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Horizon Europe - SYNERGY EVENT: Pillar II

HORIZON EUROPE

THE NEXT EU RESEARCH & INNOVATION PROGRAMME (2021 – 2027)

Nicolas Wallet
Horizon Europe UK National Contact Point for Climate
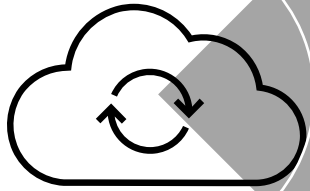Nicolas.wallet@iuk.ukri.org
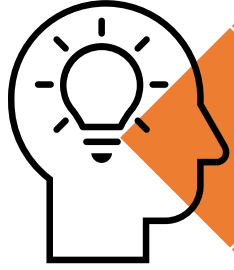
Why consider Pillar 2

Transferability tips

Technical info

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Horizon Europe: three-pillars

- The first pillar on **Open Science** will ensure continuity with H2020 in supporting science within a **bottom-up approach** through the European Research Council, Marie Skłodowska-Curie Actions and research infrastructures

- The second pillar on **Global Challenges** and Industrial Co... ...follow a more '**top down' approach**. With calls, a set of highly visible mission... ...ed. Missions, with ambitious but time-bound and achievable goals, should sp... ...and engage it. They will be designed with MS, the EP, stakeholders and citizens

- The third pillar on **Open Innovation** will focus on innovation by establishing a European Innovation Council (EIC) and continued support to the European Institute of Innovation and Technology (EIT). The EIC will offer a one-stopshop to innovators. Activities will be **mainly bottom-up**.

International projects needs >3 Associate/EU Members partners (at least 1 EU Member)

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Forthcoming – DRAFT – Work Programme 2023-2024

- Not yet formally available – Imminent!
- Leaked Work Programmes can be seen at Science|Business
https://sciencebusiness.net/news/horizon-papers-full-package

- Useful to give an indication of direction of travel and to begin conversations with potential consortium partners
- Very likely to change, possibly substantially (new topics appearing, existing ones vanishing, etc) so do not make concrete plans

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Horizon Europe

€95.5bn funding agreed for 2021-2027

€53.8bn

€24.9bn

€13.4bn

Pillar 1
EXCELLENT SCIENCE

European Research Council

Marie Skłodowska-Curie Actions

Research Infrastructures

Pillar 2
GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Clusters
- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Missions   Partnerships

Joint Research Centre

Pillar 3
INNOVATIVE EUROPE

European Innovation Council

European innovation ecosystems

European Institute of Innovation and Technology

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

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Budget figures exclude UK and other Associate Country contributions

What's New I

A mission will consist of a portfolio of actions intended to achieve a **bold and inspirational** as well as **measurable goal** within a set timeframe, with impact for science and technology, society and citizens that goes **beyond individual actions**.

- The Missions are more than a traditional research and innovation programme.

- They are an ambitious commitment for transformation, engaging citizens, the public and private sector with their focus on people.

- The Missions have €5 billion (€1 billion for each mission) to fund these large ambitions from the Horizon budget.

| Adaptation to Climate Change | Cancer | Climate-neutral and Smart Cities | Restore our Ocean and Waters | Soil Deal for Europe |

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Horizon Missions link   Missions Work Programme   EU Missions Info Days

Partnerships in Horizon Europe

Partnerships bring together the European Commission and private and/or public partners together to tackle pressing challenges.

Types of Partnership:

- Institutional Partnership (i.e., Joint Undertakings, EIT) - Require legislative proposals from the Commission and are implemented by dedicated structures created for that purpose.
  - 27% of Cluster 5 Budget over life of programme
- Co-Programmed Partnership - are between the Commission and private and/or public partners. They are based on memoranda of understanding and/or contractual arrangements.
  - 62% of Transport budget in 2021/22 Work Programme
- Co-Funded Partnership - Involving EU countries with research funders and other public authorities at the core of the consortium.

