

Introduction to Horizon Europe

University of Kent Annual Visit

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Outline

- **Introduction to Horizon Europe**
 - UK participation
 - Structure and aims of the new programme
 - Novelties under Horizon Europe
 - Perceived barriers/myths around applying
- **Q&A**



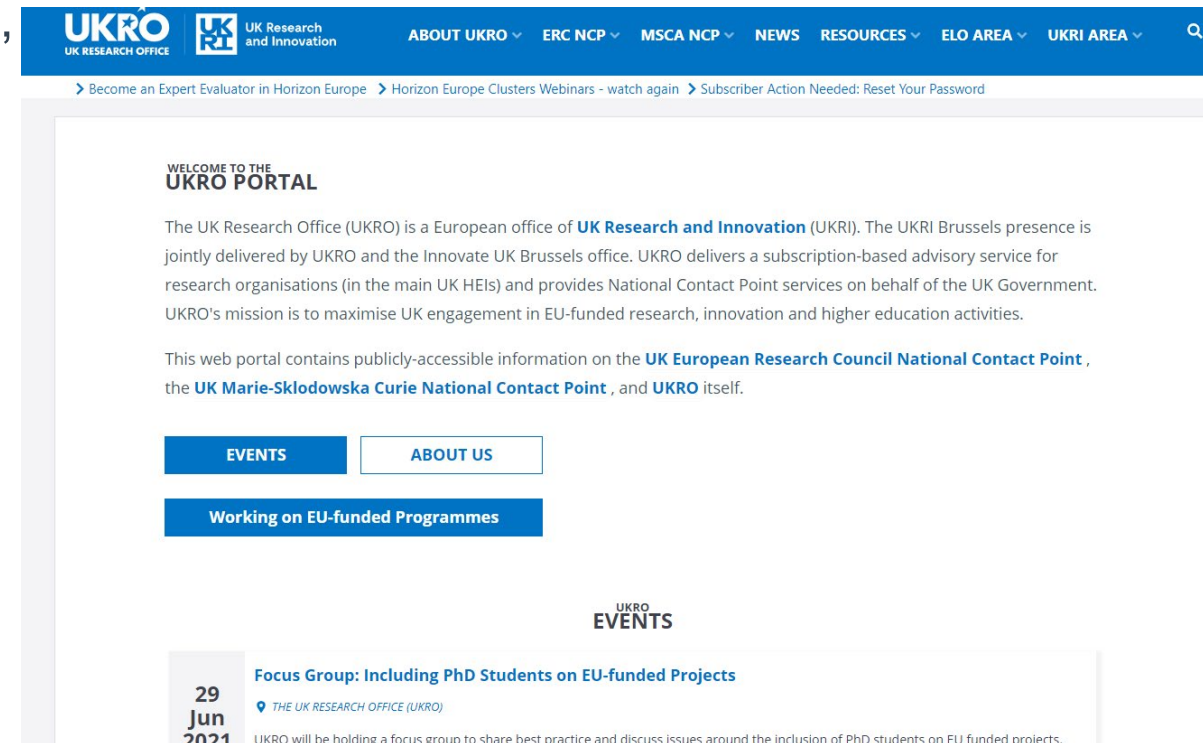
UKRO

- **Mission**

- Maximise UK engagement in EU-funded research, innovation and higher education activities

