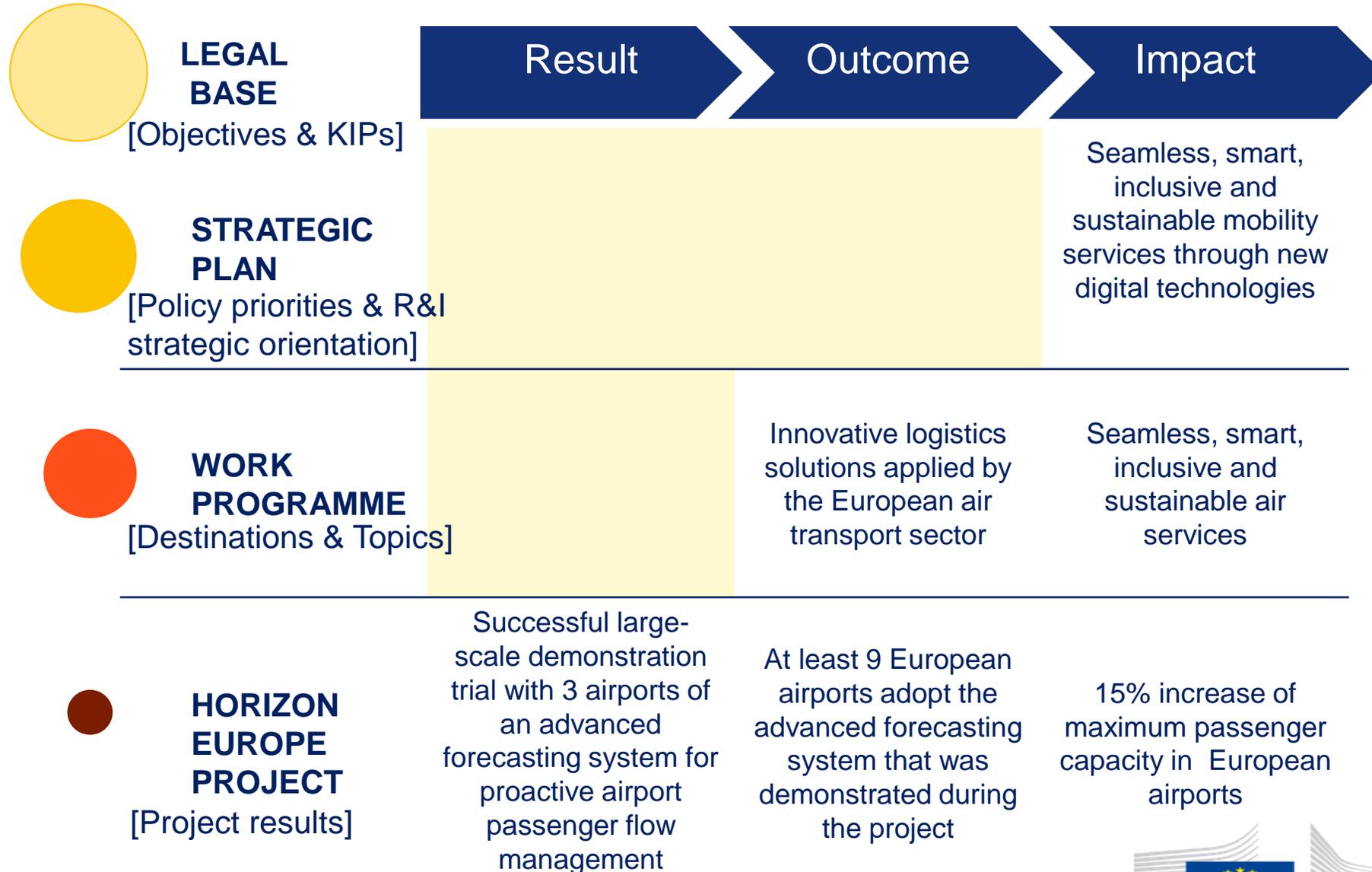
Economic/ Technological Impact

Article 50 & Annex V 'Time-bound indicators to report on an annual basis on progress of the Programme towards the achievement of the objectives referred to in Article 3 and set in Annex V along impact pathways'
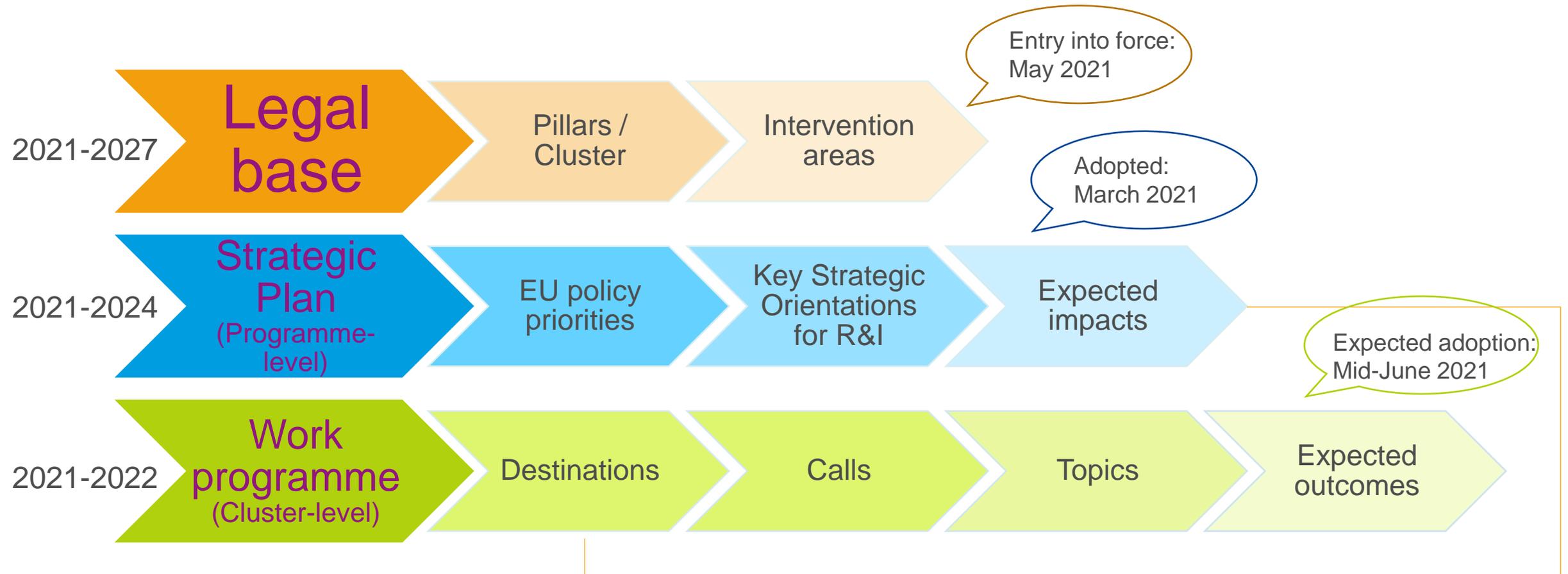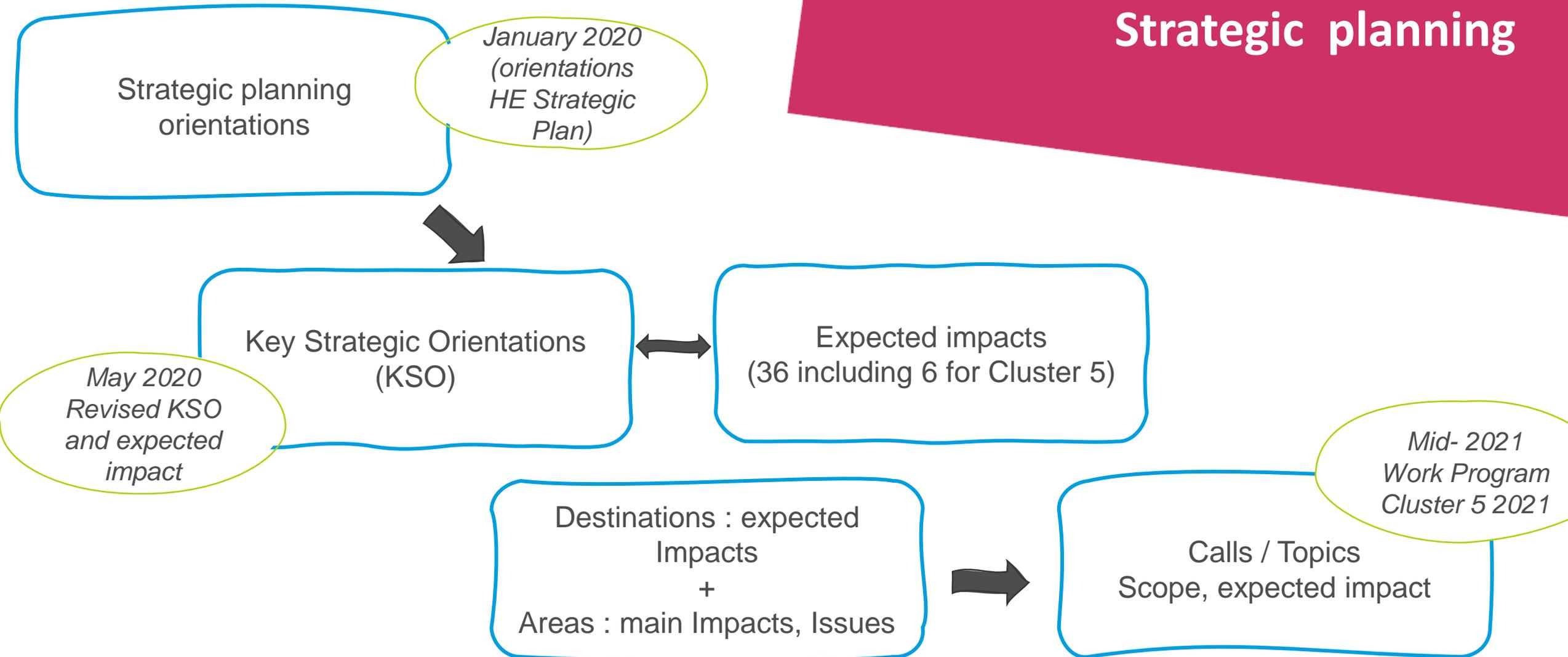
European Commission