Partnerships have often arisen as a result of European Technology Platform activity

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Overview of 49 candidate European Partnerships

PILLAR II - Global challenges & European industrial competitiveness

PILLAR III - Innovative Europe

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

CROSS-PILLARS II AND III

European Open Science Cloud

- Institutionalised Partnerships (Art 185/7)
- Institutionaised partnerships / EIT KICs
- Co-Programmed
- Co-Funded

Calls with opening dates in 2023-24
** Calls with opening dates not before 2022*

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Be practical about the consortium and Research priority

Too hard

Jigsaw piece

Large scope

Large budget

Demonstration (valley of death)

1 bullet point of the scope

TRL progression

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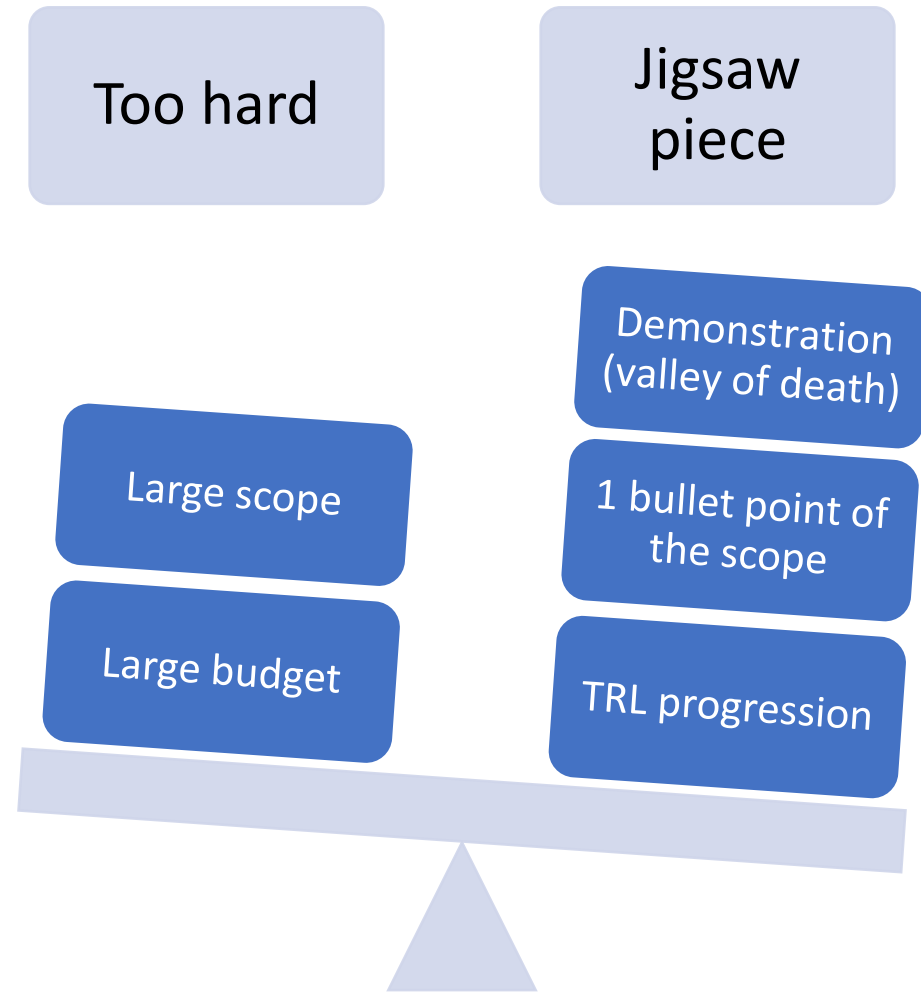
Top down instead of bottom up…
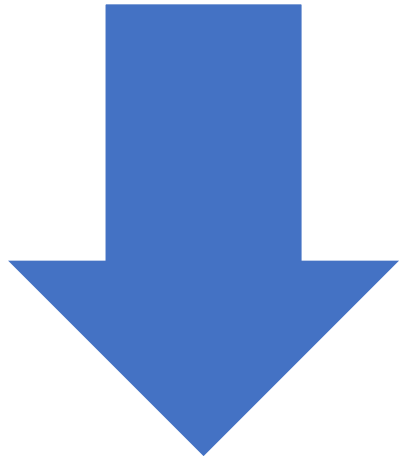
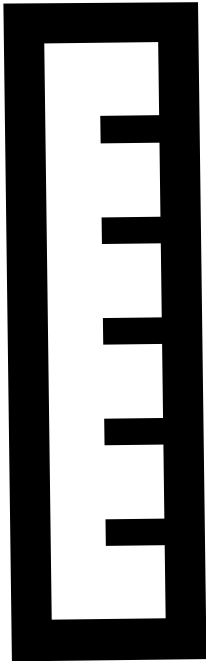

