





Horizon Europe

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Head of EU Funding

26th May 2021

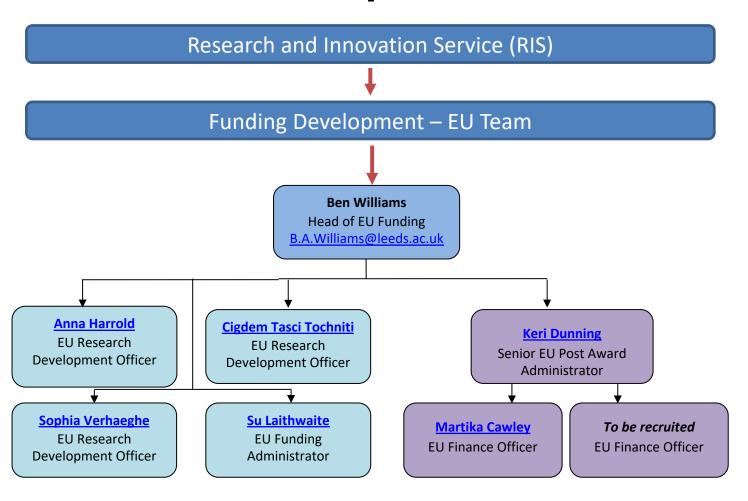


Housekeeping

- First in a series of Horizon Europe webinars
- Everyone is muted automatically
- Q+A in the chat, EU Team will moderate an reply there or answer live
- Session will be recorded and put on web site
- Changes from H2020 highlighted in green
- Couple of (anonymous) polls along the way



The European Team





What is the Framework Programme?

- The main programme for R&I funding across Europe
- 7-year programme cycles, multi-billion € budget
- Brings together Research and Innovation through various mechanisms, both industry and academiafocussed
- Covers research life-cycle from concept to market
- Contributes to the ethos of the European Research Area
- You may have heard of previous Framework Programmes FP4/5/6/7 or Horizon 2020
- We are about to enter Horizon Europe (HEu 2021-27)



Has Horizon Europe Started?

Yes!and, er, No!

Sept 2020 – structure approved

27th April 2021 – final approval

12th May 2021 – legally adopted, with start date 1st Jan 2021

May/June 2021 - first calls to be released

- Some calls (ERC, EIC Pathfinder) already gone
- Draft Work Programmes available email us!



UK Participation After Brexit

- EU-UK trade and cooperation agreement (= Brexit deal) concluded 30th December 2020
- Terms for association to HEu detailed in Protocol 1 to this agreement
- Association can only start now that HEu has been formally and legally adopted
- UK association is a formality as already passed with huge majority by European Parliament
- Association should be swift and will be applied retroactively to 1st Jan 2021

Key message 1: UK researchers can apply to all HEu calls



What does Association Mean?

- Associated Countries pay into the Programme, so can also receive money out of it
- UK has committed to pay into the whole of Heu, so can therefore receive funds from across the Programme
- UK can therefore participate <u>as Partner or as Co-ordinator</u>
- Only exceptions:
 - EIC Accelerator Fund (SME financing)
 - "Duly Justified Calls"

Key message 2: UK participation is "business as usual"



UK involvement in Horizon Europe Implementation

- UK can still participate in project evaluations, reviews and on expert committees
- UK Government participates in Programme Committees and helps define the direction of travel of Programme spending
- UK <u>holds no voting rights</u> but has right to take part, speak and access information and documentation. Very few issues go to a vote

Key message 3: UK researchers can participate in HEu processes and committees



EU Member and Associated States

Member States

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.