HORIZON EUROPE IMPACT IMPLEMENTATION

STRATEGIC PLAN

WORK PROGRAMME

PROJECT

EC POLICY PRIORITIES	Political Guidelines for the European Commission 2019-2024 (and other key strategic documents - e.g. Green Deal)
KEY STRATEGIC ORIENTATIONS FOR R&I	Set of strategic objectives within the EC policy priorities where R&I investments are expected to make a difference
IMPACT AREAS	Group of expected impacts highlighting the most important transformation to be fostered through R&I

EXPECTED IMPACTS
⇒ *DESTINATIONS*

= *General objectives*

> EXAMPLE

Wider effects on society (incl. the environment), the economy and science enabled by the outcomes of R&I investments (long term).

Strategic Plan & Work Programme: R&I contribution to seamless, smart, inclusive and sustainable mobility services

Project : Increase maximum passenger capacity by 15% and passenger average throughput by 10%, leading to a 28% reduction in infrastructure expansion costs

EXPECTED OUTCOMES
=>*TOPICS*

= *Specific objectives*

> EXAMPLE

Effects of Horizon Europe projects such as uptake, diffusion, use and deployment of the projects' results by direct target groups (medium term)

Work Programme : Innovative accessibility and logistics solutions applied by the European Transport sector

Project : At least 9 European airports adopt the advanced forecasting system that was demonstrated during the project

PROJECT RESULTS

= *Operational objectives*

> EXAMPLE

What is produced during the project implementation, such as innovative solutions, algorithms, new business models, guidelines, policy recommendations, methodologies, publications, database, prototypes, trained researchers, new infrastructures, proof of feasibility, networks, etc. (short term)

Project (by the end of its implementation): Successful large-scale demonstration trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management

European Commission

IMPACT IMPLEMENTATION (example)

	Result	Outcome	Impact
LEGAL BASE [Objectives & KIPs]			
STRATEGIC PLAN [Policy priorities & R&I strategic orientation]			Seamless, smart, inclusive and sustainable mobility services through new digital technologies
WORK PROGRAMME [Destinations & Topics]		Innovative logistics solutions applied by the European air transport sector	Seamless, smart, inclusive and sustainable air services
HORIZON EUROPE PROJECT [Project results]	Successful large-scale demonstration trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management	At least 9 European airports adopt the advanced forecasting system that was demonstrated during the project	15% increase of maximum passenger capacity in European airports

European Commission

Programme intervention logic

Strategic planning

Strategic planning orientations

January 2020 (orientations HE Strategic Plan)

Key Strategic Orientations (KSO)

Expected impacts (36 including 6 for Cluster 5)

May 2020 Revised KSO and expected impact

Destinations : expected Impacts
+
Areas : main Impacts, Issues

Calls / Topics Scope, expected impact

Mid- 2021 Work Program Cluster 5 2021

- **Crucial to know and understand**
- **Check coherence with your project idea and objectives**
- **Make references in project proposals**

- **Objectif : climate neutrality for 2050**

- **Key documents**
  - Paris agreement
  - UN Sustainable Development Goals
  - Strategic vision of the EC (november 2018) : A Clean Planet for all
  - STRIA : Strategic Transport Research and Innovation Agenda
    - Electrification
    - alternative fuels
    - vehicle design and manufacturing
    - connected and automated transport
    - Infrastructure
    - network and traffic management systems
    - smart mobility and services

- **Publication of Strategic Planning in December 2019**
  - https://ec.europa.eu/info/sites/info/files/research_and_innovation/strategy_on_research_and_innovation/documents/ec_rtd_orientations-he-strategic-plan_122019.pdf

- **6 key priorities**
  - A European Green Deal
  - An economy that works for people
  - A Europe fit for the Digital Age
  - Promoting our European way of life
  - A stronger Europe in the world
  - A new push for European democracy