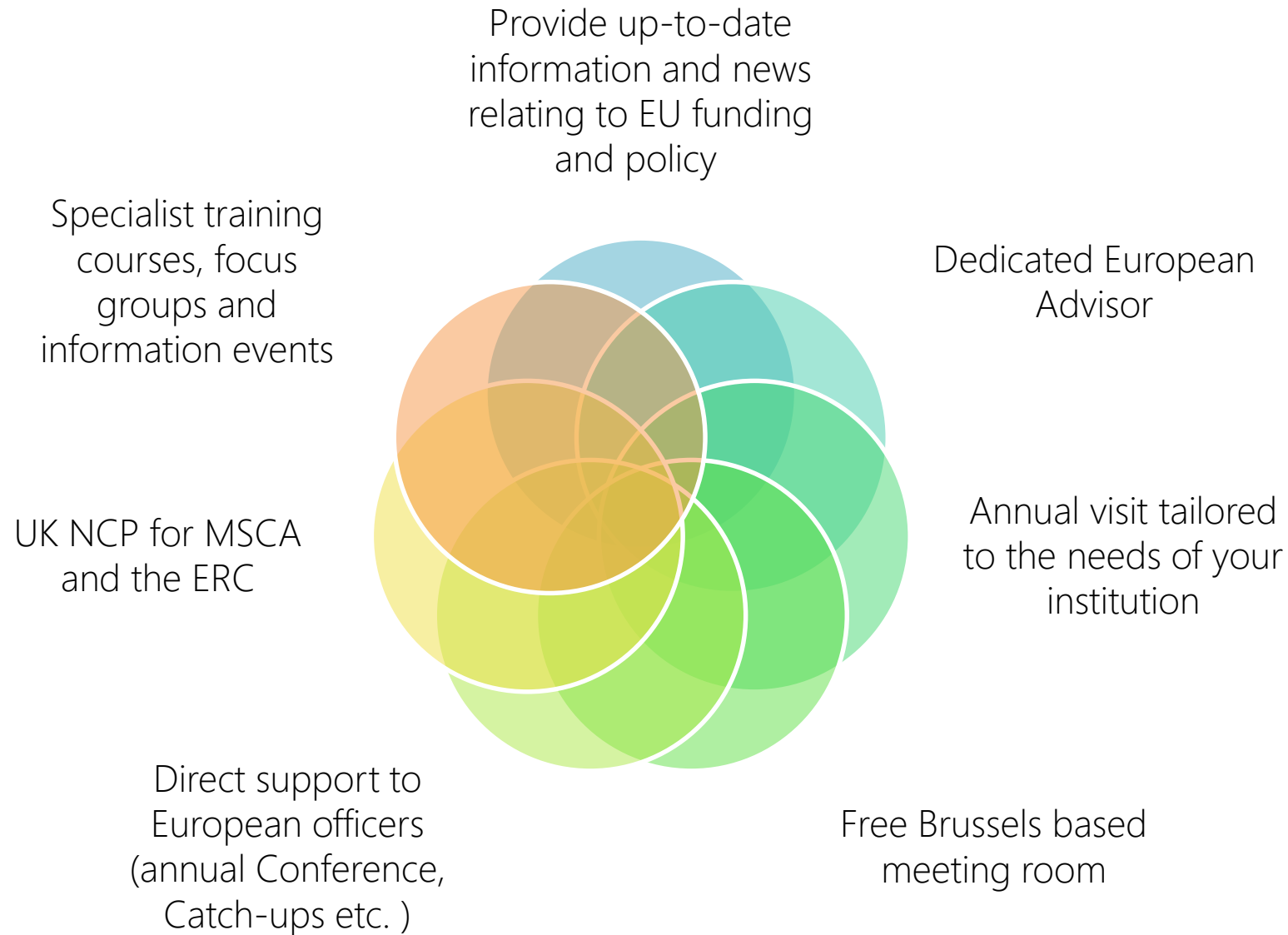
- **Our office**

- Based in Brussels
- European office of UK Research and Innovation (UKRI)
- Delivers subscription-based advisory services for around 140 research organisations in the UK and beyond
- Provides [ERC](#) and [MSCA](#) National Contact Point services on behalf of the UK Government



<https://www.ukro.ac.uk/>

Our suite of services



UK's Relationship with the EU

UK Participation

UK Participation – Association to Horizon Europe



- On 24 December 2020, the UK Government announced the conclusions of the negotiations with the European Commission.
- Included [confirmation](#) that the UK will associate to Horizon Europe
- The agreement also included participation in:
 - JRC activities, Article 185 & 187 Partnerships, the EIT, ERICs, ERAC, Euratom ITER and Copernicus
- The intent is for the UK to associate in time to participate from the beginning of the programme
- Withdrawal Agreement is still in place for H2020 funded projects

Commission's Q&A on UK Participation

- The UK is expected to soon become an associated country to Horizon Europe.
- The UK will have the same rights and obligations as other countries associated to the Programme
- UK entities including universities, research centres, scientists, innovative businesses, industry, etc. will have full rights to participate in the first calls for proposals as soon as they are published on the [Funding & Tender Opportunities Portal](#).
- This includes calls published before the adoption of the Horizon Europe Regulation
 - such as early COVID-19 calls, the European Research Council (ERC), and the European Innovation Council (EIC) - apart from the EIC Fund
- UK entities are eligible for funding at the same rates and under the same conditions as EU participants
- UK entities can lead project consortia and count towards the minimum number of countries in calls for transnational projects



Q&A on the UK's participation in Horizon Europe

The UK is expected to soon become an associated country to the EU's R&I Framework Programme Horizon Europe. The UK will therefore have the same rights and obligations as other countries associated to the Programme.

Research and
Innovation

Date: 25-02-2021

https://ec.europa.eu/info/files/ga-uks-participation-horizon-europe_en

What Does this Mean

UK based organisations and researchers can:

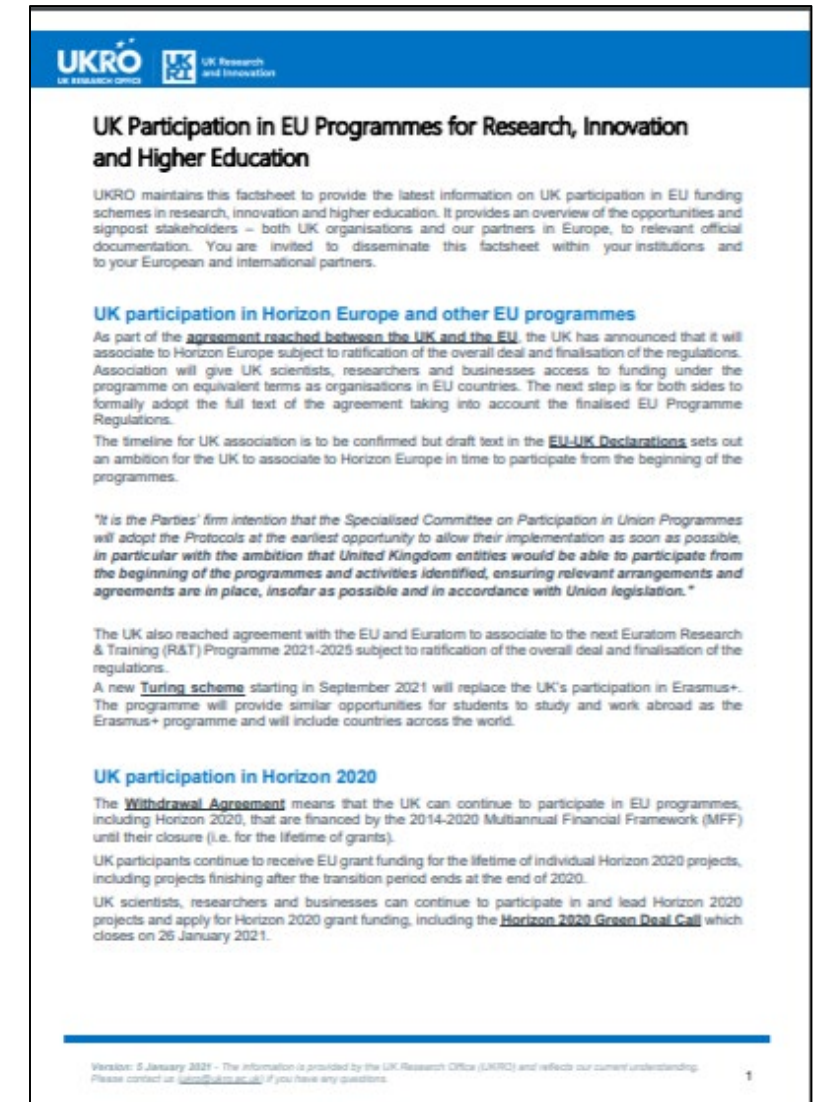
- Participate in all parts of Horizon Europe
 - Inducing ERC, MSCA and COST
- Coordinator collaborative bids, host ERC PIs, and recruit MSCA fellows
- Receive funding directly from the EC for the life time of the project
- Become expert reviewers, sit on expert panels and participate in consultations