Associated Countries (tbc)

Albania, Armenia, Bosnia & Herzegovina, Faroe Islands, Georgia, Iceland, Israel, <u>Kosovo</u>, Moldova, Montenegro, <u>Morocco</u>, North Macedonia, Norway, Serbia, <u>Switzerland*</u>, Tunisia, Turkey, Ukraine, <u>United Kingdom</u>.

https://www.sbfi.admin.ch/dam/sbfi/it/dokumente/2020/01/qa-h-europa.pdf.download.pdf/QA-Horizon-Europe_E.pdf



Third Countries

All other countries are termed 'Third Countries'. They can participate in (and even coordinate) projects and may even be encouraged to in certain calls. They are only funded in either of the following cases:

- The call specifies this is eligible
- They are an LMIC (Lower-Middle Income Country) as <u>defined by the world bank</u> but excluding Brazil, Russia, India, China and Mexico



Timeline

4th Feb 2021 Horizon Europe launch event (!)

May 2021 Horizon Europe ratified and launched officially

May/June 2021 Horizon Europe calls released

Horizon Europe association agreements

can commence

Summer 2021 UK Association ratified

Sept 2021 → * Main Horizon Europe call deadlines

Spring 2022 First projects start



How Does Leeds Perform in EU Funding?

In H2020:

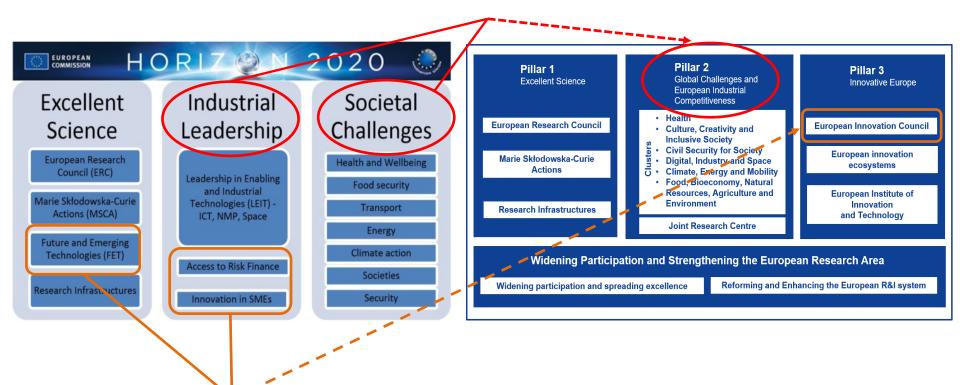
- 292 projects with value > €150m
- Lead partner on 27 collaborative projects
- 114 Fellowships (22 ERC, 92 MSCA Individual Fellows)
- Ranked 8th across UK HEIs for number of awards
- Ranked <u>25th internationally</u> for number of awards
- Ranked 9th internationally for MSCA Individual Fellowships
- Ranked 6th internationally for Coordinated ITNs
- Biggest increase in UK HEI ranking post-referendum
- 16.8% overall success rate (c.12% average across EU)



H2020

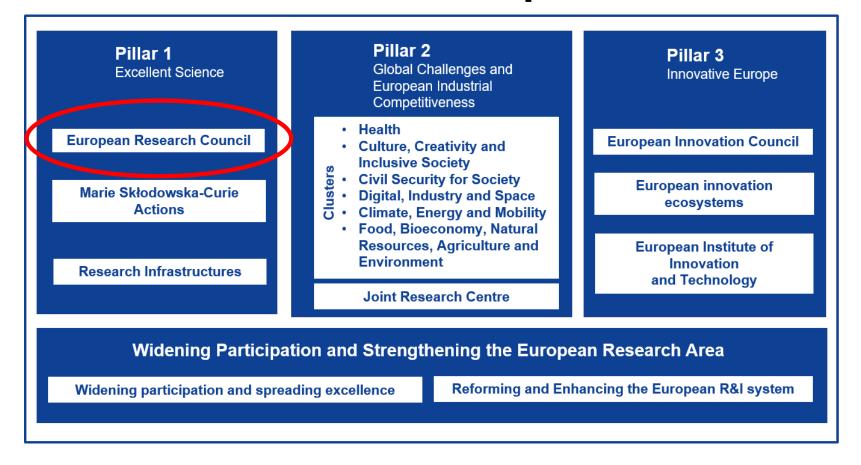
VS

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Changes from H2020 highlighted in green