Horizon Europe targeted impacts* supporting the Political guidelines of the Commission
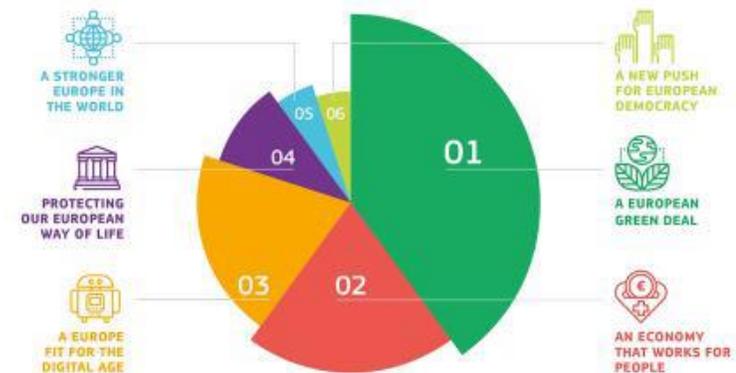
* Preliminary, as described in the General orientations towards first Strategic Plan implementing Horizon Europe
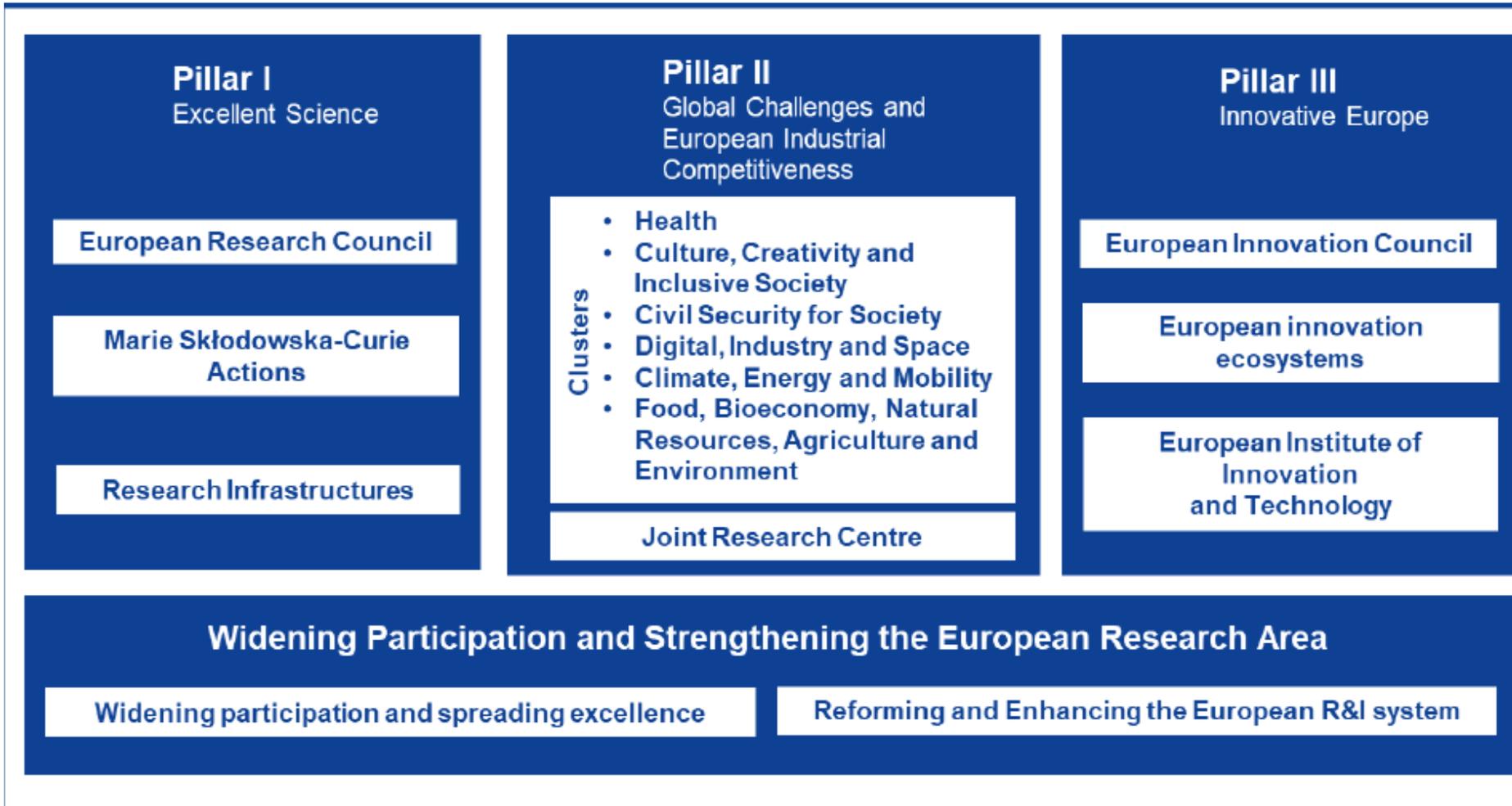
Cluster 5 – Expected impacts

Transition to a climate-neutral and resilient society and economy enabled through **advanced climate science**, pathways and responses to climate change (mitigation and adaptation)

Clean and sustainable transition of the energy and transport sectors towards climate neutrality facilitated by innovative **cross-cutting solutions**

Efficient and sustainable **use of energy**, accessible for all is ensured through a clean energy system and a just transition

Open strategic autonomy by leading the development of **key digital, enabling and emerging technologies, sectors and value chains**

Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources

Strategic Plan

Making Europe the first digitally enabled circular, climate-neutral and sustainable economy

Creating a more resilient, inclusive and democratic European society

More efficient, clean, sustainable, secure and competitive **energy supply** through new solutions for smart grids and energy systems based on more performant renewable energy solutions

Towards **climate-neutral and environmental** friendly mobility through clean solutions across all transport modes while increasing global **competitiveness** of the EU transport sector

Safe, seamless, smart, inclusive, resilient, climate neutral and sustainable **mobility systems** for people and goods

European Commission

- **Destinations**
- **Topics**
  - Expected outcomes
  - Scope

- **Dest. 1 – Climate sciences and responses for the transformation towards climate neutrality**

- **Dest. 2 – Cross-sectoral solutions for the climate transition**

- **Dest. 3 – Sustainable, secure and competitive energy supply**

- **Dest. 4 – Efficient, sustainable and inclusive energy use**

- **Dest. 5 – Clean and competitive solutions for all transport modes**

- **Dest. 6 – Safe, Resilient Transport and Smart Mobility services for passengers and goods**

- **Clearer specification of expected impacts**

- **If the expected impacts are specified, the topics will be open to a range of different routes to achieve these impacts**

- **A project-specific dissemination and exploitation plan will be required and assessed at the proposal stage.**

- **In particular for the missions and the EIC pathfinder project, the evaluation modalities will be designed to ensure the selection of a coherent portfolio of projects. The process will involve two phases: firstly, an assessment of the intrinsic quality of each proposal submitted; and secondly, the identification of high quality proposals that fit together to maximise the expected impact of the portfolio as a whole**

- **Work will be undertaken to identify appropriate indicators, methodologies and benchmarks for implementing Key Impact Pathways (KIPs) to better measure the scientific, societal and economic impacts of projects**

- **New indicators will be put in place to measure the 30 or so elements that need to be monitored and reported across the programme**

- **Efforts will be made to encourage beneficiaries to continue reporting on D&E activities beyond the life of the project itself (including the presentation of results in the Horizon Results Platform)**