UK based organisations and researchers must:

- Follow standard eligibility rules
- Follow funding rules as set out in the Horizon Europe MGA

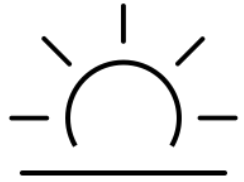
Links to official documents and further information

- UKRO [website](#) provides latest information on UK participation
- The official statements on the EU-UK relationship are available on a [dedicated European Commission website](#) and the [UK Government page](#).
- UK Government provides information on [EU Funded Programmes under the Withdrawal Agreement](#).
- [Turing scheme](#) for students to study and work abroad
 - New to replace Erasmus



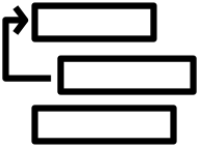
Introduction to Horizon Europe

What is Horizon Europe?



- The EU's flagship programme for research and innovation running from 2021-2027
- **Overall budget of €95.5 billion**
- **Ambition:** To shape the future of Europe and making Horizon Europe the most ambitious research and innovation programme ever introduced
- **Aim:** To create opportunities for the world of tomorrow from the challenges of today and:
 - Strengthen the European Research Area (ERA)
 - Boost Europe's innovation capacity, competitiveness and growth
 - Deliver on citizens' priorities

Horizon and EU policy priorities



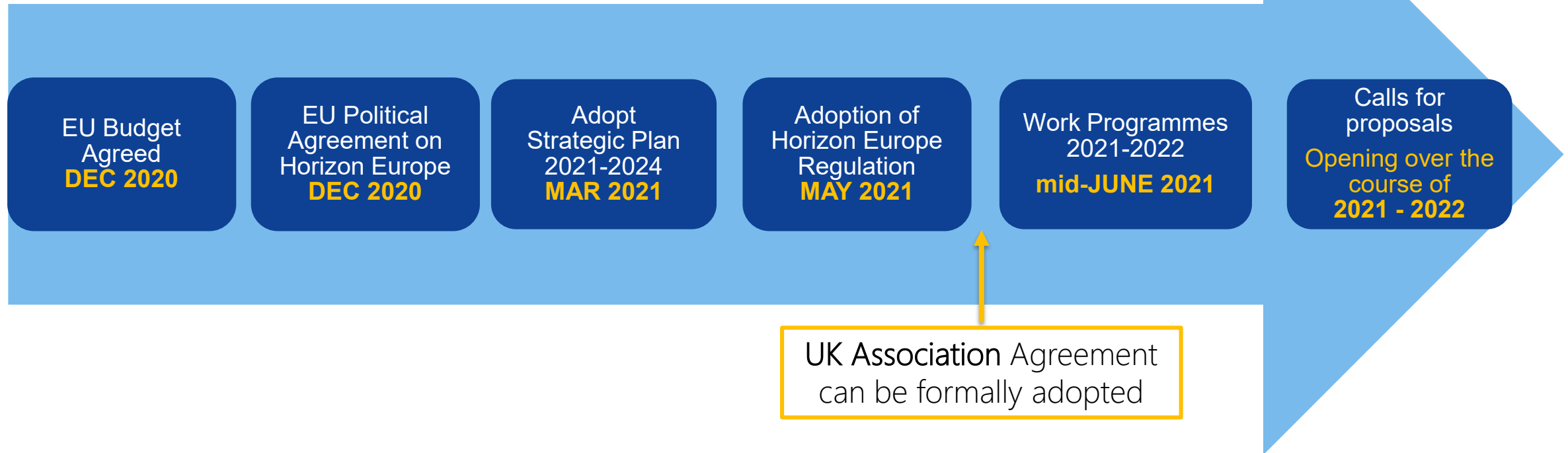
- Horizon Europe will include actions that support the wider political objectives of the European Commission, including the green and digital transition and a sustainable **recovery from the COVID-19 pandemic**
- Specifically, it will support the ambition to make **Europe the first climate-neutral continent by 2050**, directing a minimum of 35% of the funding available to climate objectives (7.5% on biodiversity)
- It will contribute to making 2021-2030 **Europe's digital decade** and further support the objectives of the **European Green Deal**
- It will establish clear links between R&I activities and the **UN Sustainable Development Goals (SDGs)**, as well as work to ensure the Union helps fulfil its role as signatory to the **Paris Agreement**

What's new in the Horizon Europe?