	Starting Grant (StG)	Consolidator Grant (CoG)	Advanced Grant (AdG)
WHO?	2-7 years post-PhD	7-12 years post PhD	Everyone else (usually Professorial staff)
WHAT?	Grant to start independent research group	Grant to consolidate independent research group	Grant to create/consolidate research group in "frontier science"
WHY?	Prestige, promotion, independent research, research income		
WHEN?	Normally November Next deadline: 13 th Jan 2022	Normally February Next deadline: 17 th March 2022	August/September Next deadline: 31st August 2021
Duration	Up to 5 years	Up to 5 years	Up to 5 years
Size	€1.5 million over 5 years <i>pro rata</i>	€2 million over 5 years <i>pro rata</i>	€2.5 million over 5 years <i>pro rata</i>
To note	Evaluate excellence of PI track record* and high-risk, high-reward project (*NB for Advanced Grant evaluate last 10 years only) Extension to eligibility criteria for maternity, paternity or illness Extra €1m budgetary allowance for large equipment/facilities 2-stage evaluation, interview at Stage 2 for all three schemes		



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Changes from H2020 highlighted in green



Research and Innovation Service

	Doctoral Networks (=ITNs)	Postdoctoral Fellowships (=IFs)	Staff Exchanges (=RISE)
WHO?	ESRs (=PGRs) Consortia featuring at least 3 partners from 3 different Member or Associated States, with at least 1 partner from a Member State	Post-Doctoral Researcher with <8 years research experience post-Ph.D.	Existing staff
WHAT?	Network of partners training PGRs. Value is greater than a Ph.D. at a single institute	Fellowship at Leeds to improve career prospects	International and/or inter-sectoral exchanges for transfer of knowledge
WHY?	Contributes to research income and PGR numbers	Research income for host / PI paid researcher for 2 years / International link created/maintained	Complement existing exchanges/relationships with industry on non-EU HEIs
WHEN? (* = tbc)	January Next deadline: 16 th November 2021*	September Next deadline: 12 th October 2021*	March/April Next deadline: 9 th April 2022*
Duration	4 years	2 years	4 years
Size	Up to 360 person months (10 PGRs) Up to €4 million	c. €200,000	Up to 360 exchange months Up to €2 million
To note	Industrial Doctorate or Joint Doctorate projects permitted 540 months Ph.D. enrolment mandatory	Global Fellowship: outgoing staff Career Restart Panel Reintegration Panel Resubmission criteria from 2022 (score >80%)	Beware! Can be costly!



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Changes from H2020 highlighted in green



	Research Infrastructures		
WHO?	Consortia featuring at least 3 partners from 3 different Member or Associated States, with at least 1 partner from a Member State		
WHAT?	Combined facilities (mono-site multi-site, or virtual) that provide resources and services for research communities. Focus on (1) Creating infrastructures, (2) Consolidation infrastructures, (3) Reinforcing infrastructure policy and international cooperation		
WHY?	European communities give new levels of access to infrastructure, empowering future R&I activities		
WHEN?	Deadlines tbc but currently three different dates by area of June 2021, Sept 2021 and Jan 2022		
Duration	3-5 years, determined by what the project needs but should last beyond funding period		
Size	Typically c.€10m		
To note	Strong focus in 2021 on Health, Green and digital infrastructures		



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Changes from H2020 highlighted in green





	Global Challenge / Industrial Competitiveness Collaborative Projects	
WHO?	Consortia featuring at least 3 partners from 3 different Member States or Associated Countries, with at least 1 partner from a Member State (except CSA – min 1 MS/AC)	
WHAT?	(1) Cross-sectoral, multi-disciplinary consortia addressing policy- or industry- led topics developed by EC Programme Committees (2) Bottom-up, consortia-led projects targeted towards specified longer-term goals within a selection of 5 R&I "Missions"	
WHY?	Collaborative approach across countries, disciplines and sectors/stakeholders provides optimal solutions to global challenges not funded on such a scale elsewhere	
WHEN?	Deadlines tbc but mainly from Sept/Oct 2021	
Duration	3-5 years, determined by what the project needs and budget available	
Size	3-20 partners (8-15 "typical") with budget ranges stated for each topic (ranges from €1.5m - >€20m)	
To note	EU Team has access to Draft WPs and new-proposal template for HEu Topics may request Research and Innovation Action (RIA), Innovation Action (IA) or CSA (Coordination and Support Action) and will give budget guide Open access and open research data now mandatory	