REMOBILISE project

Building collaborative Horizon Europe projects through interclustering

- **Key networks**

- **Why ?**
  - Understand trends
  - Understand call for proposals
  - Find partners
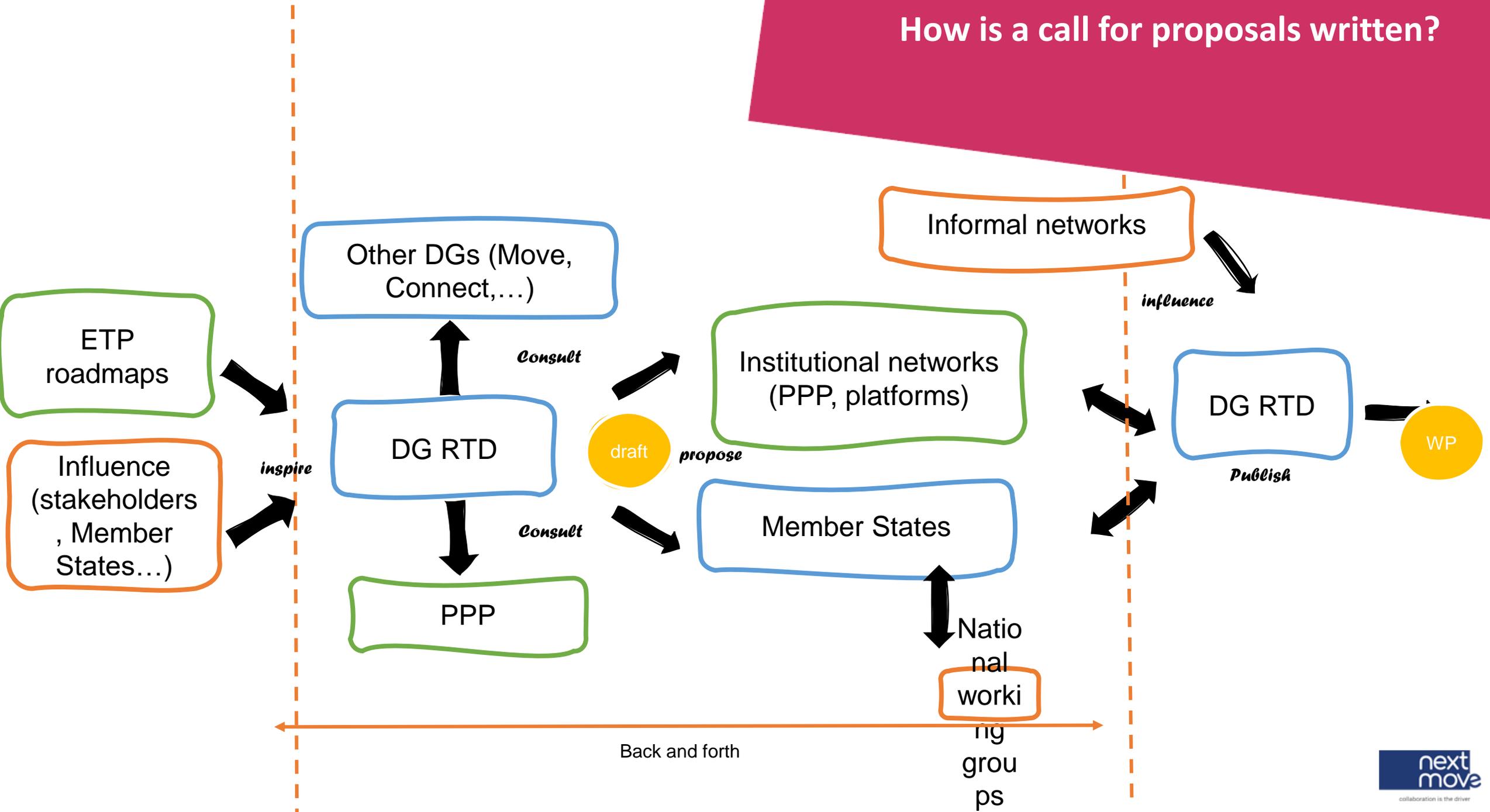
- **European Council for Automotive R&D ([EUCAR](#))**

- **European Association of Automotive Suppliers ([CLEPA](#))**

- **European Automobile Manufacturers Association ([ACEA](#))**

- **European Automotive Research Partners Association ([EARPA](#))**

- **[ERTICO](#)**

- **[ECTRI](#)**

- **[MaaS Alliance](#)**

- **[European Regions Research & Innovation Network](#)**

- **[POLIS Network](#)**

- **Cities and regions network for the development of innovative transport technologies and policies**
- **Governance :**
  - Cities Gothenburg, Madrid, Aahrus, Bilbao, Leuven, Helmond
  - London european partnership for transport
  - Transport for Greater Manchester
  - **Ile-de-France Mobilités**
  - City region of Arnhem Nijmegen
  - BKK centre for Budapest Transport
- **French members :**
  - IFPEN
  - CEREMA
  - Université Gustave Eiffel
  - La Rochelle
  - Ile de France Mobilités
  - Lille
  - Paris
  - Conseil européen pour la R&D automobile des principaux constructeurs européens

- EARPA is the association of automotive research organizations
- Governance :
  - Peter Urban (IKA)
  - Sven Herold (Fraunhofer LBF/EMI/IWU)
  - Alois Danninger (AVL)
  - Helmut Oberguggenberger (AIT)
  - Monica Pla (Applus+ IDIADA)
  - Martijn Stamm (TNO)
  - **IFPEN (Wissam Dib en remplacement de Gaetano de Paolo** *a priori)*
  - Christof Schernus (FEV)

- French members: CEA, IFPEN…
- Other members: AVL, FEV Europe GmbH, Ricardo, Siemens,…

- ERTICO - ITS Europe was created in 1991 by 15 industry leaders and the European Commission to fill the gap between research and ITS deployment

- French members : Strasbourg Eurométropole, Toulouse métropole, Ministère de la transition écologique, CEA LIST, Vedecom, Valeo, Michelin, Renault , Stellantis

- EUCAR is the European council for automotive R&D with main European OEMs
- Annual chair: Peter Lehnert, VP Technology and Innovation Digital Car (BMW Group), après Helene Niklasson (Volvo)
- The Council brings together R&D directors
- French members :
  - Stellantis
  - Groupe Renault
- Other members:
  - BMW Group, CNH, DAF, FCA, Ford, Honda, Hyundai, Iveco Group, Toyota, Volkswagen, Volvo Group,…

- The association is the voice of 3 000 enterprises and covers all automotive supply chain products and services.
- President : Thorsten Muschal, Executive Vic-President in Sales & Program Management, Faurecia

- Le bureau exécutif est composé de :
  - Thorsten Muschal, **Faurecia**
  - **Valerie Bros, Plastic Omnium**
  - **Jean-Luc Di Paola Galloni, Valeo**
  - Markus Heyn, Bosch
  - **Gilles Mabire, Continental**
  - **Jean-François Le Bos, FIEV**
  - Kurt-Christian Scheel, VDA

- French members : Plastic Omnium, Valeo, Faurecia, Saint-Gobain, FIEV, NXP

French Automotive & Mobility Network influence

1- European Public and Private Partnerships (2ZERO, CCAM, BATT4EU, Made In Europe)

2- Thematic roundtables, bringing together EC and key speakers of French sector (Power electronics, Hydrogen, Urban mobility…)

