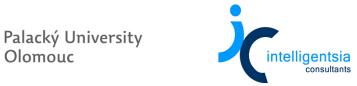








Olomouc





An Introduction to the Horizon Europe Widening Programme

Giles Brandon, Intelligentsia Consultants, Tuesday 25th June 2024



- 1. A few words about Horizon Europe
- 2. Horizon Europe Widening Programme
- 3. Introduce some but not all Widening calls for proposals





Horizon Europe

Duration: 2021 – 2027 Budget: 95.5 billion euro

HORIZON EUROPE

EURATOM

SPECIFIC
PROGRAMME:
EUROPEAN
DEFENCE
FUND

Exclusive focus on defence research & development

Research actions

Development actions

SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT

Exclusive focus on civil applications



Pillar I EXCELLENT SCIENCE

European Research Council

Marie Skłodowska-Curie

Research Infrastructures



Pillar II
GLOBAL CHALLENGES &

EUROPEAN INDUSTRIAL COMPETITIVENESS

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

Joint Research Centre



European Innovation Council

European innovation ecosystems

European Institute of Innovation & Technology*

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system

Fusion

Fission

Joint Research Center

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



Widening

budget:

About 3

billion euro

Twinning to boost the scientific and innovation capacity of the Universiteti i Tiranës to develop sustainable nanosensors for water pollution detection

Widening Work Programme 2023-2025





 \mathbf{EN}

Horizon Europe

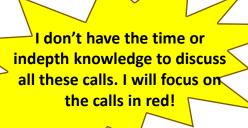
Work Programme 2023-2025

11. Widening participation and strengthening the European Research Area

(European Commission Decision C(2024) 2371 of 17 April 2024)

Twinning to boost the scientific and innovation capacity of the Universiteti i Tiranës to develop sustainable nanosensors for water pollution detection

Widening Work Programme 2023-2025



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Call - Twinning	
Conditions for the Call	
HORIZON-WIDERA-2023-ACCESS-02-01: Twinning Bottom-Up	
HORIZON-WIDERA-2023-ACCESS-02-02: Twinning Green Deal	
Call - European Excellence Initiative (EEI)	
Conditions for the Call	
HORIZON-WIDERA-2023-ACCESS-03-01: European Excellence Initiative	
Call - Pathways to Synergies	
Conditions for the Call	
HORIZON-WIDERA-2023-ACCESS-04-01: Pathways to Synergies	
Call - Dissemination and Exploitation Support Facility	
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Call - Hop-on facility	
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HORIZON-WIDERA-2023-ACCESS-06-01: Hop on Facility	
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Twinning to boost the scientific and innovation capacity of the Universiteti i Tiranës to develop sustainable nanosensors for water pollution detection

Widening Work Programme 2023-2025



Conditions for the Call 62

Part 11 - Page 2 of 193

I don't have the time or indepth knowledge to discuss all these calls. I will focus on the calls in red!

> Horizon Europe - Work Programme 2023-2025 Widening participation and strengthening the European Research Area

HORIZON-WIDERA-2023-TALENTS-01-01: ERA Chairs	63
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What is the Twinning call?

- 1. Twinning aims to enhance networking activities between the research institutions of the Widening countries (e.g. Albania) acting as co-ordinators and top-class leading counterparts at EU level by linking it with at least two research institutions from two different Member States or Associated Countries.
- 2. Twinning proposals (Budget: 0.5-1.5 million euro, 3 year duration) should have to clearly outline the scientific strategy for stepping up and stimulating scientific excellence and innovation capacity in a defined area of research as well as the scientific quality of the partners involved in the twinning exercise
- 3. The scientific strategy should include arrangements for formulating new (or ongoing) joint research project(s) in the scientific area of choice and describe how Twinning will take this research to a new stage, by enlarging its scope and/or the research partnership. If relevant, any links with sustainable development objectives are to be outlined.





