

Το Χρηματοδοτικό Πρόγραμμα Πλαίσιο Ορίζοντας Ευρώπη

Κατερίνα Παπαδούλη, Δίκτυο ΠΡΑΞΗ, ΕΑΔΠΠΑ

ΔΙΑΔΙΚΤΥΑΚΟ ΣΕΜΙΝΑΡΙΟ

Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών

Δευτέρα, 17 Μαΐου, 2021



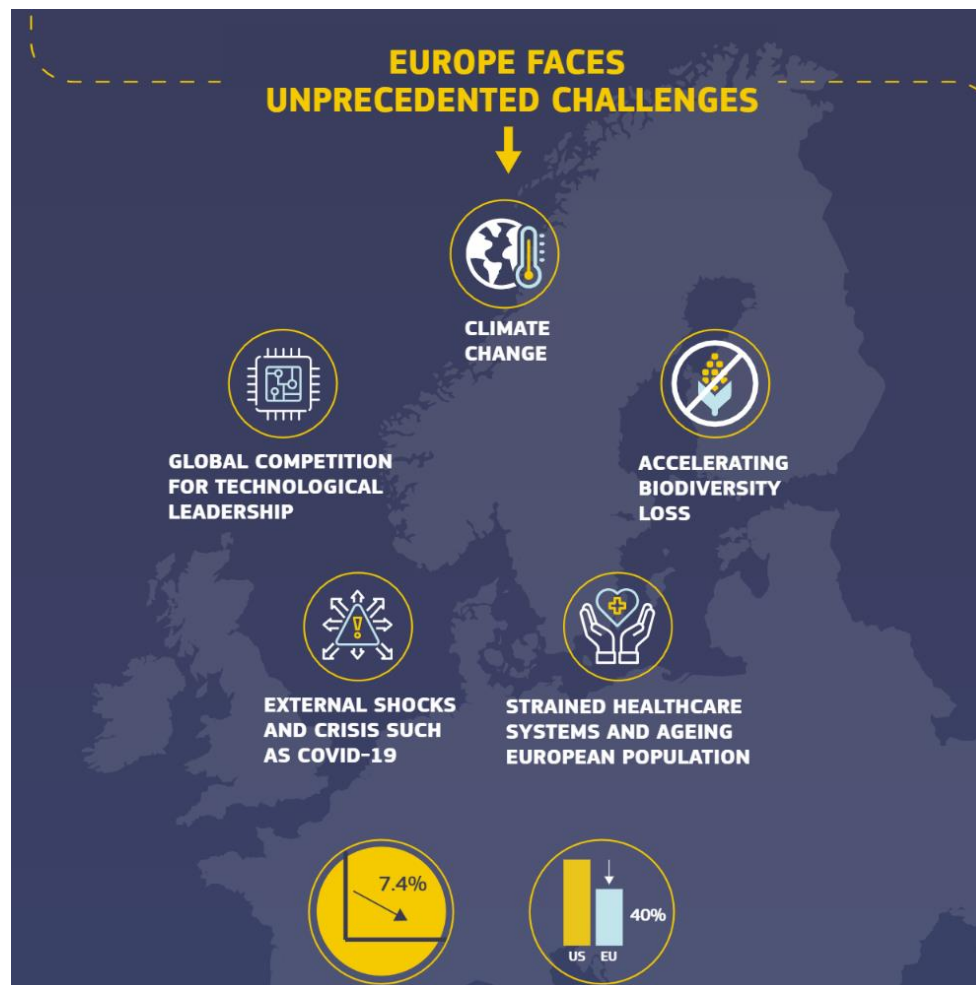
Περιεχόμενα παρουσίασης

- › Βασικές αρχές του Ορίζοντα Ευρώπη
- › Στόχοι του Ορίζοντα Ευρώπη
- › Δομή του Ορίζοντα Ευρώπη

Τι προσπαθεί να επιτύχει ο Ορίζοντας Ευρώπη



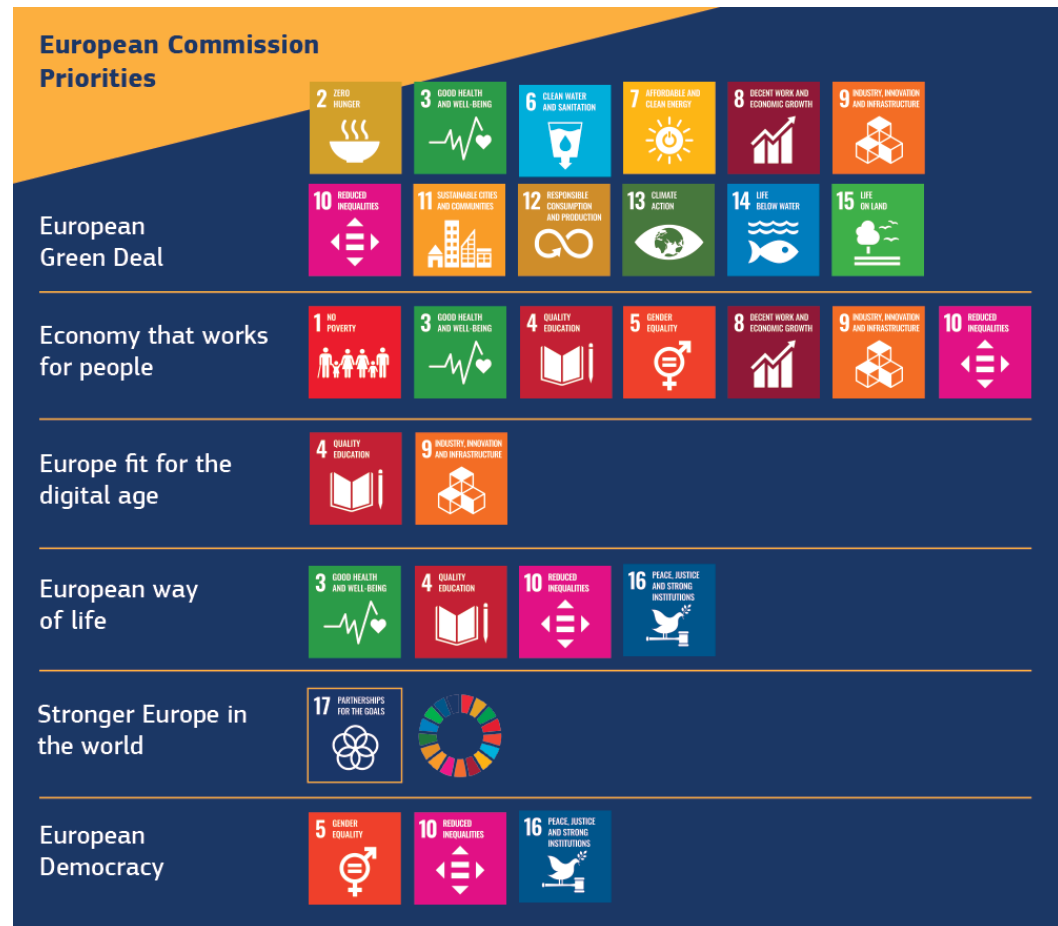
Μέσω της έρευνας και της καινοτομίας





Οι πολιτικές προτεραιότητες πίσω από τον Ορίζοντα Ευρώπη

Strategic Plan
2021-2024
DG Research & Innovation





Επιπτώσεις των τελευταίων Προγραμμάτων Πλαίσιο στην Έρευνα και Καινοτομία

€1.5 million

Collaborations from
more than
150 countries

3X

more often among **top 1%
cited publications**
compared to output in
Member States