- Mission-oriented funding:
 - Portfolios of activity to contribute to 5 high-level, impactful and global objectives
- European Innovation Council:
 - Formalising the EIC and building upon its pilot phase under H2020
- Open to the World:
 - Enhanced association opportunities for Third Countries
- Open Science policy:
 - Extending the use of open access and further developing the European Open Science Cloud (EOSC)
- New approach to European Partnerships:
 - Consolidating the use of public-public and public-private partnerships
- Spreading Excellence:
 - Increase of emphasis and funding for 'widening' activities

Horizon Europe Steps Towards Funding Calls Open



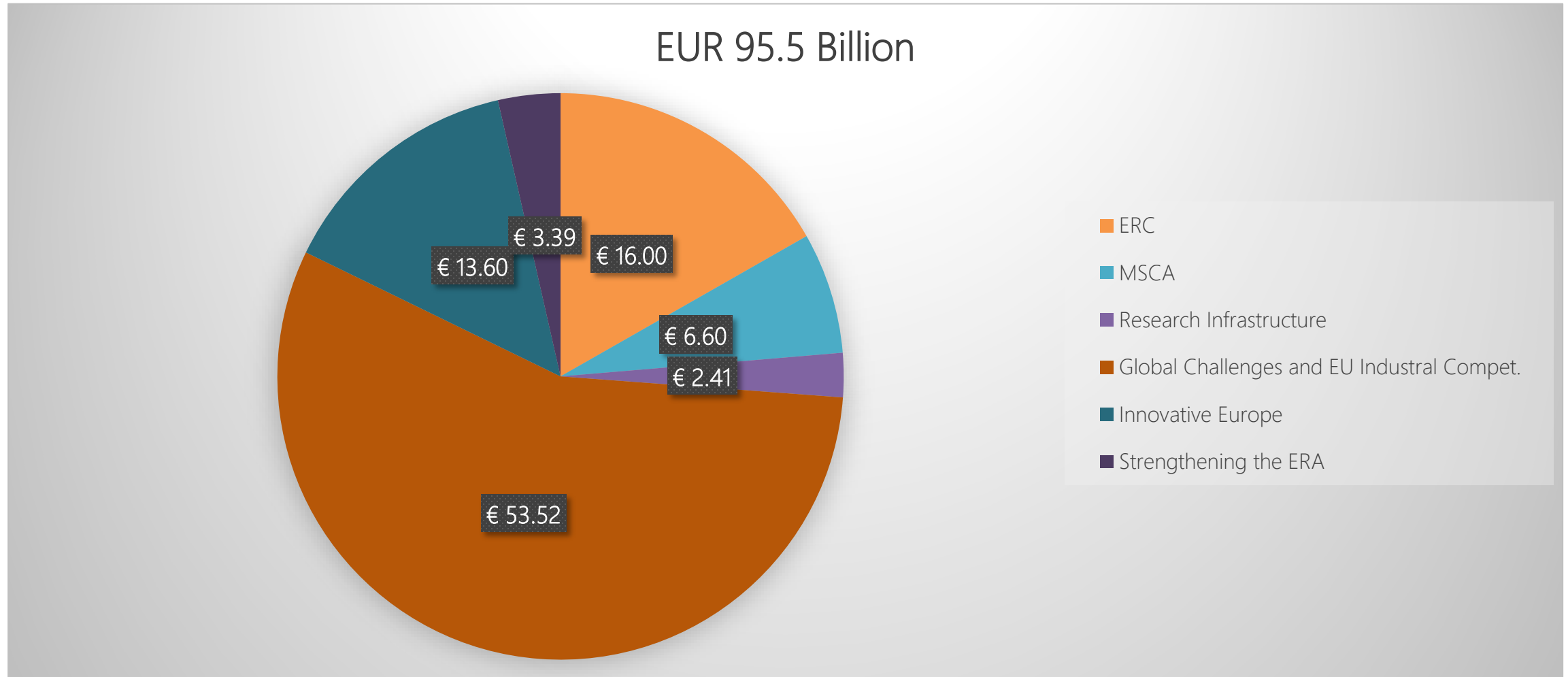
- A footnote has been added to individual (draft) Work Programme parts to clarify that countries in the process of associating can apply, and formal association needs to be concluded before grant agreements can be signed
- European Commission's [Q&A on UK participation in Horizon Europe](#)

Three Pillar Structure



- Aims at maximising the effects of European research and innovation investments
- Ensure a sustainable, fair and prosperous future for people and planet based on European values
- Boosting the Union's competitiveness and growth

Horizon Europe - Distribution of the Budget



- Tackling climate change (~35 % of budget) and supporting biodiversity (~7.5% of budget)