Mission-based approach

Bottom-up element to Global challenges



Mission aims will be confirmed and introduced later in 2021



Mission-based approach

Cancer

e.g. Conquering Cancer: Mission Possible

Targets by 2030: more than 3 million lives saved, living longer and better, achieve a thorough understanding of cancer, prevent what is preventable, optimise diagnosis and treatment, support the quality of life of all people exposed to cancer, and ensure equitable access to the above across Europe.

Healthy oceans, seas coastal and inland waters

e.g. Mission Starfish 2030: Restore our Ocean and Waters

Targets by 2030: cleaning marine and fresh waters, restoring degraded | ecosystems and habitats, decarbonising the blue economy <u>in order to</u> sustainably harness the essential goods and services they provide.

2. Adaptation to climate change including societal transformation

e.g. A Climate Resilient Europe - Prepare Europe for climate disruptions and accelerate the transformation to a climate resilient and just Europe by 2030

Targets by 2030: prepare Europe to deal with climate disruptions, accelerate the transition to a healthy and prosperous future within safe planetary boundaries and scale up solutions for resilience that will trigger transformations in society. Citizen engagement will continue and will help define the concrete steps to implement the mission.

Climate-neutral and smart cities

e.g. 100 Climate-Neutral Cities by 2030

by and for the citizens

Targets by 2030: support, promote and showcase 100 European cities in their systemic transformation towards climate neutrality by 2030 and turn these cities into innovation hubs for all cities, benefiting quality of life and sustainability in Europe.

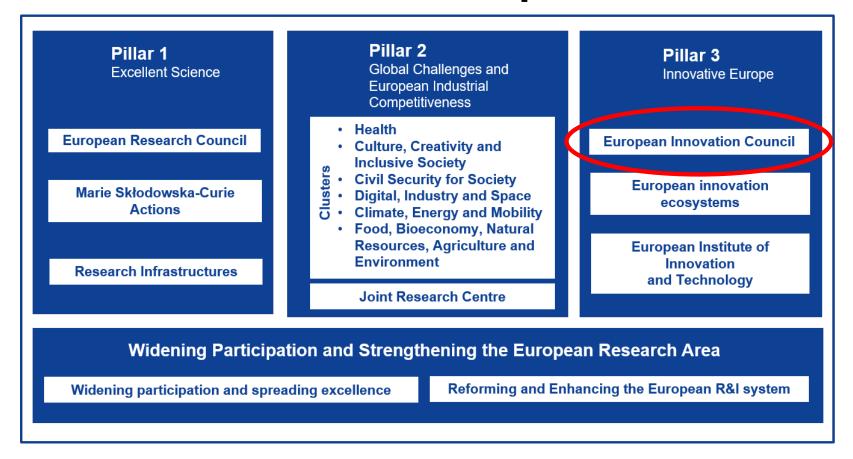
Soil health and food

e.g. Caring for Soil is Caring for Life

Targets by 2030: at least 75% of all soils in the EU are healthy for food, people, <u>nature</u> and climate. The proposed mission combines research and innovation, education and training, <u>investments</u> and the demonstration of good practices using "living labs" (experiments and innovation in a laboratory on the ground) and "lighthouses" (to showcase good practices).