€48.2 million

Directed to coronavirus
R&I just **seven days
after the first
EU case** reported

84%

of investments address
Sustainable Development
Goals; **30% address
climate change**

double

the proposals received per
year **compared
to the previous
programme**

19%

estimated labour
productivity increase in
funded companies **thanks
to the programme***

statistics from Horizon 2020 evaluation and monitoring and *Framework Programme 7 JRC [research paper](#)



Βασικές Αρχές





Στρατηγικό σχέδιο

Strategic plan gives direction to the work programme

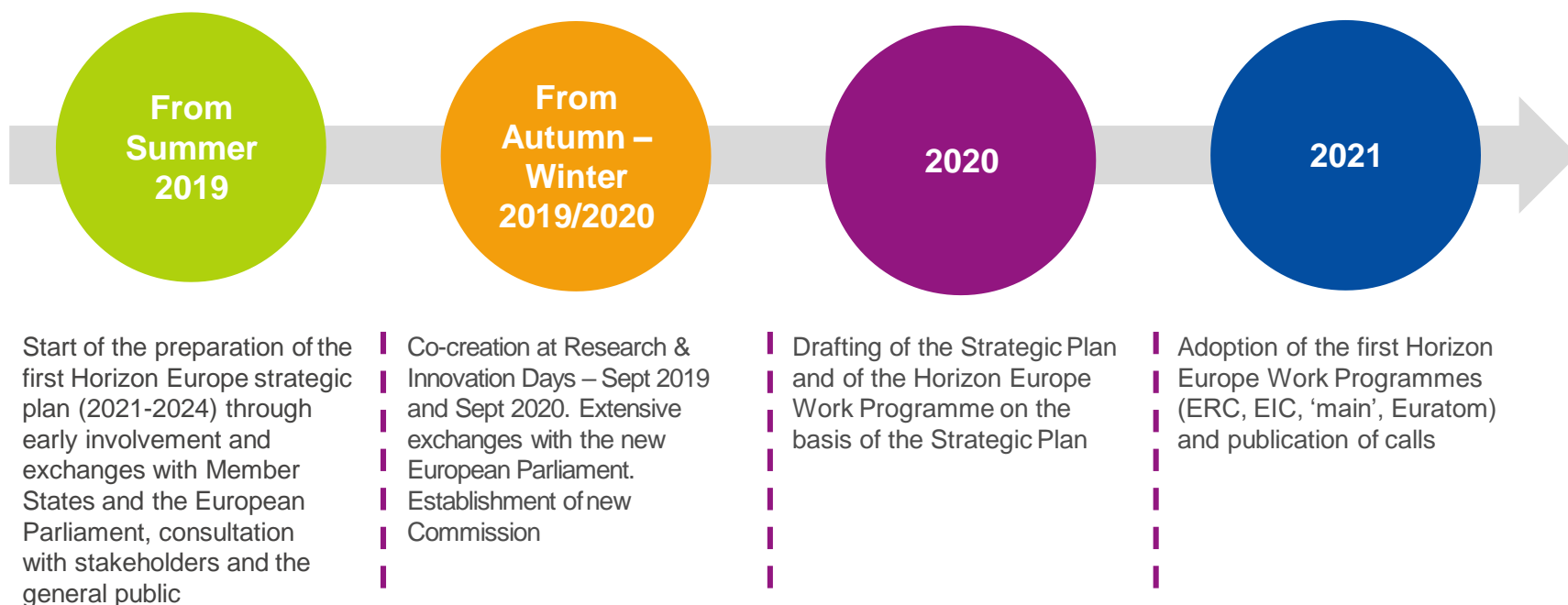


Main Features

Early involvement and extensive exchanges with Member States
Extensive exchanges with the European Parliament
Consultations with stakeholders and public at large



Βήματα για την υιοθέτηση του πρώτου Προγράμματος Εργασίας



»» Στόχοι του Ορίζοντα Ευρώπη

The ambitious EU research and innovation framework programme (2021-2027)



fuel EU's **scientific and technological excellence** and the strengthen the European Research Area (ERA)

**Science
& technology**



tackle policy priorities, including **green and digital transitions** and Sustainable Development Goals

Society



boost Europe's **innovation uptake, competitiveness** and **jobs**

Economy

Δομή του νέου Προγράμματος – Πλαίσιο Horizon Europe



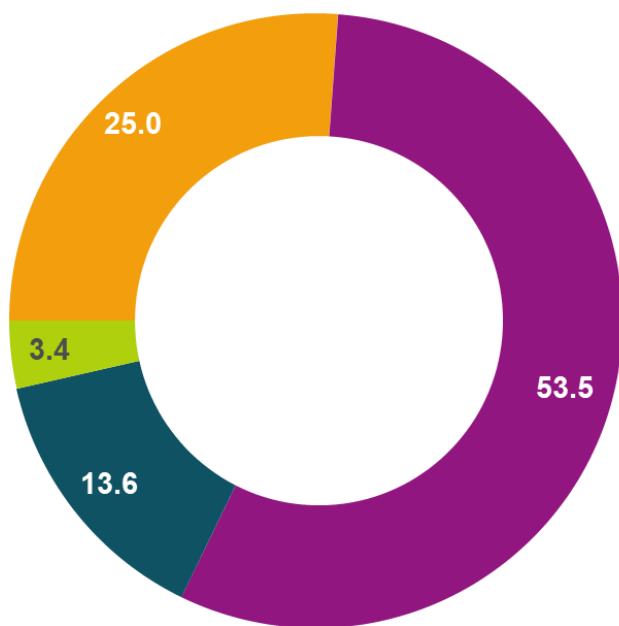
* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme



Τελικός προϋπολογισμός Ορίζοντα Ευρώπη

Horizon Europe Budget: €95.5 billion (2021-2027)

(including €5.4 billion from NGEU – Next Generation Europe – programme of EU for Recovery from COVID-19 crisis)