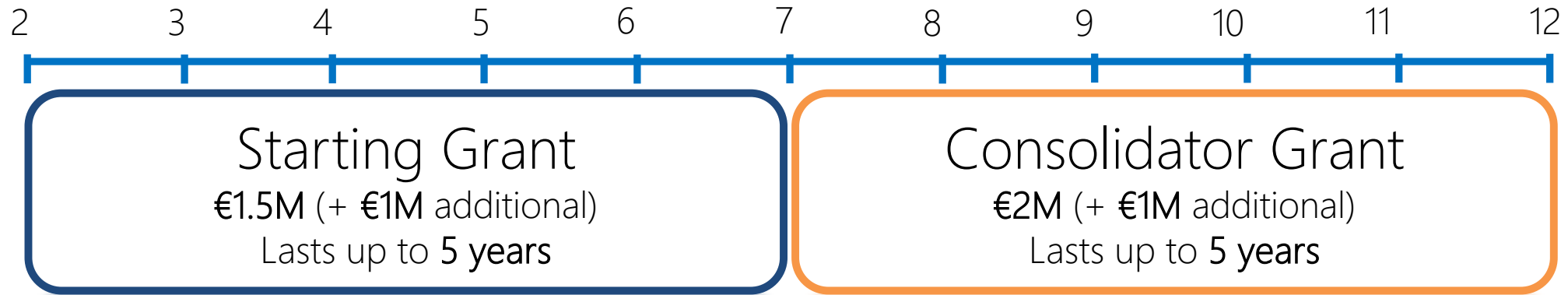
Pillar 1 – Excellent Science

Overview of the European Research Council

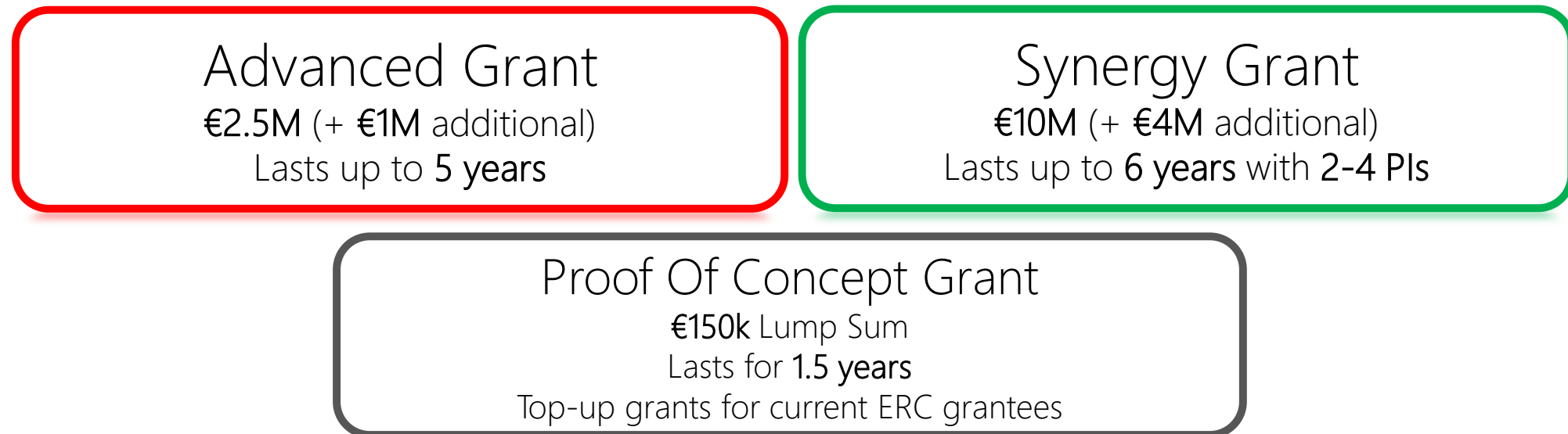
- Established to fund **high calibre researchers in any research area** including the Arts and the Humanities.
- Supports and encourages truly creative and excellent scientists, scholars and engineers **to be adventurous and take risks in their research**
- Encourages researchers to **go beyond established frontiers of knowledge** and undertake multidisciplinary, highly ambitious, innovative research.
- No mobility or nationality requirements
- No need for multi-national partnerships or consortium
- One host organisation must be located in an EU Member State (MS) or Associated Country (AC)

ERC Grant Schemes

Years post-PhD



No PhD Requirements



Tentative ERC 2022 Calls

Double check when the 2022 ERC
Work Programme is published!!

	Starting Grant	Consolidator Grant	Advanced Grant	Synergy Grant	Proof of Concept	
Call Type	ERC-2022-StG	ERC-2022-CoG	ERC-2022-AdG	ERC-2022-SyG	ERC-2022-PoC	
Call Opens	23/09/2021	19/10/2021	20/01/2022	15/07/2021	15/07/2021	16/11/2021
Deadline	13/01/2022	17/03/2022	28/04/2022	10/11/2021	14/10/2021	15/02/2022 19/05/2022 29/09/2022
Budget	€757 M	€784 M	€561 M	€300 M	€25 M	€25 M

Marie Skłodowska-Curie Actions (MSCA)

- Provides grants for all stages of researchers' careers and encourage transnational, intersectoral and interdisciplinary mobility
- Enables research-focused organisations - universities, research centres, and companies – to host talented foreign researchers and to create strategic partnerships with leading institutions worldwide
- Equips researchers with the necessary skills and international experience for a successful career, either in the public or the private sector
- The programme responds to the challenges sometimes faced by researchers, offering them attractive working conditions and the opportunity to move between academic and other settings
- Are open to all domains of research and innovation, from fundamental research to market take-up and innovation services
- Fields are chosen freely by the applicants (individuals and/or organisations) in a fully 'bottom-up' manner

Marie Skłodowska-Curie Actions in Horizon Europe - An Overview:



1. MSCA Doctoral Networks (formerly ITNs)

- Funds consortium based research projects
- Provides recruited researchers with training through research
- Mobility is key – intersectoral, interdisciplinary and international!
- Provides full funding for PhD students



2. MSCA Post-Doctoral Fellowships (formerly IFs)

- Provides full funding for an individual postdoctoral researcher
- Mobility is key – intersectoral, interdisciplinary and international!
- Training through research
- Opportunities for European or internationally hosted fellowships with opportunities for secondments.



3. MSCA COFUND Doctoral and Fellowship Programme

- Collaborative funding through a mono beneficiary scheme
- Training through research
- Mobility is key – intersectoral, interdisciplinary and international!
- EC provides a contribution to the funding for a cohort of PhD students or Post-Docs



4. MSCA Staff Exchange Scheme (formerly RISE)

- Funds short-term exchanges of personnel between academic, industrial and commercial organisations throughout the world
- Funds consortium based research projects
- Project implemented through the secondment of staff for a period between 1 and 12 months

Upcoming MSCA calls (to be confirmed)

Double check with the MSCA Work Programme when it is published!!!

MSCA Postdoctoral Fellowships 2021 (HORIZON-MSCA-PF-2021)

- Opening date: 22 June 2021
- Deadline for submission: 12 October 2021

MSCA Doctoral Networks 2021 (HORIZON-MSCA-DN-2021)

- Opening date: 22 June 2021
- Deadline for submission: 16 November 2021

MSCA and Citizens 2022 (MSCA-CITIZENS-2022)

- Opening Date: 22 June 2021
- Deadline for submission 14 October 2021

MSCA Staff Exchanges 2021 (HORIZON-MSCA-SE-2021)

- Opening date: 07 October 2021
- Deadline for submission: 09 March 2022

MSCA COFUND 2021 (HORIZON-MSCA-COFUND-2021)

- Opening date: 11 October 2021
- Deadline for submission: 10 February 2022

What are Research Infrastructures?