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	Pathfinder Open (=FET Open)	Pathfinder Challenges (=FET Proactive)	Transition Open
WHO?	Consortia featuring at least 3 partners from 3 different Member or Associated States, with at least 1 partner from a Member State		As Pathfinder, but can also be mono-Beneficiary
WHAT?	Radical, novel future technological solutions	Cutting-edge technology to disrupt a field / market or create new opportunities via high-risk/high-gain research	Project to develop ERC PoC or Pathfinder results towards market-readiness
WHY?	Funds high-risk/high-gain, consortia-led tech solutions	Funds high-risk/high-gain projects in <u>5 areas</u>	Follow-on funding for innovation of previous project
WHEN? (* = tbc)	Next deadline tbc	October 2021*	
Duration	Typically 3 years	Typically 3 years	Tbc – 18 months-2 years likely
Size	Typically 4-8 partners, €3m	Typically 5-10 partners, €4m	<u>1-5 partners, €2.5m</u>
To note	Address the FET Gatekeepers, include early-career researchers	Portfolio approach led by EC- appointed Programme Managers	Related project must be live for at least 12 months or completed within 24 months as of deadline

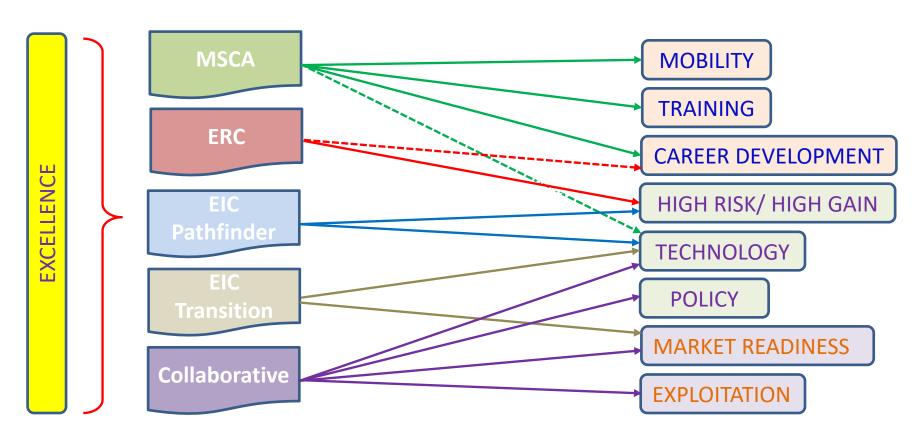


Pathfinder Challenges

Challenge	Description
Awareness Inside	Awareness and consciousness in Artificial Intelligence
Tools to measure and stimulate activity in brain tissue	Functional medical devices to measure and stimulate brain activity to cure brain diseases
Emerging Technologies in Cell and Gene therapy	Realising CGT goals ands putting Europe at forefront of CGT
Novel routes to green hydrogen production	Hydrogen key to efficient, sustainable and flexible energy systems towards 2050 climate-neutrality
Engineered Living Materials	Development of biological and hybrid ELMs