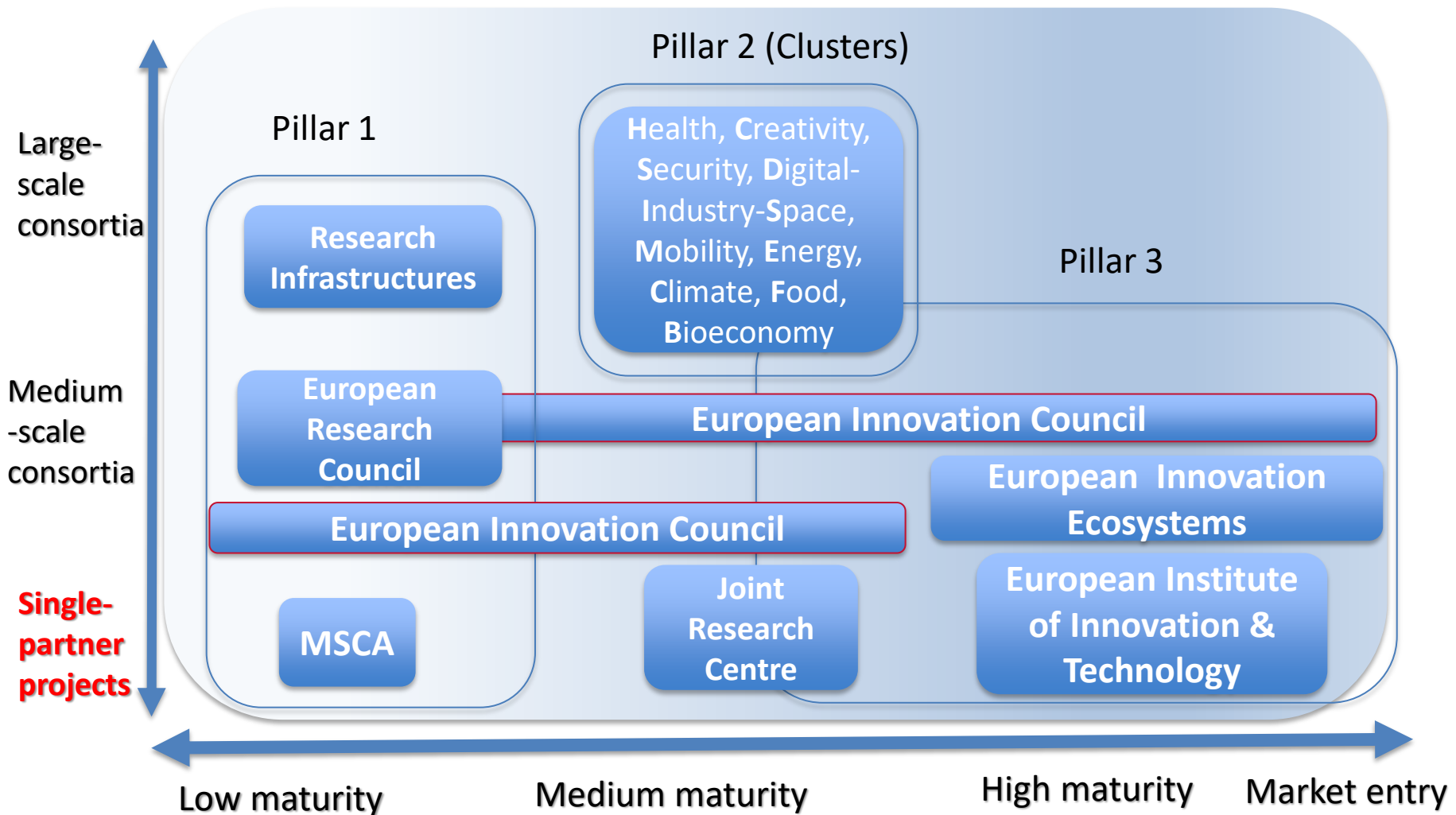
Political agreement December 2020

€ billion in current prices

- Excellent Science
- Global challenges and European ind. comp.
- Innovative Europe
- Widening Part and ERA



Βασικός προσανατολισμός





Πυλώνας 1: Επιστημονική Αριστεία

Pillar I

EXCELLENT SCIENCE:

reinforcing and extending the **excellence of the Union's science base**

European Research Council

Frontier research by the best researchers and their teams

€16 billion

Marie Skłodowska-Curie Actions

Equipping researchers with new knowledge and skills through mobility and training

€6.6 billion

Research Infrastructures

Integrated and inter-connected world-class research infrastructures

€2.4 billion

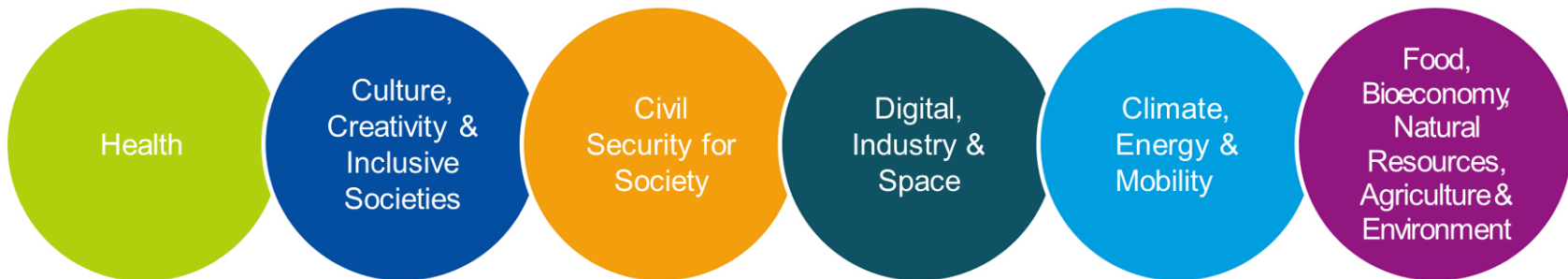


Πυλώνας 2: Παγκόσμιες Προκλήσεις και Ανταγωνιστικότητα της Βιομηχανίας

Pillar II - Clusters

GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS:

boosting **key technologies** and solutions underpinning **EU policies & Sustainable Development Goals** (6 clusters and JRC – non-nuclear direct actions)



€53.5 billion



Πυλώνας 2: Παγκόσμιες Προκλήσεις και Ανταγωνιστικότητα της Βιομηχανίας

Pillar II

Budget for clusters & for JRC

in current prices

Cluster 1	Health	€8.246 billion (including €1.35 billion from NGEU)
Cluster 2	Culture, Creativity & Inclusive Societies	€2.280 billion
Cluster 3	Civil Security for Society	€1.596 billion
Cluster 4	Digital, Industry & Space	€15.349 billion (including €1.35 billion from NGEU)
Cluster 5	Climate, Energy & Mobility	€15.123 billion (including €1.35 billion from NGEU)
Cluster 6	Food, Bioeconomy, Natural Resources, Agriculture & Environment	€8.952 billion
	JRC (non-nuclear direct actions)	€1.970 billion

Clusters are including a budget for Partnerships and Missions
NGEU is Next Generation EU programme – Recovery Fund



Πυλώνας 2: Αποστολές Έρευνας και Καινοτομίας



EU Missions

R&I Missions

Relating EU's research and innovation better to society and citizens' needs; with strong visibility and impact

A mission is a portfolio of actions across disciplines intended to achieve a **bold and inspirational and measurable goal** within a set timeframe, with **impact** for society and policy making as well as relevance for a significant part of the European population and wide range of European citizens.

Horizon Europe defines mission characteristics and elements of governance, and **5 missions areas**. Specific missions will be programmed within the Global Challenges and European Industrial Competitiveness pillar, but may also benefit from actions carried out within other parts of the Programme as well as complementary actions carried out under other Union programmes.



A climate-resilient Europe: Prepare Europe for climate disruptions and accelerate the transformation to a climate resilient and Just Europe

Mission Starfish 2030:
Restore our oceans and Water

Adaptation to climate change, including societal transformation

Conquering Cancer:
Mission Possible

Healthy oceans, seas, coastal and inland waters



Mission areas



Cancer

Climate-neutral and smart cities



100 Climate Neutral and Smart Cities by 2030



Soil health and food

Caring for Soil is Caring for Life



Αποστολές Έρευνας και Καινοτομίας

Στόχοι για το 2030

Prepare Europe to deal with **climate disruptions**, assisting citizens, communities and regions

Filling the knowledge gap, regenerating marine and water ecosystems, zero pollution

Support, promote and showcase **100 European cities** in their systemic transformation towards climate neutrality

More than **3 million lives saved**, living longer and better

Ensure **75% of soils** are healthy by 2030 for food, people, nature and climate



Πυλώνας 2: Ευρωπαϊκές Συμπράξεις



New approach to European Partnerships

New generation of objective-driven and more ambitious partnerships in support of agreed EU policy objectives

Key Features

- **Strategic orientation**
- **Systemic approach**
- **Simple architecture and toolbox**
- **Common set of criteria for the life-cycle**

CO-PROGRAMMED

Based on Memoranda of Understanding/contractual arrangements; implemented independently by the partners and by Horizon Europe

CO-FUNDED

Based on a joint programme agreed and implemented by partners; commitment of partners for financial and in-kind contributions

INSTITUTIONALISED

Based on long-term dimension and need for high integration; partnerships based on Art 185/187 of TFEU and the EIT legal acts for 2021-2027



Ενδεικτικές Ευρωπαϊκές Συμπράξεις (προτεινόμενες)