3- Informal talks, with EU representatives of major industrial players

4- Communication via social networks

French Automotive & Mobility Network
Smart & Green

How is a call for proposals written ?
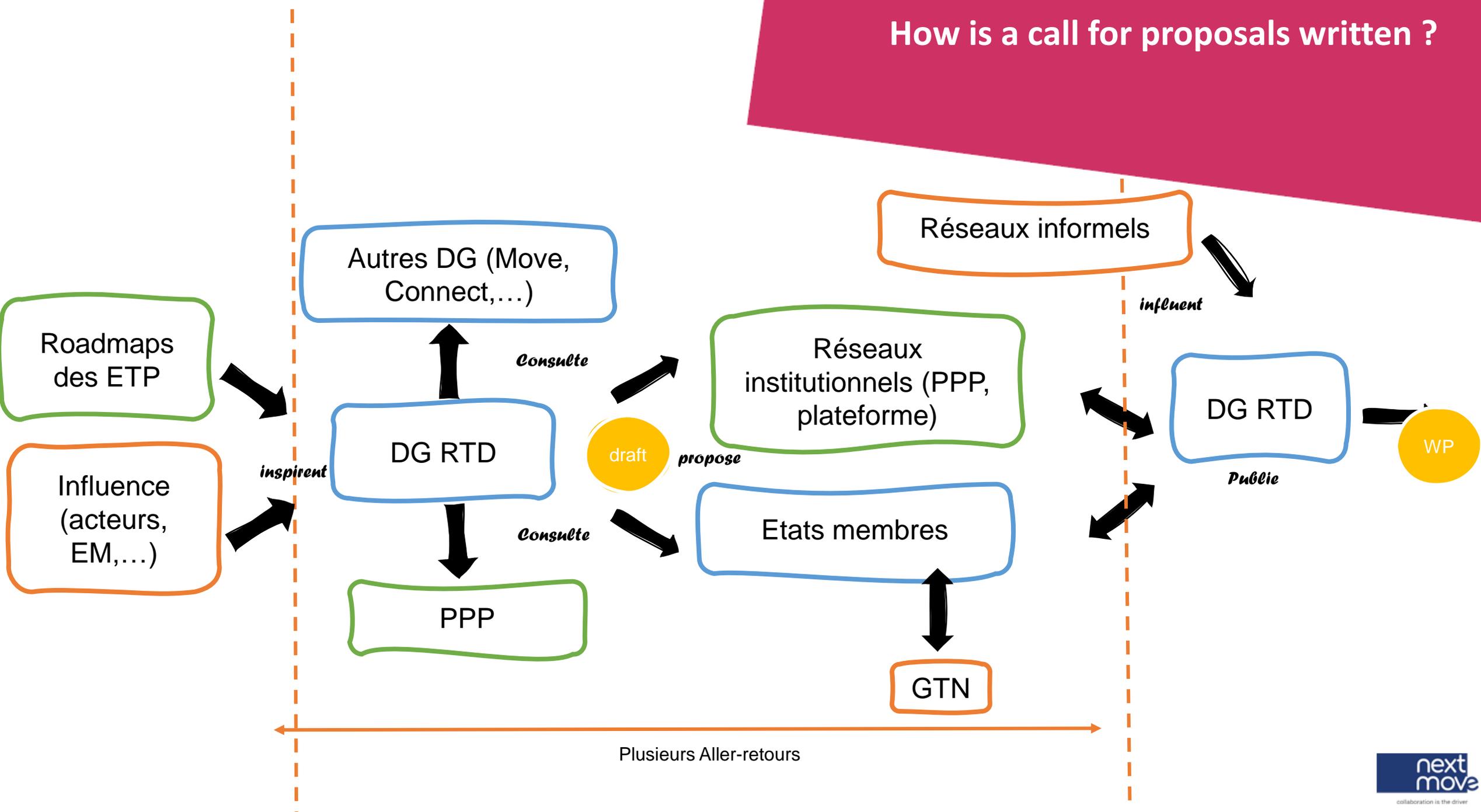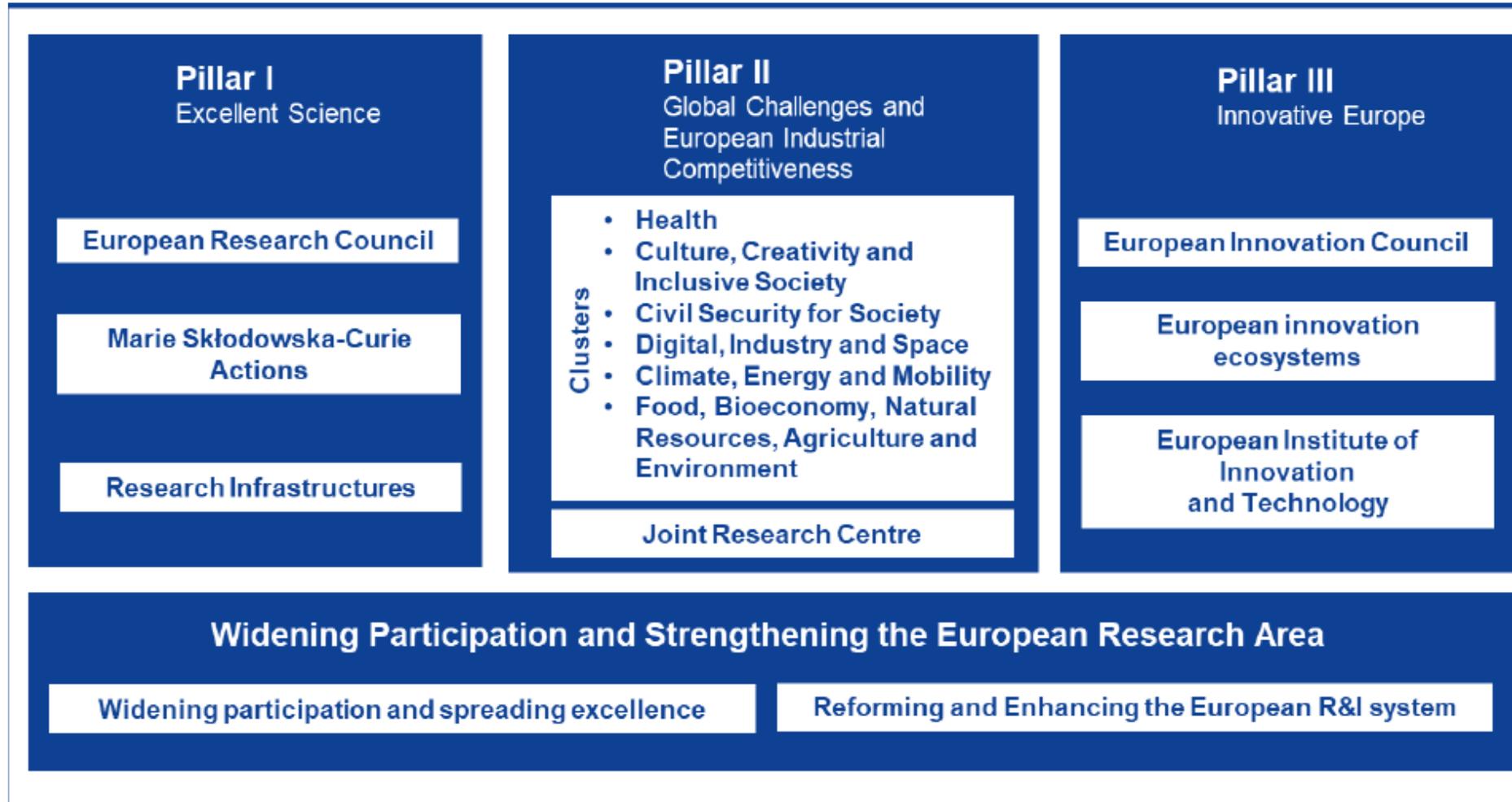
European Partnerships in the Climate, Energy and Mobility cluster
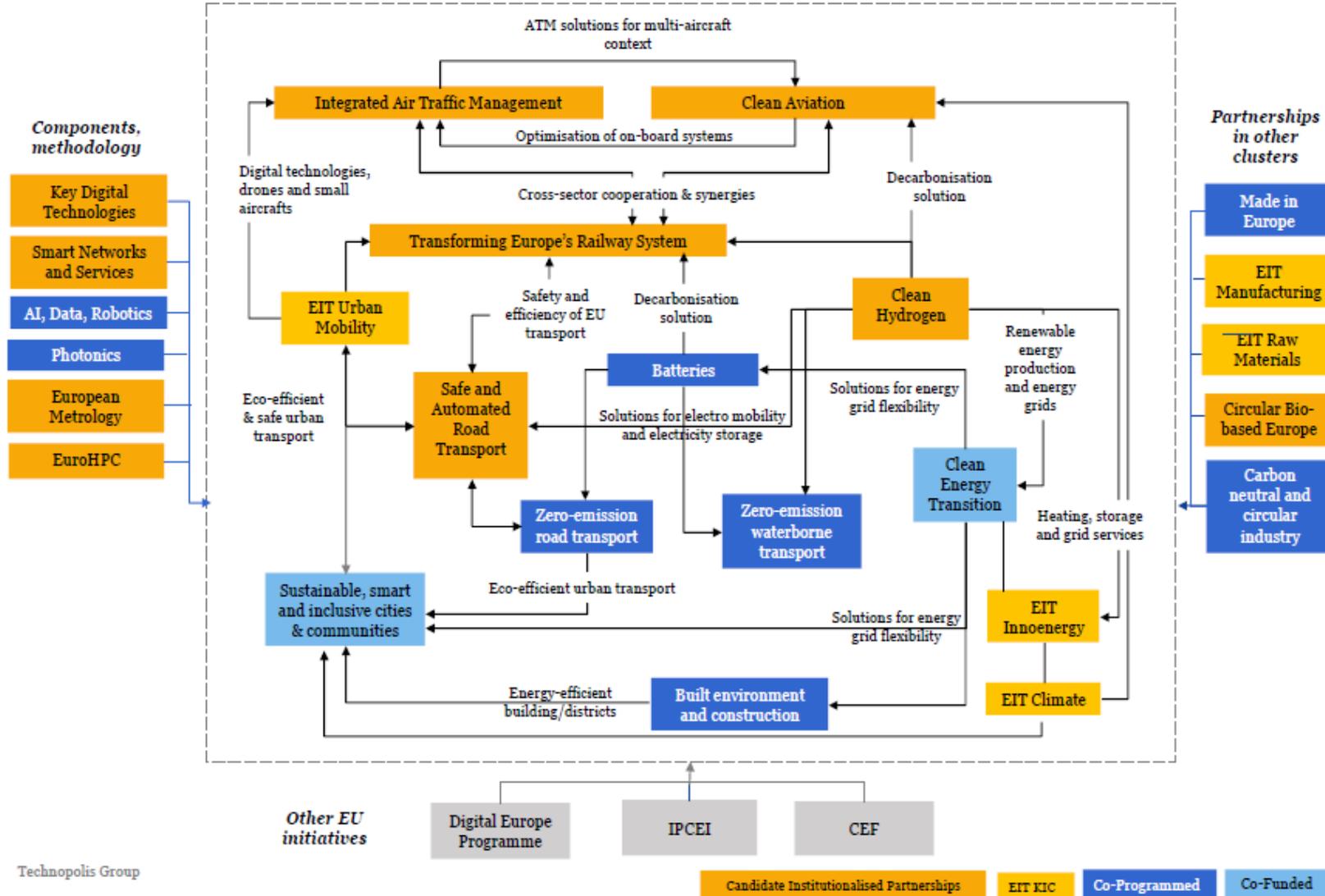
Cluster 5 PPP

