Some ideas about project proposals for calls in 2024

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List with links of proposed projects that open in the fall 2023

All projects are funded by European Commission under Horizon Europe Framework Programme (HORIZON):

- HORIZON-MSCA-2023-SE-01-01
- HORIZON-CL6-2024-GOVERNANCE-01-6
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- PRIMA MFD WFFF Nexus





Proposition of the call:

HORIZON-MSCA-2023-SE-01-01





MSCA Staff Exchanges 2023

HORIZON-MSCA-2023-SE-01-01

Staff Exchanges (SE) project

SE is a high quality and credible R&I project with an original idea demonstrating a clear added-value to the state-of-the-art in its scientific field. Support is provided for international, inter-sectoral and interdisciplinary mobility of R&I staff leading to knowledge transfer between participating organisations. Projects can be implemented together with other related R&I activities funded by another EU grant (e.g., Horizon Europe grants other than the MSCA, Erasmus+, Structural Funds etc.) as long as this does not entail double funding.

Planned opening date

05 October 2023

Deadline date

28 February 2024 17:00:00 Brussels time



MSCA Staff Exchanges 2023

Expected Outcome

For staff members

- Increased set of research and transferable skills and competences, leading to improved employability and career prospects within and outside academia;
- More knowledge and innovative ideas converted into products, processes and services;
- More entrepreneurial mind-sets, testing new and innovative ideas;
- Increased international exposure leading to extended networks and opportunities;
- Enhanced networking and communication capacities with scientific peers, as well as with the general public that will increase and broaden the research and innovation impact.



MSCA Staff Exchanges 2023

Expected Outcome

For participating organisations

- Innovative ways of cooperation and transfer of knowledge between sectors and disciplines;
- Strengthened and broader international, inter-sectoral and interdisciplinary collaborative networks;
- Boosted R&I capacity.





MSCA Staff Exchanges 2023

Expected impact

Proposals under this Action should contribute to the following expected impacts:

- Increase international, inter-sectoral and interdisciplinary mobility of research staff within Europe and beyond through collaborative research networks and activities;
- Strengthen the R&I human capital base in Europe and beyond;
- Increase Europe's attractiveness as a leading destination for R&I;
- Contribute to Europe's competitiveness and growth through high-quality R&I;
- Foster the culture of open science, innovation and entrepreneurship.



Staff Exchanges in a nutshell

Overview	
Minimum number of participating organisations	3 in 3 different countries
Minimum number of beneficiaries from EU Member States or Horizon Europe Associated Countries	2
Academic sector	No restrictions
Non-academic sector	No restrictions
Max number of person months	360
Interdisciplinary secondments	≤ 1/3
Secondment duration	1 - 12 months
Associated partners	No minimum Mandatory Letter of Commitment
Ranking lists	8 (scientific) panels

Ranking lists 8 (scientific) panels
Chemistry (CHE); Social Sciences and Humanities (SOC); Economic Sciences (ECO); Information Science and

Engineering (ENG); Environment and Geo-Sciences (ENV); Life Sciences (LIF); Mathematics (MAT), and Physics (PHY).

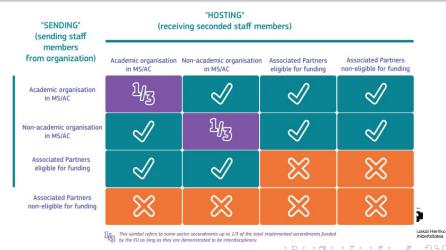




More specifics of Staff Exchanges

- Proposals must be submitted to <u>only one</u> of the eight scientific panels.
- There is no pre-defined size for Staff Exchanges projects.
 Based on previous calls, the average size of the consortia is between 6 to 10 organisations. As for the number of associated partners, it should remain reasonable and commensurate with the size of the network.
- A secondment may be <u>split</u> into several <u>stays</u> (called a "split stay") with one or several beneficiaries or associated partners, as long as it respects the above-mentioned maximum and minimum duration. The duration of the secondment is counted from the day of departure to the day of return.