Overview of 49 candidate European Partnerships

HORIZON EUROPE PILLAR II - Global challenges & European industrial competitiveness

CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture, ...
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth
Transformation of health systems	High Performance Computing	Single European Sky ATM Research 3	Climate Neutral, Sustainable & Productive Blue Economy
Chemicals risk assessment	European Metrology (Art. 185)	Europe's Rail	Water4All
ERA for Health	AI-Data-Robotics	Connected and Automated Mobility (CCAM)	Animal Health & Welfare*
Rare diseases*	Photonics	Batteries	Accelerating Farming Systems Transitions*
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Agriculture of Data*
Personalised Medicine*	Clean steel – low-carbon steelmaking	Zero-emission road transport	Safe & Sustainable Food System*
Pandemic Preparedness* <i>Co-funded or co-programmed</i>	Processes4Planet	Built4People	
	Global competitive space systems**	Clean Energy Transition	
		Driving Urban Transitions	

Orange box: Institutionalised Partnerships (Art 185/7)

Green box: Institutionalised Partnerships / EIT KICs

Blue box: Co-Programmed

Light blue box: Co-Funded

* Calls with opening dates in 2023-24

** Calls with opening dates not before 2022

PILLAR III - Innovative Europe

EIT (KNOWLEDGE & INNOVATION COMMUNITIES)	SUPPORT TO INNOVATION ECOSYSTEMS
InnoEnergy	Innovative SMEs
Climate	
Digital	
Food	
Health	
Raw Materials	
Manufacturing	
Urban Mobility	
Cultural and Creative Industries	

CROSS-PILLARS II & III

European Open Science Cloud



Συμπράξεις: Χαρακτηριστικά

Challenges required a coordinated approach for solutions

- ✓ Shared vision and co-investment in SOLUTIONS by EU – Member States - Industry
- ✓ Specific programme for Research and Innovation
- ✓ Bring together Industry, University, Research Organisations, Public Bodies at national, regional, local level or international level, Civil Society Organisations (Foundations, NGOs, etc)
- ✓ Leverage significant investments
- ✓ Create critical TESTBEDS for demonstrating radically new innovations in EU



Πυλώνας 3: Καινοτόμος Ευρώπη

Pillar III

INNOVATIVE EUROPE:

stimulating **market-creating breakthroughs** and **ecosystems** conducive to innovation

European Innovation Council

Support to innovations with breakthrough and market creating potential

European innovation ecosystems

Connecting with regional and national innovation actors

European Institute of Innovation and Technology (EIT)

Bringing key actors (research, education and business) together around a common goal for nurturing innovation

The budget: **€10.6 billion**, incl. up to **€527 million** for ecosystems (including NGEU – Recovery Fund parts dedicated to EIC).

circa €3 billion



Πυλώνας 3: Ευρωπαϊκό Συμβούλιο Καινοτομίας (EIC)

The image shows the cover of a report from the European Commission. At the top, there is a small European Union flag and the text 'European Commission'. Below this, the title 'European INNOVATION Council' is displayed, with 'eic' in a stylized font. The main title of the report is 'EMPOWERING EUROPEAN INNOVATORS' in bold, followed by 'The EIC story' in a smaller font. A quote from Carlos Moedas, European Commissioner for Science & Innovation, dated June 2015, is featured. The background of the cover is orange and white, and it includes a black and white photograph of a smiling woman.

European Commission

eic **INNOVATION** Council

EMPOWERING EUROPEAN INNOVATORS

The EIC story

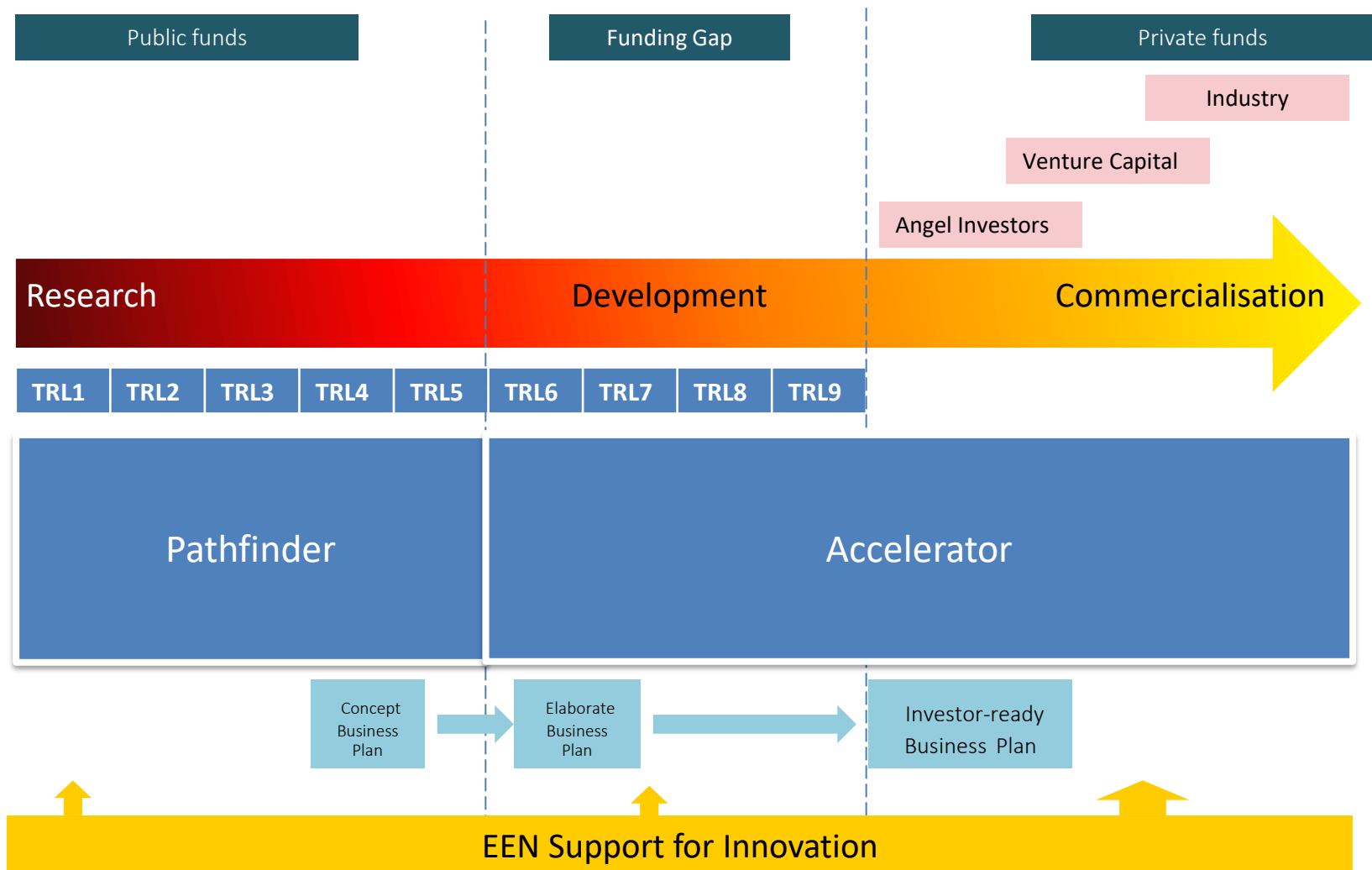
"Europe does not yet have a world class scheme to support the very best innovations in the way that the European Research Council is the global reference for supporting excellent science. So I would like us to take stock of the various schemes to support innovation and SMEs under Horizon 2020, to look at best practice internationally, and to design a new European Innovation Council."

Carlos Moedas, European Commissioner for Science & Innovation, June 2015.