Key Strategic Orientations (KSOs) & Expected impact
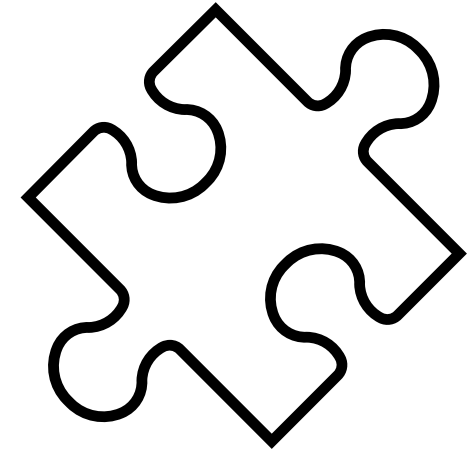
Research priorities = Topics

Your role may only be a small part of the topics and a small contribution overall to the KSO. But this can unlock budget for:
- Staff
- Demonstration / Large CAPEX
- Applied research

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One way to see it for example, is as a spin off accelerator…

TRLs

- TRL 1 – basic principles observed
- TRL 2 – technology concept formulated
- TRL 3 – experimental proof of concept
- TRL 4 – technology validated in lab
- TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- TRL 7 – system prototype demonstration in operational environment
- TRL 8 – system complete and qualified
- TRL 9 – actual system proven in operational environment

TRLs are a way to spread budgets, do not see them as immovable requirement!

TRLs progression is often an essential way to show how activities answer a topic

Those TRLs in **RED** are the bread and butter of solving the jump from lab to commercialisation

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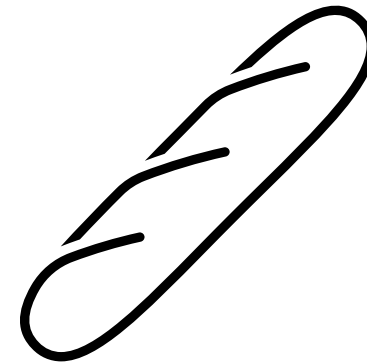
HORIZON-CL5-2023-D1-01-01: Further climate knowledge through advanced science and technologies for analysing Earth observation and Earth system model data

Expected Outcome: Actions are expected to contribute to all of the following outcomes:

- Better knowledge of the past, present and future of the Earth System, relevant for regional or international assessments like those of the IPCC.

- Support to the development of targeted and cost-efficient climate mitigation or adaptation strategies in Europe.

- Advanced data science capacities and skills for climate data analysis, capacity building and training.

- Lasting cooperation between Earth System research, Earth Observation data providers, Data science and high-performance computing (HPC) infrastructures.

Focus on your unique expertise, how it advance a subject and translate to experimentations / commercial realm

Competition is harsh, get the best partners as expert as you in the other "bullet points"

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What constitutes a winning consortium?