Co Programmed Partnership

- Built4People -People-centric sustainable built environment
- **2ZERO** –**Towards zero-emission road transport**
- **CCAM** –**Connected and Automated Driving**
- Waterborne - Zero-emission waterborne transport
- **BATT4EU** – **Batteries European Partnership**

Co-funded Partnership

- **Driving urban transitions to a sustainable future**
- Clean Energy Transition

Institutional Partnership

- **Key Digital Technologies**
- **Clean Hydrogen**
- Transforming Europe's Rail System
- Clean Aviation

next move
collaboration is the driver

Next steps for the elaboration of the HE Work Programme 2023-24

➤ **October:** Finalisation of the shortlist of topics and validation of topics by the EC.

➤ **November:** Establishment of the drafting teams and writing of 2023 topics.

➤ **December:** Validation of 2023 topics and writing of 2024 topics.

➤ **January:** Finalisation and validation of 2024 topics.

➤ **Early February:** Finalisation of the full WP2023-24 recommendations.

next move
collaboration is the driver

- **Co-programmed PPP**

- **Objectives**
  - Accelerate the development of zero emission solutions for road transport in Europe
  - Take a systemic approach based on an ambitious research programme
  - Improve air quality, mobility and safety of people and goods
  - To be a leader in innovation, production and services
  - Make a key contribution to the success of the European Green Deal

- **Managed by EGVIAfor2ZERO**

Green Cars
2008-2013

- Focus sur l'électrification
- Voitures, camions et logistique

Green Vehicles
2014-2020

- Efficacité énergétique des véhicules utilisant des groupes motopropulseurs alternatifs, y compris le groupe motopropulseur électrique
- 2 roues, voitures, fourgons, autobus, camions

2Zero
2021-2027

- Approche systémique pour une mobilité routière zéro émission pour les personnes et les biens
- Soutenir l'UE dans son objectif de neutralité carbone d'ici 2050 : stratégies et feuilles de route pour une énergie 100% renouvelable dans les transports
- Tous types de véhicules routiers
- Interconnexion et interopérabilité des secteurs (véhicules, énergie, logistique, infrastructure...)

next move
collaboration is the driver

- **EGVIAfor2ZERO brings together e-mobility stakeholders, co-programmed partnership (cPPP) launched in 2013, initially called Green Car Initiative**

- **Executive Board**
  - Stephan Neugebauer (BMW Group)
  - Jean-Luc di Paola Galloni (Valeo)
  - Wolfgang Dettman (Infineon)
  - Josef Affenzeller (AVL List)
  - Thilo Bein (Fraunhofer)
  - Uros Salobir (ELES)

- **French members**
  - ESI, Renault, IFPEN, Valeo, Michelin, Université Gustave Eiffel, Faurecia, Continental, Plastic Omnium,FEV, French Automotive and Mobility Network (dont NextMove), EDF, CEA LITEN

- **New Co-programmed PPP**

- **ERTRAC behind the development**

- **Objectives**
  - Creating autonomous and connected user centred mobility while increasing safety reducing congestion and contributing t decarbonization
  - Harmonise European R&I efforts
  - Accelerate the implementation of innovativ technologies and services for connected an autonomous mobility
  - Providing solutions to facilitate users journeys
  - Improve the mobility system as a whole
  - Artificial intelligence, big data and cybe security at the heart of the partnership' strategies

next move
collaboration is the driver
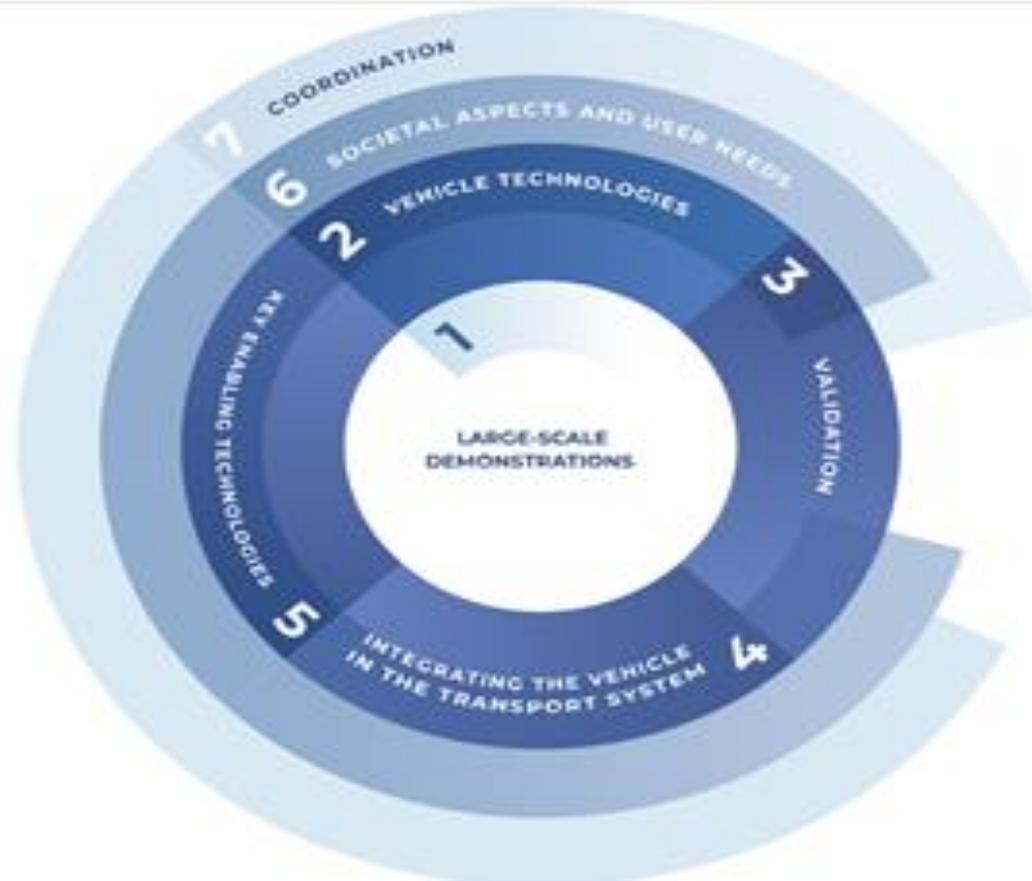
- Cluster 1 (leader: Armin Graeter, Mats Rosenquist) – BMW et Volvo
- Cluster 2 (leader: David Storer) – CLEPA (ex FCA)
- Cluster 3 (leader: Peter Urban) – KIT
- Cluster 4 (leader: Torsten Geissler) - Federal Highway Research Institute
- Cluster 5 (leader: Margriet Van Schijndel) - TNO
- Cluster 6 (leader: Ingrid Skogsmo) - VTI
- Cluster 7 (leader: Stephane Dreher) - Ertico