- Research infrastructures are **facilities, resources and services** used by the research communities to conduct research and foster innovation.
- May be used beyond research (education or public services)
- Includes:
 - **major scientific equipment** (or sets of instruments);
 - **knowledge-based resources** (collections, archives, scientific data);
 - **e-infrastructure** (data, computing systems, communication networks);
 - **other infrastructure of a unique nature** essential to achieve excellence in research and innovation.
- Infrastructures may be '**single-sited**', '**virtual**' or '**distributed**'.

Pillar 2 – Global Challenges & Industrial Competitiveness

Pillar 2 - Global Challenges and European Industrial Competitiveness

- Clusters

Cluster	Areas of Intervention	
1) Health	<ul style="list-style-type: none"> • Health throughout the life course • Non-communicable and rare diseases • Tools, technologies and digital solutions for health and care, including personalised medicine 	<ul style="list-style-type: none"> • Environmental and social health determinants • Infectious diseases, including poverty-related and neglected disease • Health care systems
2) Culture, Creativity & Inclusive Society	<ul style="list-style-type: none"> • Democracy and Governance • Social and economic transformations 	<ul style="list-style-type: none"> • Culture, cultural heritage and creativity
3) Civil Security for Society	<ul style="list-style-type: none"> • Disaster-resilient societies • Protection and Security 	<ul style="list-style-type: none"> • Cybersecurity
4) Digital, Industry and Space	<ul style="list-style-type: none"> • Manufacturing technologies • Advanced materials • Next generation internet • Circular industries • Space, including Earth Observation • Emerging enabling technologies 	<ul style="list-style-type: none"> • Key digital technologies, including quantum technologies • Artificial Intelligence and robotics • Advanced computing and Big Data • Low-carbon and clean industry
5) Climate, Energy & Mobility	<ul style="list-style-type: none"> • Climate science and solutions • Energy systems and grids • Communities and cities • Industrial competitiveness in transport • Smart mobility 	<ul style="list-style-type: none"> • Energy supply • Buildings and industrial facilities in energy transition • Clean, safe and accessible transport and mobility • Energy storage
6) Food, Bioeconomy, Natural Resources, Agriculture & Environment	<ul style="list-style-type: none"> • Environmental observation • Agriculture, forestry and rural areas • Circular systems • Food systems 	<ul style="list-style-type: none"> • Biodiversity and natural resources • Seas, oceans and inland waters • Bio-based innovation systems in the EU Bioeconomy

Work Programmes with new impact-driven approach

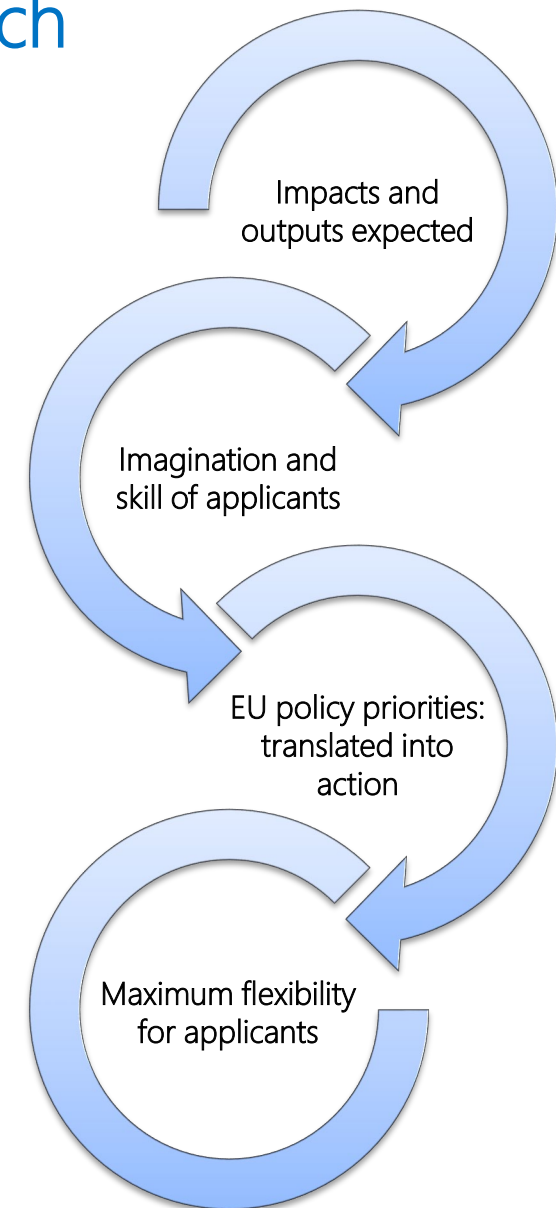
Horizon Europe supports research and innovation through Work Programmes, which set out funding opportunities for research and innovation activities

Horizon Europe has new structure for calls with each Work Programme part including a number of:

- 'Destinations',
- Topic
- Expected Outputs

Destinations set out priorities but will leave the exact approach for achieving them to the applicant

Aimed at giving applicants greater freedom in translating policy priorities into concrete action



Pillar 3 – Innovative Europe

Pillar 3 – Innovative Europe – European Innovation Council (EIC)

- Provides a coherent and connected system of innovation funding that supports projects with market potential
- Principally targeted at Small- and Medium-sized Enterprises (SMEs) and industry
- EIC will serve as a 'one-stop shop' for European innovators
- Channel funding through three main schemes

Pathfinder

- Based on the FET Open
- Support international consortia working on establishing future and emerging breakthrough technologies through collaborative research and innovation projects

Transition

- For 2021, only open to ERC Proof of Concept grantees and EIC Pathfinder grantees
- Matures a novel technology and develops a business case to bring it to market