One that can **deliver the expected outcomes** within the stated scope and budget (and give the evaluators confidence that they can)

Common to see universities, big business, small business, research and technologies organisations, consultancies, local authorities, national authorities **all within the one consortium**. There is no 'typical' or 'model' consortium structure/membership

Useful to include **exploitation partners** – someone who is going to take the outputs of the project and actually implement them (e.g. an automotive/aerospace/marine/rail/etc., industry) to show immediate impact

Useful to include the **end user community**, possibly as an advisory board or associate partners (not direct beneficiaries but costs e.g. travel can be included in 'other costs'), again to demonstrate route to implementation

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Check out the Horizon Europe Clusters - Webinar Series For more details

[Innovate UK KTN Webinar on new Programmes](#)

Webinar Programme
- 1 December 2022, 10am-12pm GMT – Cluster 5: Climate, Energy and Mobility
- 2 December 2022, 10am-12pm GMT – Cluster 1: Health
- 6 December 2022, 10-12pm GMT – Cluster 6: Food, Bioeconomy, Natural Resources, Agriculture and Environment
- 7 December 2022, 10am-12pm GMT – Cluster 2: Culture, Creativity and Inclusive Society
- 8 December 2022, 10am-12pm GMT – Cluster 4: Digital, Industry and Space
- 15 December 2022, 10am-12pm GMT – Cluster 3: Civil Security for Society

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Questions?

Current Status of UK Association to Horizon Europe

- The UK government has stated that its priority remains association to Horizon Europe, as both the UK and the EU agreed under the Trade and Cooperation Agreement in December 2020, and that it stands ready to formalise UK association

- UK organisations are fully eligible to APPLY for Horizon Europe funding as if they are from an Associate Country. Until the UK's association to the programme is complete, however, UK organisations are not eligible to RECEIVE Horizon Europe Funding (see General Annexes)

- The UK government has guaranteed funding for successful applicants to Horizon Europe who are unable to sign grant agreements with the EU prior to formalisation of the UK's association to the programme.

  - Details of the calls covered by the current UK government guarantee can be seen here (those calls with a submission deadline before end end 2022)

- The scope of the UK government guarantee is under review. The UK R&D Roadmap (page 43) states:

  - "It is our ambition to fully associate…During any gap, we would provide funding to UK partners who are successful in bidding to programmes open to third country participation"

  - "If we do not formally associate…We will make funding available to allow UK partners to participate in European schemes open to third countries"

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UK is a 'third country negotiating association to the programme

- The UK government has stated that its priority remains association to Horizon Europe, as both the UK and the EU agreed under the Trade and Cooperation Agreement in December 2020, and that it stands ready to formalise UK association

- List of Participating Countries in Horizon Europe states: "Until association agreements start producing legal effects either through provisional application or their entry into force, the transitional arrangement set out in the General Annexes to the Horizon Europe Work Programme 2021-2022 is applicable (for the entire Programme, including ERC, EIC, EIT and the institutionalised European partnerships)"

- General Annexes states: "For the purposes of the eligibility conditions, applicants established in Horizon 2020 Associated Countries or in other third countries negotiating association to Horizon Europe 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"

UK is currently Schrödinger's country:

- UK organisations **are** eligible to coordinate proposals

- UK organisations **are** classed as one of the minimum three different legal entities from three different eligible countries as long as at least one consortium member is also from a Member State for proposal eligibility

However, if the UK's association to Horizon Europe has not completed by the time the consortium reaches Grant Agreement signature phase:

- UK organisations **cannot** coordinate projects

- UK organisations **are not** classed as one of the minimum three different legal entities from three different eligible countries as long as at least one consortium member is also from a Member State for project eligibility

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UK Government Guarantee

- The current list of calls that are covered by the UK government guarantee (administered by UKRI) is given in an annex to the guidance:

- https://www.ukri.org/publications/horizon-europe-guarantee-scheme-ukri-guidance/

- Note that **you MUST apply as a BENEFICIARY**

- Do not apply as an associated partner to get the Guarantee Scheme

- Currently all projects submitted before end of 2022 is eligible.