What is the Twinning call?

- 4. The scientific strategy should include a comprehensive set of activities to be supported. These should include at least a number of the following:
 - Short-term staff exchanges; expert visits and short term on-site or virtual training; workshops; conference attendance; organisation of joint summer school type activities; dissemination and outreach activities.
- 5. Proposals should also focus on strengthening the research management and administration skills of the coordinating institution from the Widening country. This should take the form of a dedicated work package or task, placing emphasis to specific activities.
- 6. A research component not exceeding 30% of the total Horizon Europe grant may include an exploratory research project. This will open opportunities for integrating smaller research activities and by this strengthening the commitment and the engagement of the twinning partners.





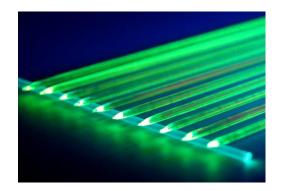
Two example Twinning projects ...

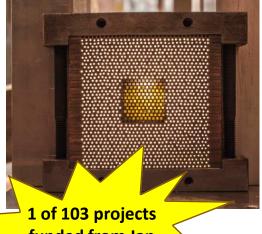
- SUSNANO: Twinning to boost the scientific and innovation capacity of the Universiteti i Tiranes to develop sustainable nanosensors for water pollution detection.
- Widening country coordinator: Universiteti i Tiranes (AL).
- Consortium partners:

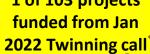
 Univerzita Palackého v
 Olomouci (CZ) and Institut
 Català de Nanociència i
 Nanotecnologia (ES)



- TWISMA: Twinning with ISMA to develop innovative calorimeters for high energy physics based upon advanced scintillation materials.
- Widening country coordinator: Institute for Scintillation Materials (Kharkiv, UA).
- Consortium partners: CERN and CNRS Lyon.







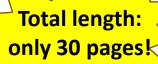




Twinning proposal – Technical Description (Part B)

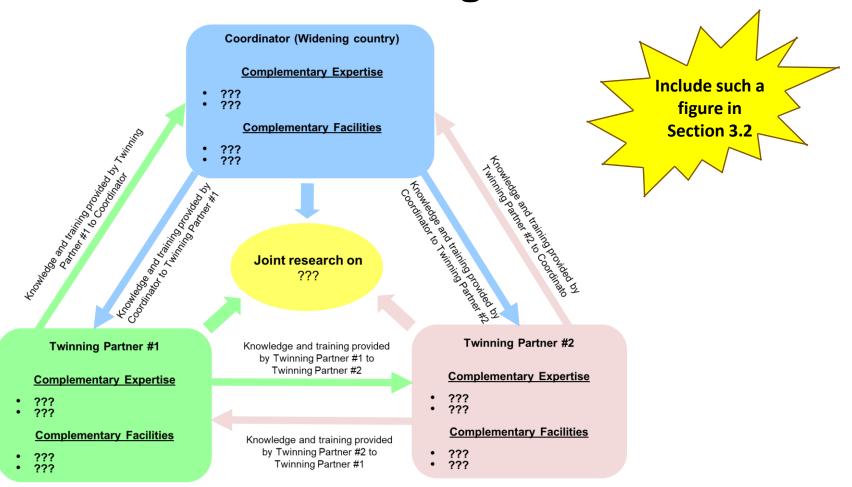
- 1. Excellence
 - 1.1 Objectives [EC recommended length: 2 pages]
 - 1.2 Coordination and/or support measures and methodology [EC recommended length: 6 pages]
- 2. Impact
 - 2.1 Project's pathways towards impact [EC recommended length: 4 pages]
 - 2.2 Measures to maximise impact Dissemination, exploitation and communication
 - 2.3 Summary [EC recommended length: 5 pages for Sections 2.2 and 2.3]
- 3. Quality and efficiency of the implementation
 - 3.1 Work plan and resources [EC recommended length: 10 pages including tables]
 - 3.2 Capacity of participants and consortium as a whole [EC recommended length: 3 pages]
- Don't deviate more than ½-1 page from the recommended limits!
- Start Section 1.1 on the proposal cover page!