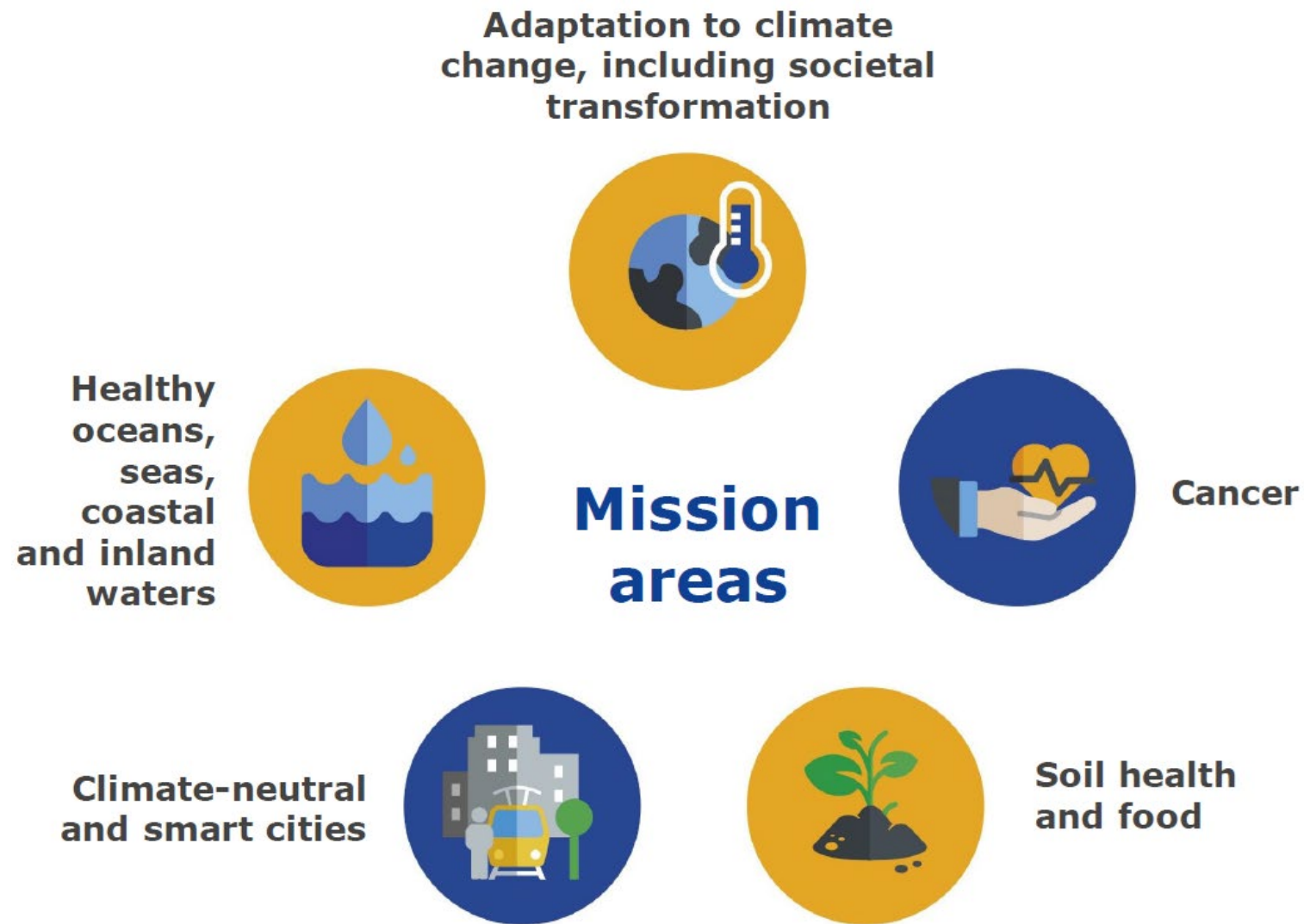
Accelerator

- Based on the SME Instrument
- Will bridge the financing gap between late stages of innovation activities and market take-up, to effectively deploy breakthrough market-creating innovation and scale up companies where the market does not provide viable financing

EIC Pathfinder Open

- No predefined thematic priorities, open to proposals in any field of science, technology or application.
- Explore foundations for radically new future technologies, high-risk & high-impact interdisciplinary research that underpins technological breakthroughs.
- Pathfinder goes beyond what is already known. Visionary thinking can open up promising avenues towards powerful new technologies.
- Applicants are typically visionary scientists, entrepreneurial researchers and, research organisations, start-ups, high-tech SMEs and industrial stakeholders interested in technological research and innovation.
- Supports early stage development of such future technologies (e.g. various activities at low Technology Readiness Levels 1-4).

Horizon Europe Missions









Other Novelties of Horizon Europe

Cross cutting aspects

Dissemination and Exploitation and Communication

- At proposal stage, you will need to submit a short description of your D&E&C activities (5 pages)
- This short description of D&E&C activities should include planned measures to maximise the impact of your project
- The full D&E&C plan is a mandatory project deliverable after the first 6 months of the project. It needs to be updated regularly

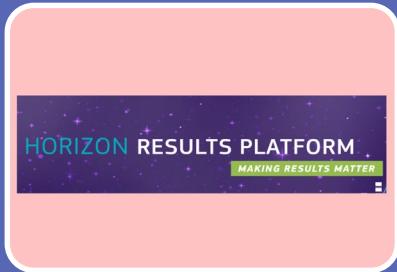
In a nutshell

Communication	Dissemination	Exploitation	
			
Reach out to society and show the impact and benefits of EU-funded R&I activities, e.g. by addressing and providing possible solutions to fundamental societal challenges.	Transfer knowledge & results with the aim to enable others to use and take up results, thus maximising the impact of EU-funded research.	Effectively use project results through scientific, economic, political or societal exploitation routes aiming to turn R&I actions into concrete value and impact for society.	 Objective
Inform about and promote the project AND its results/success.	Describe and ensure results available for others to USE → focus on results only!	Make concrete use of research results (not restricted to commercial use.)	 Focus
Multiple audiences beyond the project's own community incl. media and the broad public.	Audiences that may take an interest in the potential USE of the results (e.g. scientific community, industrial partner, policymakers).	People/organisations including project partners themselves that make concrete use of the project results, as well as user groups outside the project.	 Target Audience

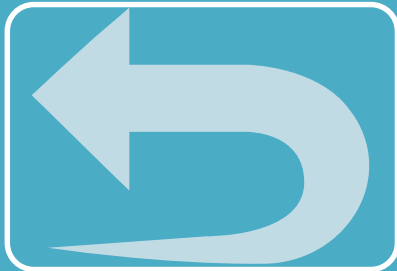
Reinforced focus on exploitation



Beneficiaries must complete a results ownership list (ROL) in the last periodic report to clarify the ownership of the results as well as to promote and simplify their exploitation.