Research and Innovation



Χρηματοδοτικά εργαλεία : € 1bn





Ευρωπαϊκό Ινστιτούτο Τεχνολογίας και Καινοτομίας (EIT)



European Institute of
Innovation & Technology

Making innovation happen

The EIT is a body of the European Union



What is the EIT?

The European Institute of Innovation and Technology (EIT) drives innovation in Europe by supporting entrepreneurs, innovators and students across Europe to turn their best ideas into reality.

How does the EIT work?



Trains a new
generation of
entrepreneurs

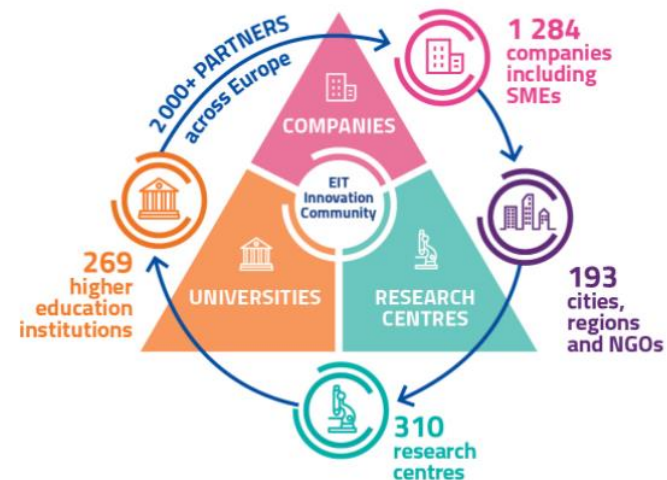


Develops
innovative
products
and services



Power
start-ups
& scale-ups

Europe's largest innovation community





Κοινότητες γνώσης και καινοτομίας του EIT

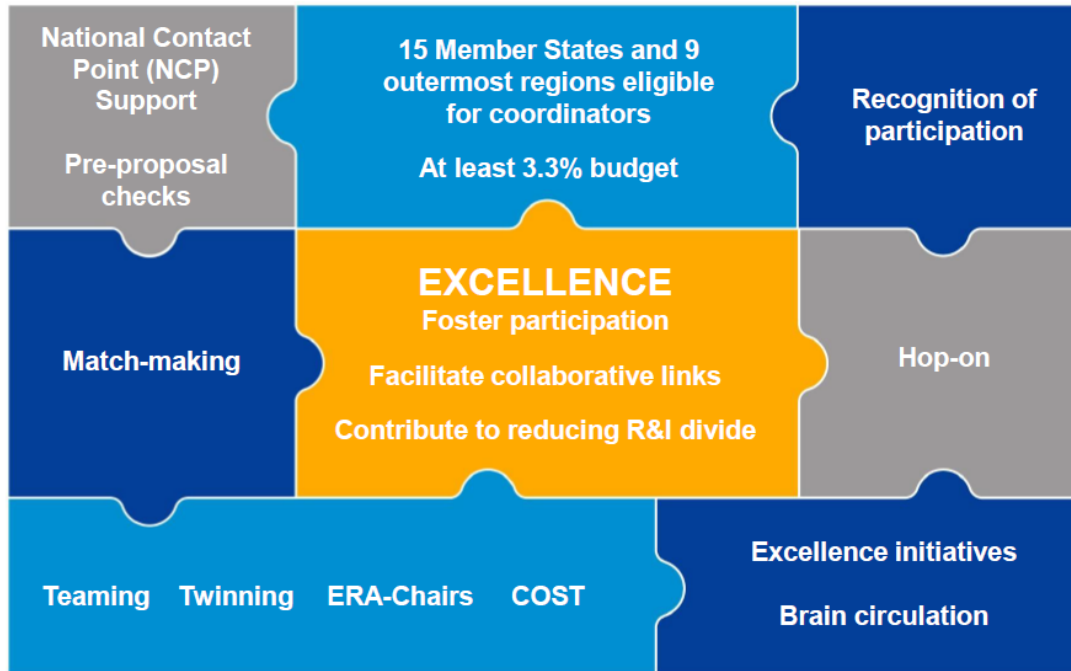




Διεύρυνση της συμμετοχής και επέκταση της αριστείας



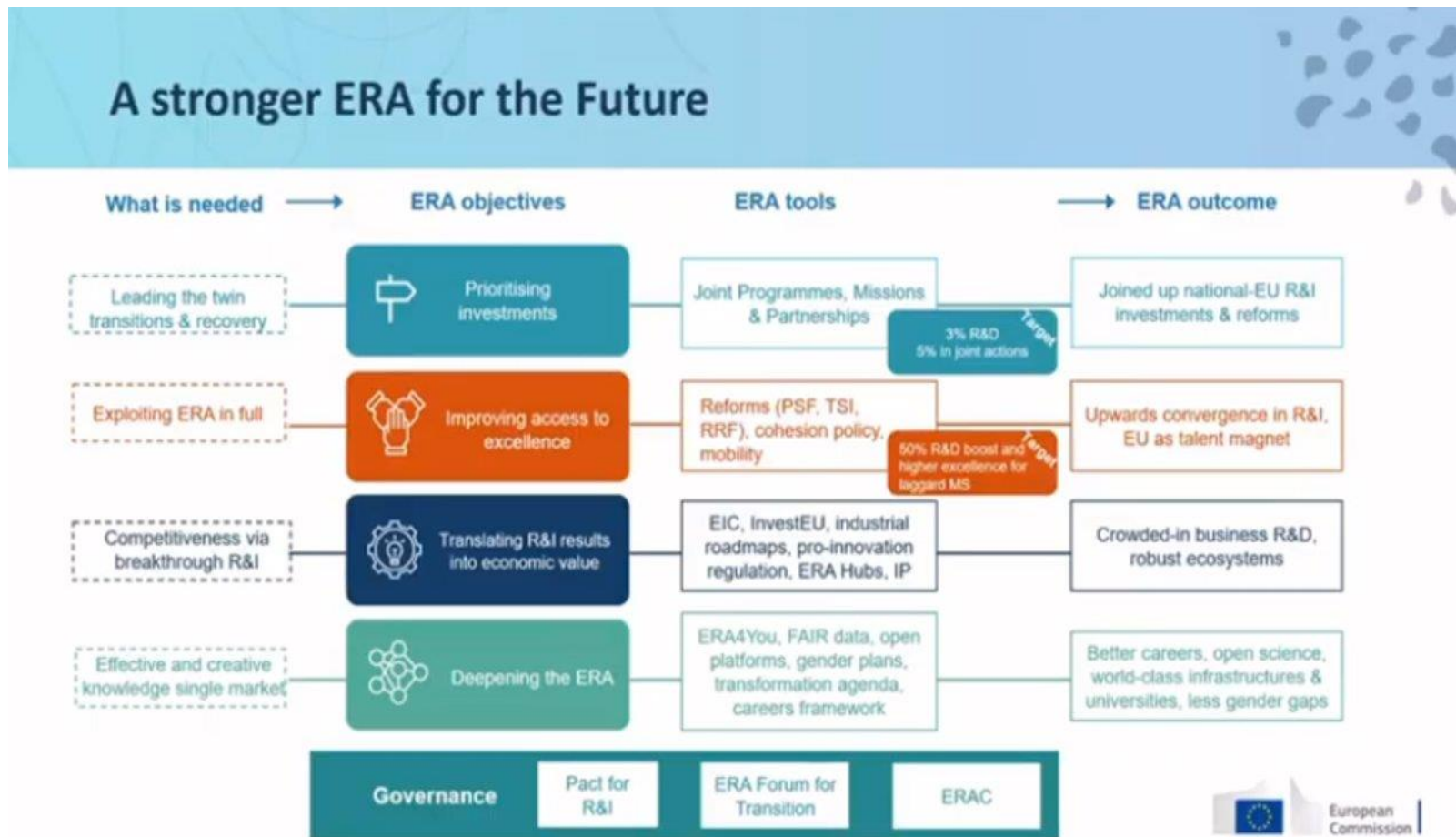
Widening participation/spreading excellence