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Formal consortium building mechanisms

Participant portal – Every topic once published will have a 'Partner Search' function where you can upload your profile and review others that have done so

Brokerage events – European Commission, Technology Platforms, Co-Programmed Partnerships, Enterprise Europe Network, UK's KTN, NCPs from around Europe, etc will virtual hold events with e.g., Meeting Mojo, B2B and other tools

Partner Search – under the How to participate tab on the EU funding and tenders portal where you can search for past projects and organisations

CORDIS – a more useful way of finding past projects and participants and allows you to contact them

Searching the formal consortium building mechanisms is a bit like looking for a needle in a haystack – they all look like needles so finding the ones for you can be difficult

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The best ways to form winning teams

Being an *effective networker* is much more useful than submitting a profile into a portal and awaiting contacts. Don't wait to be invited to the party, push yourself forward

- Use your existing professional networks – if you don't know who the sector leaders are in Europe then you should find out
    - Use Linked In to connect to people from possible consortium partners
- Search CORDIS for previous, related projects and contact the participants. All projects must disseminate their results and often hold workshops, etc.

- **Join the relevant networks, associations and partnerships, ask your NCP for suggestions**
    - Be an *active* member – say 'hi' when you join the virtual room. Ask questions, support others' opinions, act as if you are already well known to all in the virtual room
    - Volunteer to draft working papers, take notes, send in useful information – be helpful
    - Speak up at workshops – demonstrate Thought Leadership
    - Show that you would be a valuable partner for collaborative projects and that without you they won't win – you have the secret sauce that is necessary for their success

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Partnerships and Associate Countries

1. **Co-programmed partnerships:**
   - Participation: calls will be open (Work Programme)
   - Funding: yes
   - Membership: associations are private entities open to new members (AC and other 3rd countries)
2. **Co-funded partnerships:**
   - Participation: yes, if the country participates and contributes to the call in question.
   - Funding: yes, if the country participates and contributes to the call in question.
   - Membership: yes
3. **Institutionalised Partnerships:**
   - Participation: calls will be open (Work Programme)
   - Funding: yes
   - Membership: if association is complete before their launch, possibility to become founding member. If not, possibility to join later as associated member

European Commission

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Presentation dated 19 May 2021 given to AC representatives

EU Funding and Tender Opportunities Portal

All Topics (competitions) are published on the EU's [Funding and Tender Opportunities Portal](#)

- Create a personal login (top right) then 'Register your organisation' (in 'How to participate') to get a Participant Identification Code (PIC)
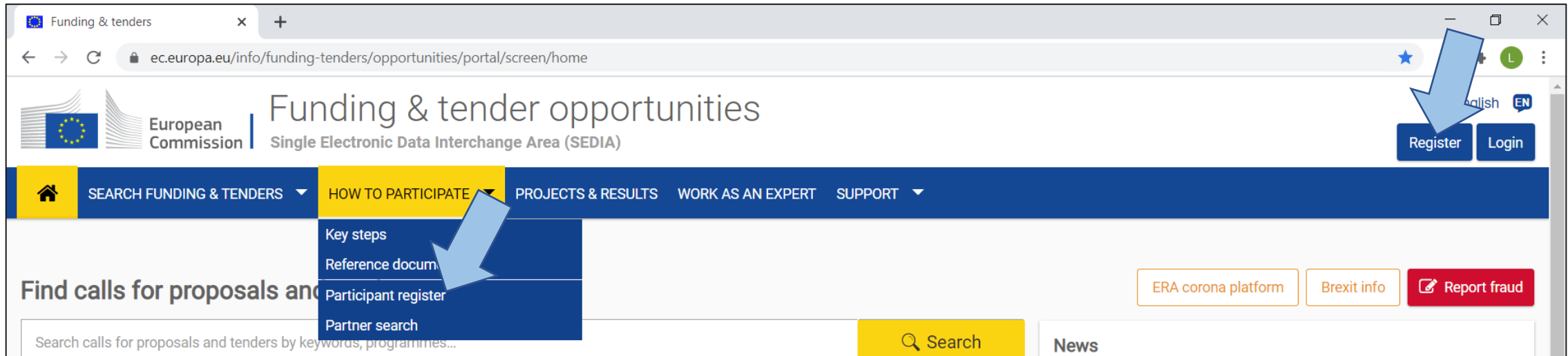
- Each Topic (competition) has its own webpage (in '[Search Funding & Tenders](#)') with everything you need to know – read it all (expand the sections to see the More Info...)