HEu Scheme Focuses

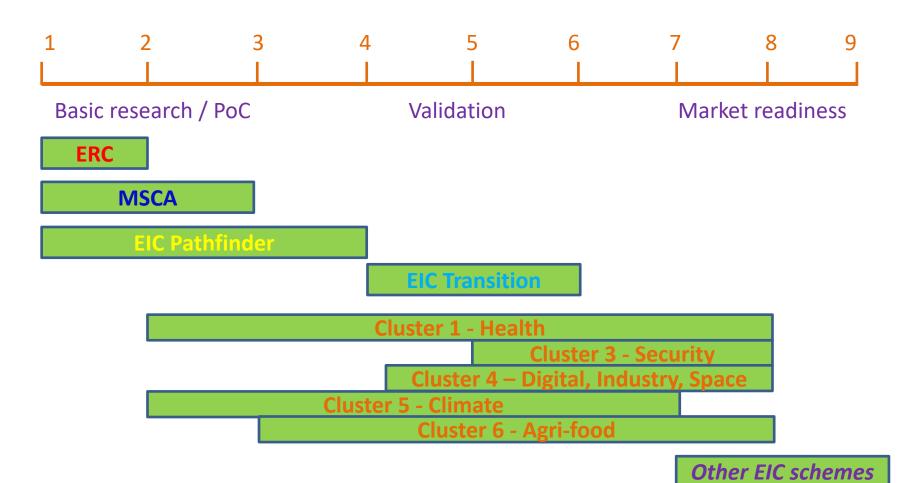


Technology Readiness Levels (TRLs) also guide focus

Research and Innovation Service

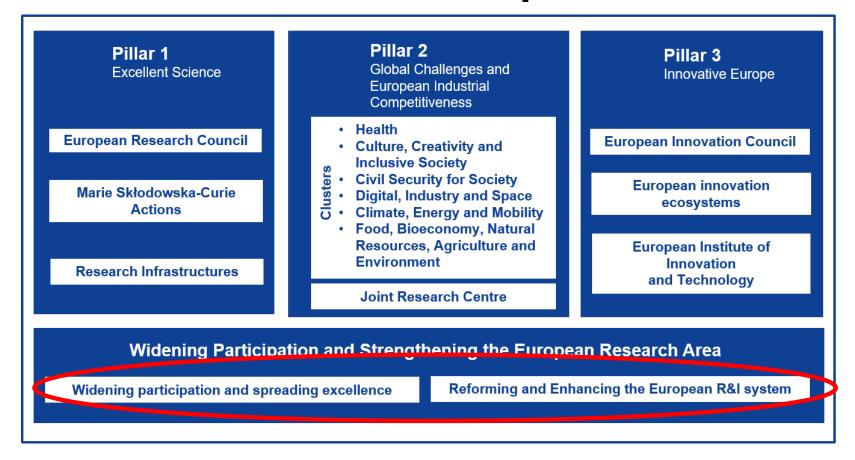


TRL Life-cycle and HEu Schemes





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Widening Participation

- Two principle aims:
 - Widening Participation and Spreading Excellence;
 - Strengthening the European Research Area
- EU 13, Portugal and Greece fall way behind rest of EU for R&I funding, reducing Europe's international competitiveness
- Huge "brain drain" from these countries to rest of EU need to turn to a "brain gain"
- "Twinning", excellence hubs, R&I reform, attracting/retaining excellence
- ERA: knowledge and people circulate freely, open and accessible research, attractive careers, gender equality; harmony with national R&I plans, citizen engagement



Reforming and Enhancing the EU R&I System

1.	Strengthen evidence base for R&I policy	8. Supporting and monitoring gender equality
2.	Foresight activities - anticipate emerging needs and trends	9. Ethics and integrity
3.	Support for policy makers, funding bodies, research performing organisations or advisory groups working on ERA	10. International cooperation
4.	Accelerate the transition towards open science	11. Scientific input to other policies
5.	Support to national R&I policy reform, strengthened Policy Support Facility (PSF)	12. EU R&I programme implementation
6.	Provide researchers with attractive career environments, skills and competences, support the modernisation of universities	13. Support to National Contact Points
7.	Citizen science, supporting formal, non- formal and informal science education, and more effective communication and engagement of citizens	14. Dissemination and exploitation of results, data and knowledge



Horizon Europe – General Novelties



Proposal Novelties

- Reduction in page limits for RIA / IA
 - Stage 1 15 pages → 10 pages
 - Stage 2 70 pages → 45 pages
- Reduction in CSA page limits 50 pages → 30 pages
- ERC same as H2020, MSCA tbc
- Blind evaluation in 2-stage calls (trial)
- Right to react can respond to feedback before final consensus report (within 7 days, max 2 sides A4)
- Impact section focus more business-minded...



Pathways to Impact

Applies mainly to collaborative projects in Pillar 2

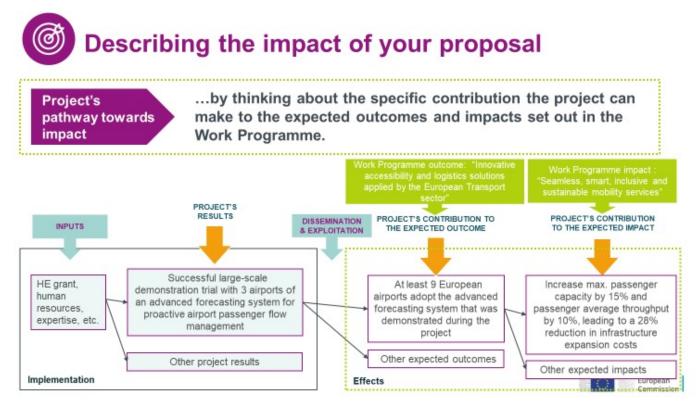


Image taken from EC presentation on HEu by Isabel Vergara and Bénédicte Charbonnel, 24/03/2021 https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/other/events/20210324/submission-and-evaluation_en.pptx