Νέο status της Ελλάδας-χώρα 'widening'- νέες ευκαιρίες



Ο νέος Ευρωπαϊκός Χώρος Έρευνας και ο Ορίζοντας Ευρώπη





Δράσεις και Προϋπολογισμός

Widening Participation & Strengthening the European Research Area (ERA):

Widening Participation and Spreading Excellence

- Teaming, Twinning, ERA Chairs,
- European Cooperation in Science and Technology (COST)
- Boosting National Contact Points' (NCPs) activities, pre-proposal checks and advice
- Brain circulation
- Excellence initiatives:-
- Possibility for entities from widening countries to join already selected collaborative R&I actions
- Recognition of participation
- Matchmaking services

€2.96 billion

Reforming and enhancing the EU R&I system

- Strengthening the evidence base for R&I policy
- Foresight
- Support for policy makers to the ERA development
- Support to national R&I policy reform, including Policy Support Facility
- Attractive researcher careers and links with higher education
- Open science, citizen science and science communication
- Gender equality
- Ethics and integrity
- Support to international cooperation
- Scientific input to other policies
- Support to the Programme implementation
- Support for National Contact Points
- Support to dissemination & exploitation

€0.44 billion



Κανόνες Συμμετοχής



Admissibility

Same general admissibility conditions

- Applications must be submitted before the call deadline, **electronically** via the Funding & Tenders Portal
- Applications must be **complete, readable, accessible and printable**, and include a **plan for the exploitation and dissemination of results**, unless provided otherwise in the specific call conditions.

Proposal page limit

Substantial reduction in maximum length:

- RIAs and IAs type of actions: limit for a full application is **45 pages**
- CSAs: limit is **30 pages**
- First stage proposals: limit is **10 pages**
- EIC Pathfinder: limit is **17 pages**
- Exceptions, if any, would be specified in the call text.



Κανόνες Συμμετοχής



Eligibility

Consortium composition (collaborative projects)

- at least one independent legal entity established in a Member State, and
- at least two other independent legal entities each established either in a different Member State or an Associated Country.

Gender Equality Plan (applicable only from 2022 on)

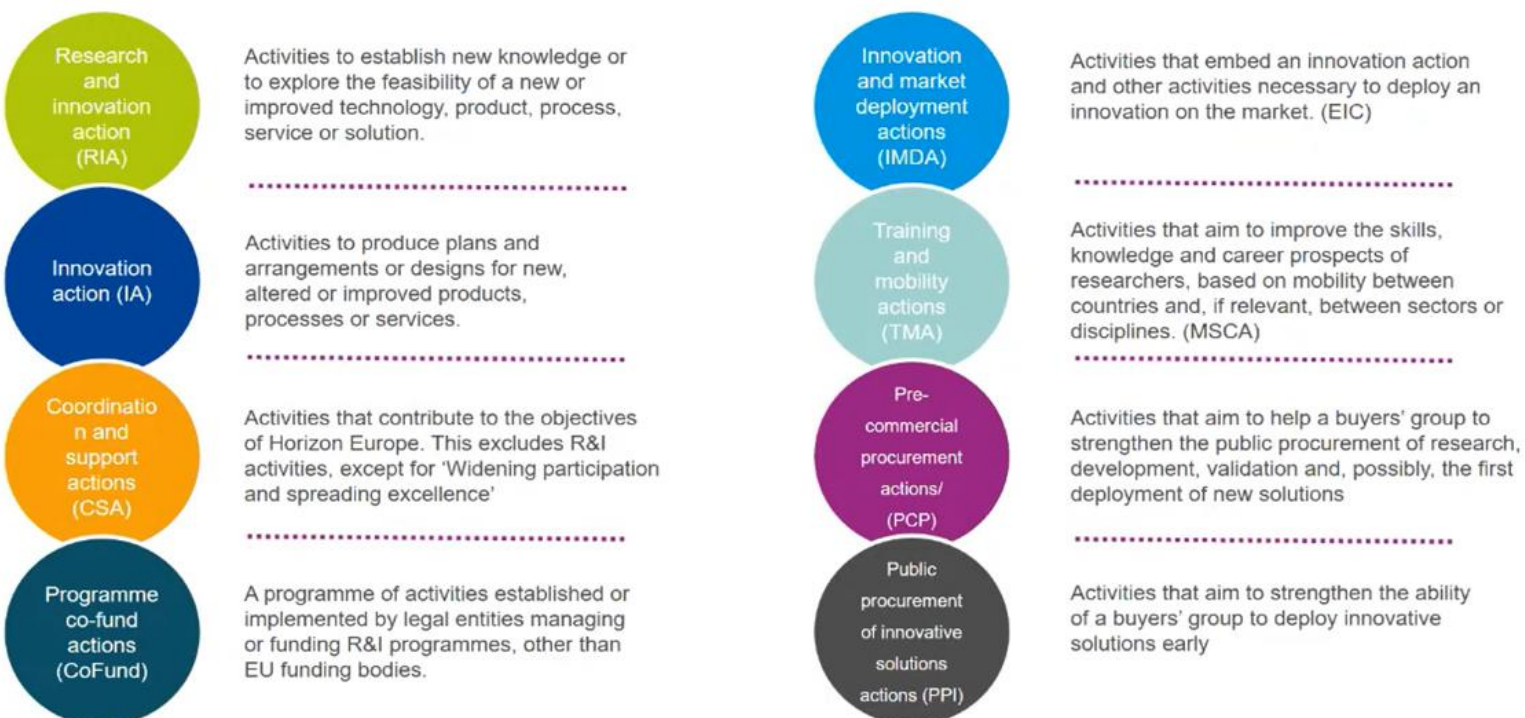
Participants that are public bodies, research organisations or higher education establishments from Members States and Associated countries **must have a gender equality plan**, covering minimum process-related requirements.

- A self-declaration will be requested at proposal stage (for all types of participants).
- Included in the entity validation process (based on self-declaration)