If despite their best efforts no exploitation takes place within one year after the end of the project, the beneficiaries must use the Horizon Results Platform to find interested parties to exploit the results.



Continued reporting on the progress and obstacles regarding exploitation thereafter.

Open Science

- **Continuation of the Open Science policy developed under Horizon 2020**
 - further advances, requiring research data to be FAIR and open by default
- **Encouraging uptake of Open Science practices through funding**
 - including for activities to enhance researcher skills in Open Science and support reward systems
- **Open Access to scientific publications**
 - Immediate open access via repository at the latest upon publication under open licence
 - Only publication fees (if any) in full open access venues are eligible for reimbursement
- **From open research data pilot to responsible research data management**
 - All research data must be managed in line with FAIR principles, with data management plan as a standard deliverable
 - Open access to research data via repository under principle 'as open as possible, as closed as necessary'
- **Additional open science practices may apply if indicated in work programme**

- ❖ Monitoring system to ensure compliance with Horizon Europe provisions
- ❖ Evaluation Criteria



Open Research Europe

Scholarly publishing platform that provides Horizon 2020 and Horizon Europe beneficiaries with a no-cost full open access peer-reviewed publishing service, across all fields of research

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

Research and Innovation

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Gateways

Gateways are dedicated portals for Horizon 2020 programme areas and their thematic sections. In each gateway, you will find articles published on Open Research Europe that are linked to projects funded under topics of their specific sections.




Enhanced European Innovation Council (EIC) Pilot

This gateway hosts the articles published on Open Research Europe stemming from the EIC pilot programme section supported by Horizon 2020.




European Institute of Innovation and Technology (EIT)

This gateway hosts the articles published on Open Research Europe stemming from the EIT programme section supported by Horizon 2020.




Excellent Science

This gateway hosts the articles published on Open Research Europe stemming from the Excellent Science programme section supported by Horizon 2020.




Focus areas

This gateway hosts the articles published on Open Research Europe stemming from the focus areas programme section supported by Horizon 2020.




Industrial Leadership

This gateway hosts the articles published on Open Research Europe stemming from the Industrial Leadership programme section supported by Horizon 2020.




Science with and for Society

This gateway hosts the articles published on Open Research Europe stemming from the Science with and for Society programme section supported by Horizon 2020.



Societal Challenges

This gateway hosts the articles published on Open Research Europe stemming from the Societal Challenges programme section supported by Horizon 2020.



Spreading Excellence and Widening Participation

This gateway hosts the articles published on Open Research Europe stemming from the Spreading Excellence and Widening Participation programme section supported by Horizon 2020.

[Stay informed](#)

Enhanced Emphasis on Gender – Why?

- Adds value in terms of excellence, creativity, and business opportunities
- Enhances the societal relevance of the knowledge, technologies and innovations produced
- **Contributes to the production of goods and services better suited to potential markets**
 - Adds a valuable dimension to research and take it in a new direction
 - Gender bias also leads to missed market opportunities
 - ensures excellence and quality in outcomes and enhancing sustainability
 - Adds value to society by making research more responsive to social needs
- **Three objectives**
 - Fostering gender balance in research teams
 - Ensuring gender balance in decision-making
 - Integrating the gender dimension in research and innovation (R&I)

❖ Evaluation Criteria

Gender Equality Plans – New in Horizon Europe!

- Stem from the Union's first [Gender Equality Strategy 2020-2025](#)
- Mandatory for beneficiaries established in EU MS/AC, that are **public bodies, research organisations or HEIs**
- Grace period expected in 2021
- Self-declaration will be requested at the proposal stage:

Gender equality plan

<p><i>Only Public bodies, Higher education establishments and Research organisations must answer this question. Be aware that if the proposal is selected, having a Gender Equality Plan will be necessary before the grant signature.</i></p> <p>Does the organisation have a Gender Equality Plan (GEP) covering the elements listed below?</p> <p>Minimum requirements (building blocks) for a GEP</p> <p>Public GEP: formal document published on the institution's website and signed by the top management, addressing the following issues:</p>	<input type="radio"/> Yes	<input type="radio"/> No
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Gender Equality Plans – Content

Public GEP: formal document published on the institution's website and signed by the top management, addressing the following issues:

- **Dedicated resources:** commitment of human resources and gender expertise to implement it
- **Data collection and monitoring:** sex/gender disaggregated data on personnel and students and annual reporting based on indicators
- **Training:** Awareness raising/trainings on gender equality and unconscious gender biases for staff and decision-makers
- **Minimum areas** to be covered and addressed via concrete measures and targets:
 - work-life balance and organisational culture
 - gender balance in leadership and decision-making
 - gender equality in recruitment and career progression
 - integration of the gender dimension into research and teaching content
 - measures against gender-based violence including sexual harassment

Perceived barriers/myths around applying for European funding

- UK applicants aren't eligible for Horizon Europe funding
- It's too bureaucratic / too confusing for me
- Success rates are low
- Calls are written by the successful consortia
- UK partners are not wanted on collaborative projects

Any Questions?