Twinning (5 of 6)

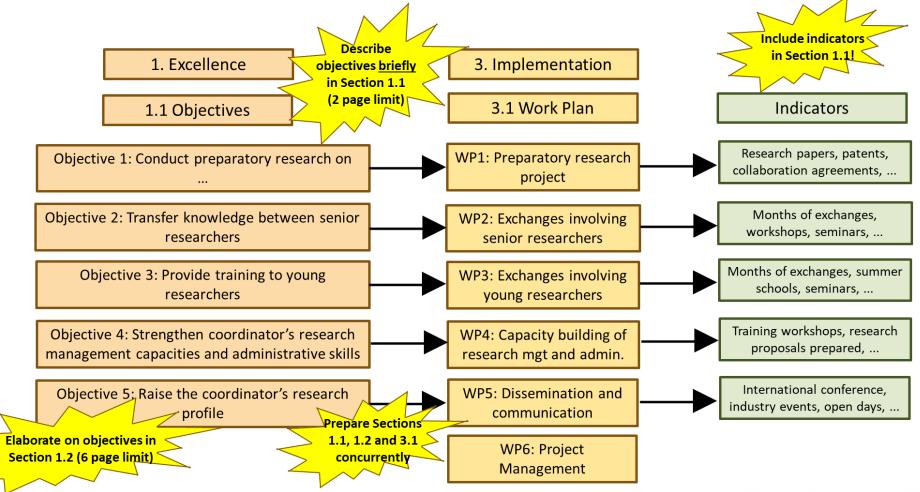
How to structure a Twinning network







How to structure a Twinning proposal







What is the ERA-Chair call?

- 1. Research organisations located in widening countries interested in establishing an ERA Chair shall (*Professorial position* + *Research Group*) submit a proposal (Budget: 1.5-2.5 million euro, 5 year duration) with the prospective ERA Chair holder who should be an outstanding researcher and/or innovator in the chosen scientific domain. The scientific field can be any domain of research and innovation addressed under the Treaty on the Functioning of the European Union.
- 2. The institution in the Widening country shall be the coordinator and can opt between a joint application with the legal entity currently employing the future ERA Chair or submitting a proposal as a single applicant. For the former, partner institutions can be located in any country (including countries outside the EU) except the country of the coordinator and ERA Chair holders can be citizens of any country in the world.





What is the ERA-Chair call?

- 3. Proposals should include a CV in Europass form of the future ERA Chair holder and detail the scientific and technical support he/she will provide to the coordinator and how the proposed activities will upgrade from the current situation. If there is a partner institution proposals should outline any additional support to be provided by it to the coordinator.
- 4. Proposals should also describe any relevant investments of the coordinator in research projects, facilities and infrastructures and how those will be achieved and/or a better use of the installed research capacity (in particular of EU co-funded research infrastructures & facilities)
- 5. ERA Chair holders should be excellent researchers and/or innovators in the chosen field of research. They should establish a research team fully integrated in the coordinator's institution to significantly improve its research performance in the scientific domain of choice and to be more successful in obtaining competitive funding.





Two example ERA-Chair projects ...





- MariCybERA: ERA Chair in Maritime Cyber Security at Tallinn University of Technology.
- Widening country coordinator: TalTech (EE).

1 of about 15
projects funded
from Nov 2019 ERAChair call

- SanDAL: ERA Chair in Mathematical Statistics and Data Science for the University of Luxembourg.
- Widening country coordinator: University of Luxembourg (LU).