Τύπος δράσεων που χρηματοδοτούνται

Activities eligible for funding – Type of actions





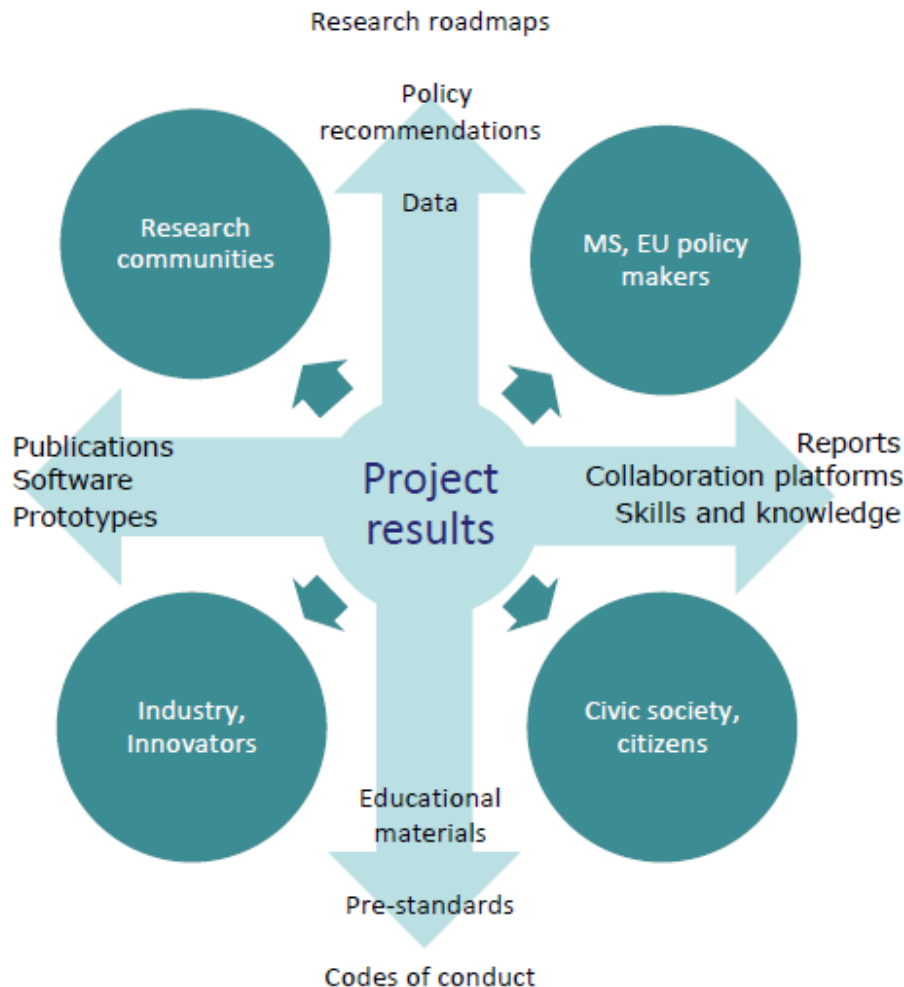
Dissemination and Exploitation

Key Impact Pathways

Open Science



Βασικοί Ορισμοί: Αποτελέσματα έργου



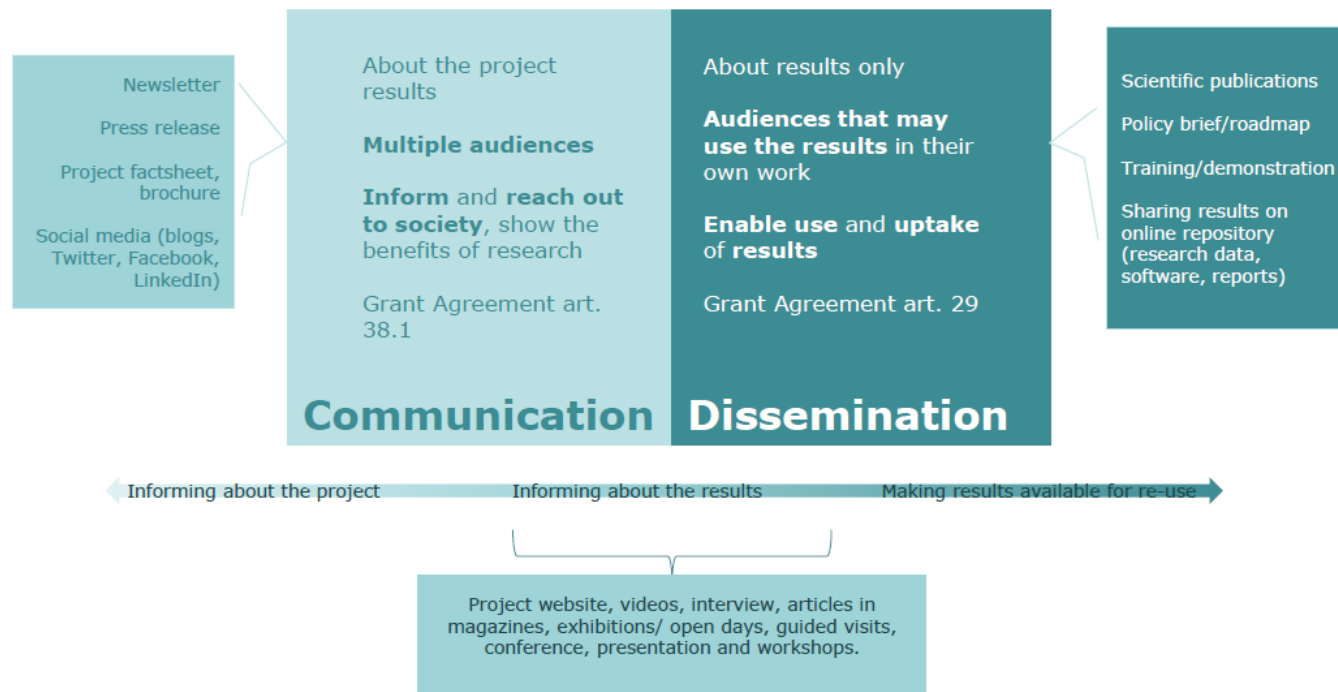
Χειροπιαστά ή μη, αποτελέσματα μιας δράσης πχ δεδομένα, γνώση και πληροφορία σε οποιαδήποτε μορφή, ασχέτως προστασίας τους.

- Key exploitable results: Re-usable & exploitable
- Χρησιμοποιούνται από:
Project partners
Stakeholders



Επικοινωνία και διάχυση

What is the difference?





Διάχυση και αξιοποίηση αποτελεσμάτων

What is the difference?





Γιατί είναι σημαντικό για την Ευρωπαϊκή Επιτροπή;



- Αύξηση της απήχησης της έρευνας
- Περισσότερη γνώση των παραγομένων αποτελεσμάτων από τα έργα έρευνας και καινοτομίας
- Ομαδοποίηση και διάθεση των αποτελεσμάτων σε ενδιαφερόμενους φορείς/οργανισμών/επιχειρήσεις
- Διευκόλυνση πλαισίου συνεργειών μεταξύ ευρωπαϊκών πρωτοβουλιών.



D&E στον Ορίζοντα Ευρώπη

- › Ενταγμένο στο σχεδιασμό του έργου
- › Αναμορφωμένο template
- › Παροχή κινήτρων προς τους δικαιούχους για χρήση και επανάχρηση (re-use) αποτελεσμάτων και δεδομένων.
- › Αναφορά δράσεων 4 έτη μετά το πέρας του έργου
- › Συστηματική συλλογή στοιχείων εκ μέρους της Επιτροπής (cluster of data), evidence-based policy making
- › Συστηματικότερο follow up και εμπλουτισμός βάσεων δεδομένων για περαιτέρω διάδοση – χρήση και από τρίτα μέρη όπως Common Dissemination & Exploitation Booster, Projects for Policy Reports (P4P), Innovation Radar, Horizon Results Platform (εν εξελίξει).



Key Impact Pathways

Horizon Europe legislation defines three types of impact tracked through **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
Impact**





Key Impact Pathways

Why do we need a robust monitoring system?