Eligibility criteria

There are several types of eligibility, and it does get confusing:

- Eligibility to be part of a consortium/project

- Eligibility to receive funding as part of a consortium/project

- Eligibility to be one of the minimum number of participants necessary in a consortium/project

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Eligibility criteria explained

Stated in the General Annexes

- **Any legal entity**, regardless of its place of establishment, including legal entities from non-associated third countries or **international organisations** (including international European research organisations) is eligible to participate (whether it is eligible for funding or not) *although exceptions may apply in specific topics so check the text*
- To be **eligible for funding**, applicants must be established in one of the eligible countries, i.e.:
  - Member States of the European Union, including their outermost regions;
  - Overseas Countries and Territories (OCTs) linked to the Member States
  - Eligible non-EU countries:
    - Countries associated to Horizon Europe
    - Low- and middle-income countries
  - Legal entities which are established in countries not listed above will be eligible for funding if provided for in the specific call conditions, or if their participation is considered essential for implementing the action by the granting authority
- **Consortium Composition**:
  - At least one independent legal entity established in a Member State; and
  - At least two other independent legal entities, each established in different Member States or Associated Countries

Associate Countries

- [The UK has agreed to Associate to Horizon Europe](#) – Association gives UK organisations access to funding under the programme on equivalent terms as organisations in EU countries

- Specific agreements vary but, in general, associate countries contribute additional funds to the Horizon Europe Budget in direct proportion of their GDP to that of the EU.

  - For example, UK's GDP is 16% of that of the EU, therefore UK will be contributing an additional 16% to the Horizon Europe budget

- Countries that associated to Horizon 2020, and are expected to associate to Horizon Europe:

  - Albania
  - Armenia
  - Bosnia and Herzegovina
  - Faroe Islands

  - Georgia
  - Iceland
  - Israel
  - Republic of North Macedonia

  - Republic of Moldova
  - Montenegro
  - Norway
  - Serbia

  - Switzerland
  - Tunisia
  - Turkey
  - Ukraine

- Countries considering association include Canada, Japan, Australia and others

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International Participation

Some topics state international participation is **essential**, e.g. "In addition to the conditions described in General Annex B, the consortium must include at least three legal entities from three different African countries"

Some topics state international collaboration is **advised**, e.g. "In order to achieve the expected outcomes, international cooperation is advised, in particular with projects or partners from the US, Japan, Canada, South Korea, Singapore, Australia"

Some topics state **limitations** on international collaboration, e.g. "participation to the call is limited to legal entities established in Member States, associated countries, OECD countries, African Union Countries, and MERCOSUR, CARIFORUM, and Andean Community"

Most countries around the world have Horizon Europe National Contact Points – find their details here and there is a full list of participating countries published too

The Proposal

All proposals are submitted electronically via the Topic (competition) webpage on the [Funding and Tenders Portal](#)

- Part A – administrative information completed online
- Part B – technical proposal template downloaded from the Portal, completed and then uploaded as PDF
  - Section 1 – Excellence
  - Section 2 – Impact
  - Section 3 – Implementation

Research and Innovation Action (RIA) and Innovation Actions (IA)
- Part B - Technical proposal is maximum 45 pages [Template](#)

Coordination and Support Action (CSA)
- Part B - Technical proposal is maximum 30 pages [Template](#)

} Usually, but check as some IA topics say 'up to 70 pages' and some RIA topics say 'up to 60 pages'

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Note some differences from 'standard' Horizon Europe

Innovation Action (IA)
- All not-for-profit participants receive 100% of eligible direct costs plus 25% of that for indirect costs
- All for-profit participants receive 70% (**60% if co-programmed partnerships**) of eligible direct costs plus 25% of that for indirect costs

Length of Proposal
- For some Innovation Actions – "The page limit of the application is 70 pages"
- For some Research and Innovation Actions – "The page limit of the application is 60 pages"

Check the Work Programme and General Annexes as published in the Reference Documents

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