1 of about 15
projects funded
from Nov 2017 ERAChair call





ERA-Chair proposal – Technical Description (Part B)

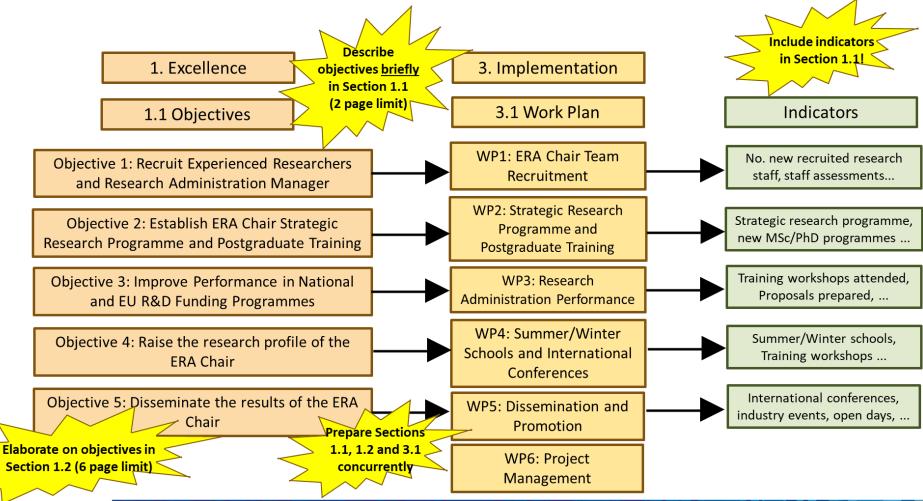
- 1. Excellence
 - 1.1 Objectives [EC recommended length: 2 pages]
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- Don't deviate more than ½-1 page from the recommended limits!
- Start Section 1.1 on the proposal cover page!



Total length: only 30 pages!

ERA-Chair (5 of 6)

How to structure an ERA-Chair proposal





Twinning to boost the scientific and innovation capacity of the Universiteti i Tiranës to develop sustainable nanosensors for water pollution detection

ERA-Chair (6 of 6)

Section 1: Excellence



Śląskie Region SMART Specialisations:

ICT: Adv. manufacturing systems ICT: Micro/ Nano-electronics Energy: Adv. materials Energy: Adv. manufacturing systems National SMART Specialisations:

Innovative technologies and Industrial Processes (Priorities 13, 16 and 18) Sustainable Energy (Priority 7) EU Research and Innovation Priorities:

H2020 (NMP, ICT and Energy)
ETPs (Photonics21, Photovoltaics,
Manufuture, EuMaT)
Europe 2020 Energy Sustainability

Action Plan

Action Step 1: Recruit ERA Chair Holder, Experienced Researchers and Innovation Manager Action Step 2: Establish ERA Chair Strategic Research Programme and Postgraduate Training Action Step 3: Ensure CoE supports Poland's SMART Specialisation and European Research Priorities

Centre of Excellence in Organic Electronics

Action Step 4: Raise the research profile of the CoE and ERA Chair Team Action Step 5: Disseminate the results of the CoE and ERA Chair Team

If you have space, then it's nice to have an overview figure in Section 1 ... This one is from a H2020 ERA Chair proposal

Centre of Excellence's Research Topic and Research Sub-Topics (RST)

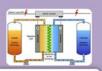
RST 1: Organic Transistors



RST 2: OLEDs



RST 3: Organic Solar Cells



RST 4: Organic Energy Storage Systems

ERA Chair Team

ERA Chair Holder: Professor (1) ERA Chair Experienced Researchers (at least 4)

ERA Chair Innovation Manager (1)

Expected Impacts

Impact 1. Increased attractiveness of the institution, host region and country for internationally excellent and mobile researchers.

Impact 2. Increased research excellence of the institution in the specific fields covered by the ERA Chair holders. Impact 3. Improved capability to compete successfully for internationally competitive research funding. Impact 4. Institutional changes within the ERA Chair host institution to implement the European Research Area priorities





What is the Hop-On Facility?