Dissemination and Exploitation

- Throughout and beyond the project
- D&E plan required as a deliverable by M6 (targeted groups, how they help with impact and channels to achieve this, IPR plan, feedback to policy)
- Communication measures for promoting the project and its findings throughout the duration
- Results must be exploited if not by consortium, must find Third Party. If this cannot be done, obligation to publish results on <u>Horizon Results Platform</u>
- 'Results Ownership List' (ROL) required as part of the final report for projects.
- May be additional funding to continue D&E activities beyond project duration



Do No Significant Harm (DNSH)

- Research should not cause any harm to the following six environmental objectives detailed under the <u>EU</u> <u>Taxonomy Regulation</u>:
 - Climate change mitigation;
 - Climate change adaptation;
 - Sustainable use & protection of water & marine resources;
 - Transition to a circular economy;
 - Protection and restoration of biodiversity & ecosystems;
 - Pollution prevention and control.



Security

- Previously only in flagged topics, now a self-assessment for all projects, covering:
 - Whether the proposal uses or generates EU classified information;
 - Potential of misuse of results (that could be channelled into crime or terrorism);
 - Whether activities involve information or materials subject to national security restrictions.



Trustworthy Artificial Intelligence

- Only in projects involving Al
- Evaluated as part of Excellence section
- All Al must be:
 - Technically robust
 - Socially robust
 - Reliable and function as intended
 - Able to provide a suitable explanation of its decision-making process,



Public Emergency Provision

- Aims to allow access to results that will help in the case of any unforseen threat undermining European Union's security, public order or public health
- The Commission reserves the right to request beneficiaries to 'grant non-exclusive license, under fair and reasonable conditions, to relevant legal entities that need the results to address the public emergency...'
- This provision applies during the project duration and up to four years after its end.



Open Science

- Systematic sharing of knowledge and tools as early and widely as possible. This includes active engagement of society
- Research Data must be "as open as possible, as closed as necessary"
- Data Management Plan (compliant with principles of FAIR) mandatory by Month 6
- Commission has launched its own platform, <u>EOSC</u>
- Immediate open access to publications now mandatory
- EC has own <u>open research portal</u> for publications



Gender Equality Plans

- Proposals must link to institutional plan for all deadlines from 2022 onwards
- Leeds is developing a plan and should be ready for 2022
- Athena Swann alone may not meet criteria fully
- Applicants will have to demonstrate how they have met the objectives of the GEP in their projects
- Separate to gender aspects in proposal focussed on gender differences affecting the research plan



Horizon Europe – Info and Support

- Communication: Web site updated regularly, Twitter feed and Newsletter
- Key documents (being updated): <u>EU Team brochure</u>, Finda-scheme chart, Partner Information sheet, several 'quick guides'
- Bespoke support: <u>EU Team brochure</u> for our proactive support on key schemes (e.g. Call topic 'translation', proposal review, successful examples, submission admin, partner search
- Award support: Grant preparation admin, financial reporting, audit management, admin and legal queries
- Events









Horizon Europe – Events

- General events coming up:
 - MSCA Doctoral Networks
 - MSCA Post-doctoral Fellowships
 - ERC Advanced Grants
 - HEu Collaborative projects
 - ILovEU2 EU event week

All will be advertised via newsletter, Twitter and on web site

- Bespoke events for Faculties / Schools / Research Groups
- Past (general) events <u>archived</u>









Final comments

- Get in touch with any queries, or if anything discussed today is of potential interest
- Bookmark web site and sign up to Twitter / newsletter
- Keep an eye out for future events
- If you are part of a consortium, please add <u>EUFunding@leeds.ac.uk</u> to the Leeds part of the online proposal