- French members : CEA, Cerema, ESI Group, Ecov, Faurecia, IFPEN, Ile-de-France Mobilités, Michelin, Renault, Université Gustave Eiffel, Valeo, Telecom Paris, MACIF, FIA, French Automotive and Mobility Network (dont NextMove)
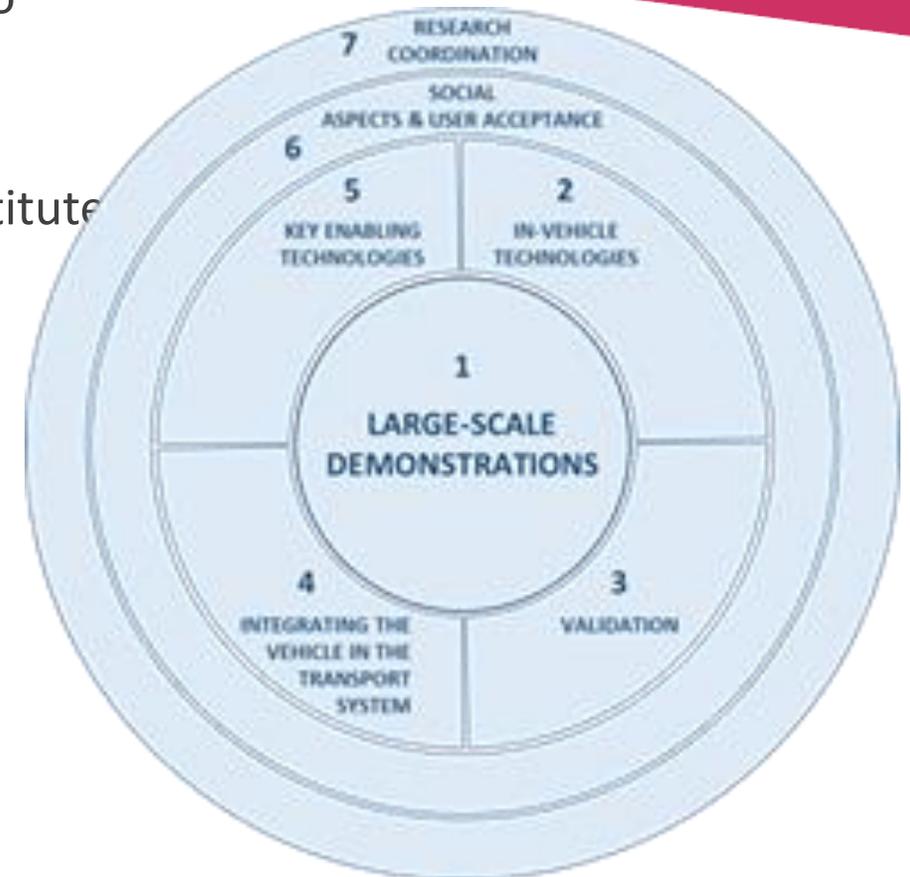
- **New co-programmed PPP**

- **3 associations behind**
  - EMIRI (Energy Material Industrial Research Initiative)
  - RECHARGE (European Battery Industry Association)
  - EUCAR (European Council for Automotive R&D)

- **Objectives and structure**
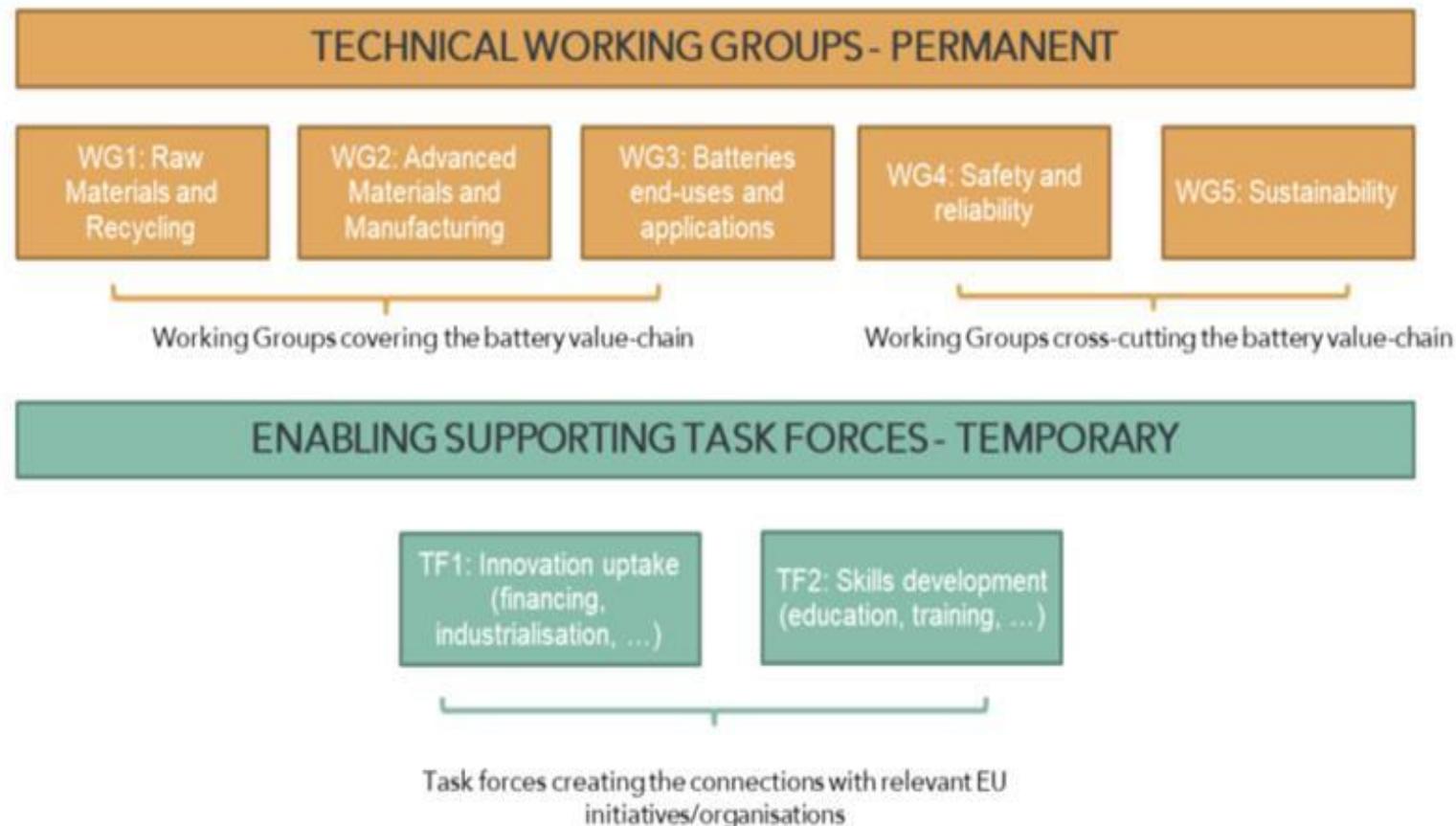
Objective: To strengthen Europe's strategic autonomy in the field of electronic components and systems, while addressing the EU's societal and environmental challenges and ensuring more active participation of SMEs. components and systems, while addressing the EU's societal and environmental challenges and ensuring a more active participation of SMEs.