- Chance for one additional participant from a Widening country to join a project (i.e. with a signed grant agreement) funded under the Horizon Europe Pillar 2 or EIC pathfinder schemes, which does not already have a participant from a Widening country.
- To include the additional participant, an extra budget between 100,000 600,000 euro can be requested with up to 10% allocated to the coordinator of the consortium.
- Next cut-off date: 26 September 2024
- List of eligible Horizon Europe Pillar 2 and EIC pathfinder projects (to contact coordinators): https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/horizon/hop-on





What is the Hop-On Facility?

- Application success rates are high (>90%).
- However, the **challenge** is to identify a **coordinator/consortium willing** to make a Hop-On Facility application.
- Essential to contact coordinator/consortium well before the cut-off date e.g. now!



Twinning to boost the scientific and innovation capacity of the Universiteti i Tiranës to develop sustainable nanosensors for water pollution detection

Hop-On Facility (3 of 3)

Two example Hop-On Facility projects ...



- NOMA Resins (Polish SME) introduced into the Horizon Europe Pillar 2/Cluster 4 project "Multi-level Circular Process Chain for Carbon and Glass Fibre Composites (MC4)"
- Noma is an end-user for technologies related to the recycling, processing, and reuse of polymer matrix constituents from recycled composites.
- 478,375 euro of funding during 2 years.



- Kaunas University of Technology (KTU) introduced into the Horizon Europe EIC pathfinder project "Strong-coupling-enhanced nanoparticle array organic light emitting diode (SCOLED)".
- KTU is developing two chemical approaches (1) TADF emitters and (2) heavy-metal-free organic emitters exhibiting either duplet emission, room temperature phosphorescence (RTP) or singlet fission adapted for the needs of the SCOLED technology.
- 545,437 euro of funding during 2 years.





What is the ERA-Fellowship?

- 1. The ERA-Fellowships are open to researchers of any nationality who wish to engage in research and innovation (R&I) projects. These can involve either moving to the EU from any country worldwide or relocating within the EU to a Widening country.
- 2. The ERA-Fellowships build on the Marie Skłodowska-Curie Actions (MSCA)

 Postdoctoral Fellowships. Applications submitted to the MSCA Postdoctoral Fellowships 2024 (Call deadline: 11 September 2024) that cannot be funded due to budget constraints are automatically considered for ERA-Fellowships.
- 3. ERA-Fellowships typically last 2 years (possibility for extra year with sending organisation) and provide a generous salary according to the country of the host organisation.
- **4. Host organisations** must be located in eligible **Widening countries**, which are EU countries with lower participation rates in Horizon Europe. These organisations can be academic or non-academic entities.





What is the ERA-Fellowship?

- 5. The ERA-Fellowships aim to enhance the research skills and career prospects of the fellows, improve the quality and sustainability of research training in Widening countries, and increase the global attractiveness and reputation of the participating organizations. Additionally, they seek to foster a more competitive and innovative research environment in the widening countries.
- 6. The total budget for the ERA-Fellowships call is €8 million. The ERA-Fellowships aim to support high-scoring research proposals that otherwise might not receive funding due to limited financial resources.



ERA-Fellowship (3 of 5)