- Make sense of a complex funding landscape
- Connect micro-data with programme's objectives
- Get insights on time
- Account for the inherit risk and time lag of R&I investments
- Uncover the true added value of EU funding
- Reduce administrative burden on beneficiaries

Key principles of **Key Impact Pathways** Ambitious & pragmatic framework

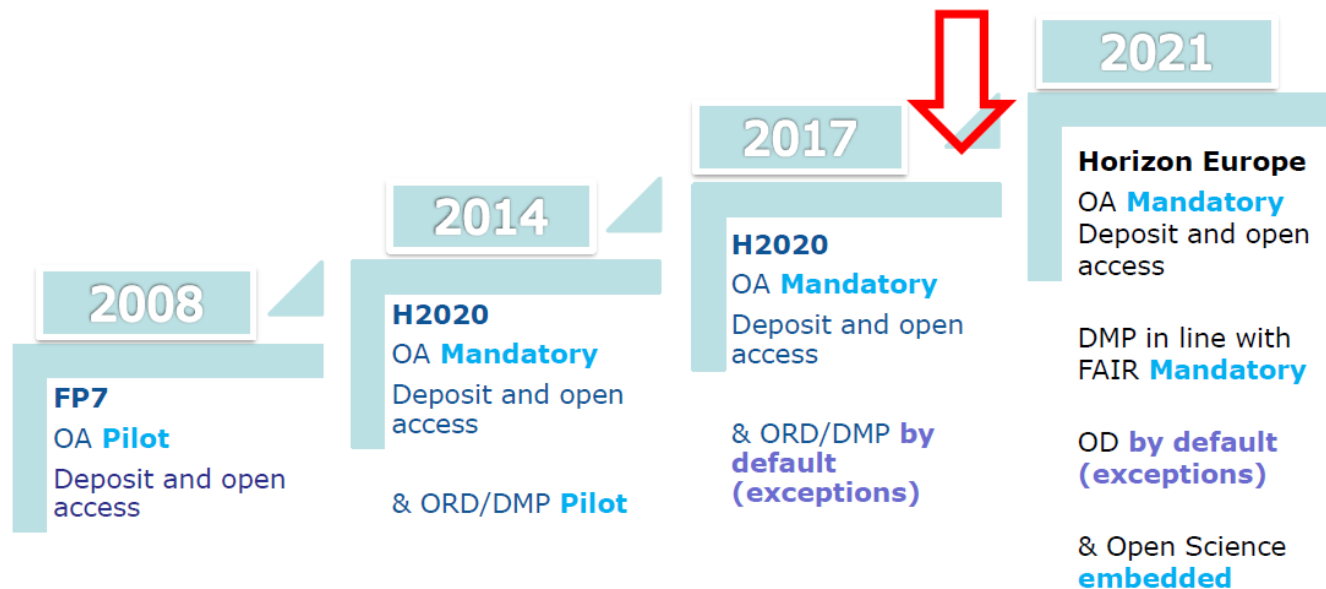
- **Proximity** from broad overview to continuous monitoring of each project
- **Attribution** details about most granular details (VAT numbers, researcher identifiers, DOIs...)
- **Traceability** multiple data sources in one place minimize reporting burden (publications, patents, companies, researchers)
- **Holistic approach** knowing how each part of the programme contributes to its impact
- **Stability** building on current systems, piloting new advanced counterfactual approaches



Εξέλιξη της ανοικτής πρόσβασης στα Προγράμματα-Πλαίσιο

Από την ανοικτή πρόσβαση στην ανοικτή επιστήμη

The evolution of Open Science in the EU funding programmes for R&I



*Horizon Europe goes beyond OA (publications & data)
to embrace & incentivise Open Science as *modus operandi* for science*



Ανοικτή Επιστήμη στον Ορίζοντα Ευρώπη

- › “Open Science Approach” ενταγμένη ολιστικά στο “design” μιας πρότασης
- › Εδραιώνει την υποχρέωση για ανοικτή πρόσβαση (OA)
- › Ενθαρρύνει τους συγγραφείς να ακολουθούν την ανοικτή πρόσβαση
- › Ενθαρρύνει συμμόρφωση με συνδυασμό υποχρεώσεων και κινήτρων
- › Ανάρτηση στο European Open Science Cloud
- › Έξοδα δημοσίευσης στα Hybrid journals δεν θα είναι επιλέξιμα



Εργαλεία για την ανοιχτή πρόσβαση: Open Research Europe



- ✓ Submissions as of end November 2020
- ✓ Tendered by the EC, total of 5.8 million euros/4 years
- ✓ Flat article fees paid by EC; 780 euros
- ✓ Powered by F1000 Research
- ✓ Commitment to the platform: new European Research Area



Εργαλεία για την ανοιχτή πρόσβαση: Open Research Europe

<https://open-research-europe.ec.europa.eu/>

The screenshot shows the Open Research Europe website. At the top, there is a search bar with the text "Search" and a "Search" button. Below the search bar is a blue navigation bar with the text "Open Research Europe" and links for "How to Publish", "About", "My Account", and "Sign In". The main content area features a section titled "Rapid & Transparent Publishing" with the text "Fast publication and open peer review for research stemming from Horizon 2020 funding across all subject areas." Below this text is a blue button labeled "SUBMIT YOUR RESEARCH", which is circled in blue. To the right of the button is the text "Powered by F1000Research". Below the button is a section titled "ARTICLES COMING SOON" and another section titled "We are accepting submissions for these subject areas" with a grid of six subject areas: Natural Sciences, Medical and Health Sciences, Social Sciences, Engineering and Technology, Agricultural and Veterinary Sciences, and Humanities and the Arts. At the bottom, there is a circular logo and the text "Enables researchers to publish any research they wish to share, supporting reproducibility, transparency and impact." A yellow button labeled "STAY INFORMED" is located in the bottom right corner.

European Commission

Research and Innovation

Open Research Europe

How to Publish ▾ About ▾

My Account ▾ Sign In

Rapid & Transparent Publishing

Fast publication and open peer review for research stemming from Horizon 2020 funding across all subject areas.

SUBMIT YOUR RESEARCH

Powered by F1000Research

ARTICLES COMING SOON

We are accepting submissions for these subject areas

Natural Sciences	Medical and Health Sciences	Social Sciences
Engineering and Technology	Agricultural and Veterinary Sciences	Humanities and the Arts

Enables researchers to publish any research they wish to share, supporting reproducibility, transparency and impact.

STAY INFORMED



Εργαλεία για την ανοιχτή πρόσβαση : European Open Science Cloud





Νέα διαδικτυακή πύλη για τον Ορίζοντα Ευρώπη από το Δίκτυο ΠΡΑΞΗ

<http://horizoneurope.gr/>

Framework Programmes Consultation Platform

 **HORIZON EUROPE**
2021-2027

ΤΟ ΠΡΟΓΡΑΜΜΑ ΝΕΑ & ΕΚΔΗΛΩΣΕΙΣ ΥΠΟΣΤΗΡΙΞΗ ΔΗΜΟΣΙΕΥΣΕΙΣ ΕΠΙΚΟΙΝΩΝΙΑ 🔍

Νέα | 16-02-2021

Save the Date! “EU R&I Days”: Η εμβληματική εκδήλωση για την έρευνα και την καινοτομία πραγματοποιείται στις 23-24 Ιουνίου



Χρήσιμοι σύνδεσμοι

- › Horizon Europe: https://ec.europa.eu/info/horizon-europe_en
- › R&I Missions (incl. reports): https://ec.europa.eu/info/horizon-europe/missions-horizon-europe_en
- › Partnerships for R&I: https://ec.europa.eu/info/horizon-europe/european-partnerships-horizon-europe_en
- › Open science policy: https://ec.europa.eu/info/research-and-innovation/strategy/goals-research-and-innovation-policy/open-science_en
- › EU approach to sustainable development: https://ec.europa.eu/info/strategy/international-strategies/sustainable-development-goals/eu-holistic-approach-sustainable-development_en
- › European Innovation Council: <https://ec.europa.eu/research/eic/index.cfm>
- › European Institution of Innovation and Technology: <https://eit.europa.eu/>
- › Knowledge and Innovation Communities: <https://eit.europa.eu/our-communities/eit-innovation-communities>
- › European Open Science Cloud: <https://eosc-portal.eu/>

Σας ευχαριστώ για την
προσοχή σας!

Κατερίνα Παπαδούλη

National Contact Point Horizon Europe

papadouli@praxinetwork.gr

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