Research and innovation actions (RIA) *bottom-up* **(TRL 3-4) :**

- Projects should be in line with SRIA ECS 2021, prepared by Aeneas, Artemis and EPoSS.
- Activities aimed at establishing new knowledge and/or exploring the feasibility of a new or improved technology, product, process, service (or solution).
- May include basic and applied research, technology development and integration, testing and validation of a small-scale prototype in a laboratory or simulated environment.
- May include directly related but limited demonstration or pilot activities aimed at showing technical feasibility in a near operational environment.

- Selection criteria : Excellence ; Impact ; Quality of implementation
- Funder : EU (via Joint Undertaking Key Digital Technologies), i-Demo or i-Demo Europe

Funding

- EU contribution : max 12M€/project, funding rate 25% big groups / 35% SME/universities/non-profit
- National contribution : refer to i-Demo/i-Demo Europe
- https://www.kdt-ju.europa.eu/calls/kdt-ju-calls-2021-0

- **EFFRA is running PPP**

- **Executive Board**
  - Joaquim Menezes, Iberomoldes
  - Herman Derache, Agoria
  - Berndt-Thomas Kraft, FMTI
  - Eduardo Beltrán - Mondragon
  - Rainhil Freitas - Airbus
  - Dietmar Goericke - VDMA
  - Torbjörn Holmström - Volvo
  - Stefan Kammann - Continental Engineering Services
  - Malte Lohan - Orgalim
  - Philippe Maurin-Perrier - HEF Group
  - Heinz Neubert - Siemens
  - Philippe Lubineau - CETIM
  - Egbert-Jan Sol - TNO
  - Marco Taisch - Politecnico di Milano
  - Riikka Virkkunen - VTT
  - Steffen Winkler - Bosch Rexroth
  - Massimo Ippolito - COMAU
  - George Chryssolouris LMS – University of Patras*
  - José Carlos Caldeira - Inesc Porto/ManuFuture ISG*

- **French members**
  - Airbus, Atos, Renault, CEA, Continental, ESI, Arts et métiers ParisTech, IRT Jules Verne, Fédérations des industries mécaniques , EMC2

- **Structuring: overall coherence, conciseness, clarity**

- **General content: consistency with the scope and expectations of the call, consideration of the potential profile of the evaluators**

- **Context: references to policy framework, consumer needs and market opportunity**

- **Excellence: strong definition and interest of the project at the beginning, innovation compared to the state of the art & TRL, competitive advantage thus taking into account competitors/risks/IP, informed choice of partners and mention of support, interest in getting EU funding**

- **Impact: well-identified target groups, relevant and ambitious KPIs, eco/technical but also environmental/social/political dimension, communication/dissemination/IP. not to be neglected (often is), use of results/marketing**

- **Methodology: SMART tasks (structure, means, timing), balanced budget and coherent with GANTT, link with other initiatives +SharePoint the Evaluator FrameworkTranslated with www.DeepL.com/Translator (free version)**

next move
collaboration is the driver

- **Beneficiaries of Horizon Europe and Horizon 2020 funding must carry out activities to increase the impact of their project results:**
  - They must share research results with the scientific community, commercial players, civil society and policymakers ('dissemination').

  - They must also take action to use their project results for commercial purposes, to tackle societal problems or in policymaking ('exploitation').

COMMUNICATION, DISSEMINATION AND EXPLOITATION
WHY THEY ALL MATTER AND WHAT IS THE DIFFERENCE?

European Commission

Communication:
Promote your action and results

Inform, promote and communicate your activities and results

Reaching multiple audiences
Citizens, the media, stakeholders

How?
• Having a well-designed strategy
• Conveying clear messages
• Using the right media channels

When?
From the start of the action until the end

Why?
• Engage with stakeholders
• Attract the best experts to your team
• Generate market demand
• Raise awareness of how public money is spent
• Show the success of European collaboration

Legal obligation of your Grant Agreement

Dissemination:
Make your results public

Open Science: knowledge and results (free of charge) for others to use

Only to scientists?
Not only but also to others that can learn from the results: authorities, industry, policymakers, sectors of interest, civil society

How?
Publishing your results on:
• Scientific magazines
• Scientific and/or targeted conferences
• Databases

When?
At any time, and as soon as the action has results

Why?
• Maximise results' impact
• Allow other researchers to go a step forward
• Contribute to the advancement of the state of the art
• Make scientific results a common good

Legal obligation of your Grant Agreement

Exploitation:
Make concrete use of results

Commercial, Societal, Political Purposes

Only by researchers?
Not only, but also:
• Industry including SMEs
• Those that can make good use of them:
  authorities, industrial authorities, policymakers, sectors of interest, civil society

How?
• Creating roadmaps, prototypes, softwares
• Sharing knowledge, skills, data

When?
Towards the end and beyond, as soon as the action has exploitable results

Why?
• Lead to new legislation or recommendations
• For the benefit of innovation, the economy and the society
• Help to tackle a problem and respond to an existing demand

Legal obligation of your Grant Agreement

Acknowledge the EU funding!

EUROPEAN COMMISSION TOOLS

Research and Innovation success stories ● ● ●

A collection of the most recent success stories from EU-funded Research & Innovation.

Horizon Dashboard ● ●

An intuitive and interactive knowledge platform where you can extract statistics and data on EU Research and Innovation programmes – sorting by topics, countries, organisations, sectors, as well as individual projects and beneficiaries!

CORDIS ● ● ●

Multilingual articles and publications that highlight research results, based on an open repository of EU project information.

Horizon Results Booster ● ●

A service free of charge in case you would like to apply to benefit from one of these services:
1. Portfolio Dissemination & Exploitation Strategy
2. Business plan development
3. Go-to-Market Support

Horizon Magazine ●

The latest news and features about thought-provokingscience and innovative research projects funded by the EU.

Innovation Radar ● ●

A data-driven method focused on the identification of high potential innovations and the key innovators behind them in EU-funded Research and Innovation projects.

Horizon Impact Award ●

An annual prize to recognise and celebrate outstanding projects that have used their results to provide value for society. The award enables individuals or teams to showcase their best practices and achievements, and inspire beneficiaries of research and innovation funding to maximise the impact of their research!

Horizon Results Platform ● ●

A public platform that hosts and promotes research results thereby widening exploitation opportunities. It helps to bridge the gap between research results and generating value for economy and society. You can create your own page to showcase your results, find collaboration opportunities and get inspired by the results of others!

● Communication
● Dissemination
● Exploitation

Keep in touch

Contact your PO
Funding & Tenders Opportunities portal
Research Enquiry Service

- **HORIZON-CL5-2023-D2-01-05: Hybrid electric energy storage solutions for grid support and charging infrastructure (Batt4EU Partnership)**

- **HORIZON-CL5-2023-D5-01-01: User-centric design and operation of EV for optimized energy efficiency (2ZERO Partnership)**

- **HORIZON-CL5-2023-D2-01-04: Battery management system (BMS) and battery system design for stationary energy storage systems (ESS) to improve interoperability and facilitate the integration of second life batteries (Batt4EU Partnership)**

Connected, cooperative and automated mobility

Priorities

- **HORIZON-CL5-2023-D6-01-01: User-centric development of vehicle technologies and solutions to optimise the on-board experience and ensure inclusiveness (CCAM Partnership)**

- **HORIZON-CL5-2023-D6-01-02:** Generation of scenarios for development, training, virtual testing and validation of CCAM systems (CCAM Partnership)