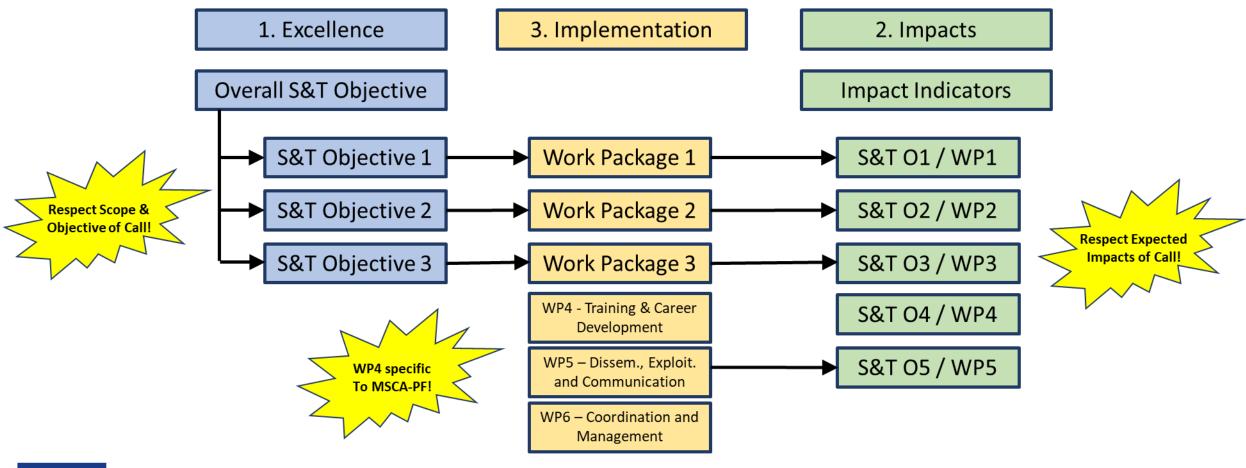
ERA-Fellowship proposal – Technical Description (Part B)

- 1. Excellence [I recommend about 5 pages for Section 1.]
 - 1.1 Quality and pertinence of the project's research and innovation objectives
 - 1.2 Soundness of the proposed methodology
 - 1.3 Quality of the supervision, training and of the two-way transfer of knowledge between the researcher and the host
 - 1.4 Quality and appropriateness of the researcher's professional experience, competences and skills
- 2. Impact [I recommend about 2 pages for Section 2.]
 - 2.1 Credibility of the measures to enhance the career perspectives and employability of the researcher and contribution to his/her skills development
 - 2.2 Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities
 - 2.3 The magnitude and importance of the project's contribution to the expected scientific, societal and economic impacts
- 3. Quality and efficiency of the implementation [I recommend about 3 pages for Section 3.]
 - 3.1 Quality and effectiveness of the work plan, assessment of risks and appropriateness of the effort assigned to work packages
 - 3.2 Quality and capacity of the host institutions and participating organisations, including hosting arrangements
- Don't deviate more than ½-1 page from the recommended limits!
 - Start Section 1.1 on the proposal cover page!

Funded by the European Union

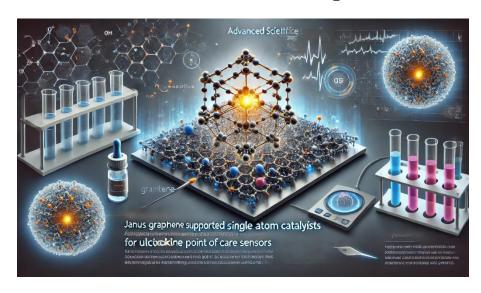


How to structure an ERA-Fellowship proposal





Two example ERA-Fellowship projects ...



- UPO (CZ) hosting ICN2 (ES) researcher in "Janus Graphene supported Single atom catalysts for ultrasensitive cytokine point of care sensors (RESPONSE)"
- 166,279 euro of funding during 2 years.



- Universidade NOVA de Lisboa (PT) hosting SINTEF
 Ocean AS (NO) researcher in "Hazards of
 microplastics to the marine ecosystem: A novel
 mesocosm approach to evaluate the dynamic and
 effects of microplastic on marine organisms' health
 (PlastHealth)".
- 156,779 euro of funding during 2 years.





A last word on sources of information ...

 See video of EC's Horizon Europe info-day on the Widening Work Programme 2023-2025



- 2. Review carefully the "Topic Q&As" for the current Horizon Widening calls, but also for past Widening calls.
- 3. Review carefully the projects that have been funded in past Horizon Europe Widening calls in the CORDIS database.







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Palacký University Olomouc