Eligibility for EU funding of secondments between organisations



Previous call and new proposition

This year we submitted a project (topic HORIZON-MSCA-2022-SE-01-01) with the acronym **PREDEXPO** entitled:

Hybrid multidimensional spatio-temporal models of the human population exposome for the assessment of the susceptibility to future pandemics at specific locations

Question for discussion

We can develop, improve and update this project and submit proposal in a new call MSCA Staff Exchanges 2023. What do you think?



Next proposition of the call:

HORIZON-CL6-2024-GOVERNANCE-01-6



Develop innovative applications to support the European Green Deal, building on meteorological satellite data HORIZON-CL6-2024-GOVERNANCE-01-6

Call

Innovative governance, environmental observations and digital solutions in support of the Green Deal

Type of action

HORIZON-RIA HORIZON Research and Innovation Actions

Planned opening date

17 October 2023

Deadline date

28 February 2024 17:00:00 Brussels time

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Develop innovative applications to support the European Green Deal, building on meteorological satellite data HORIZON-CL6-2024-GOVERNANCE-01-6

Scope

The successful applications should take up and enhance the development of new environmental information based on the Meteosat Third Generation (MTG) and EUMETSAT Polar System Second Generation (EPS SG).

They should explore pre-operational European services through the exploitation of new Earth Observation (EO), digital infrastructures and modelling capabilities.



Some ideas about project proposals for calls in 2024

Develop innovative applications to support the European Green Deal, building on meteorological satellite data HORIZON-CL6-2024-GOVERNANCE-01-6

Scope

Proposals should build on these and other missions (e.g., Sentinel), designing new methods and data products to exploit the synergies across instruments and platforms and showcase pilot services for public and private users.

They should turn existing and future EO measurements into new environmental information.

Co-registration of measurements should allow for optimising the information extraction, as for example the life cycle of extreme weather events through lightning, hyperspectral and other instruments hosted by geostationary payloads.



Develop innovative applications to support the European Green Deal, building on meteorological satellite data HORIZON-CL6-2024-GOVERNANCE-01-6

Scope

Synergies should be considered for across-payloads (geostationary and polar orbiting systems) measurements, and through the use of advanced algorithms, machine learning/artificial intelligence, data assimilation techniques and atmospheric models and artificial intelligence/machine learning techniques. This should contribute to the design of new products exploiting the full spectrum of possibilities.

The tools and services developed under the successful applications should be made available for future integration in the Copernicus programme and in the common topical European open infrastructure, Destination Earth. Open-source data/information requires open access to data that is associated with important benefits for the society and economy when reused.

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HORIZON-CL6-2024-GOVERNANCE-01-6

Develop innovative applications to support the European Green Deal, building on meteorological satellite data HORIZON-CL6-2024-GOVERNANCE-01-6

Scope

Successful applications should also develop applications using the new environmental data/information within key domains (e.g., urban and coastal management, air quality and health, disaster risk reduction, sustainable blue economy and climate adaptation/mitigation), as enhancements of already available services.

Attention should be given the sustained uptake of data/services or these satellites by the European commercial sector.



Develop innovative applications to support the European Green Deal, building on meteorological satellite data HORIZON-CL6-2024-GOVERNANCE-01-6

Proposals are expected to contribute to all of the following outcomes:

- Uptake of the newly available environmental information and data at global and regional scale delivered through the Copernicus Sentinels and the EUMETSAT "Meteosat Third Generation (MTG)" and "EUMETSAT Polar System Second Generation (EPS SG)";
- Preparation and implementation of high-quality (novel) satellite
 data products and applications using the next generation
 EUMETSAT and Copernicus instruments for the exploitation by
 advanced physical/chemical/biochemical models, and integrating
 in-situ data, to improve the implementation and operationalisation
 of new and advanced services and applications;

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Develop innovative applications to support the European Green Deal, building on meteorological satellite data HORIZON-CL6-2024-GOVERNANCE-01-6

Proposals are expected to contribute to all of the following outcomes:

- Demonstrated use of these applications for Earth Systems predictions, long-term climate monitoring (i.e., re-analysis within the Copernicus climate services context) and disaster risk prediction and reduction (e.g., within the framework of the Copernicus Emergency Management service);
- Exploitation of the European cloud systems (e.g. Copernicus DIAS, European Open Science Cloud, European Weather Cloud) and a contribution to the Destination Earth initiative;
- Demonstrated use of satellite derived environmental information to advance and improve seamless climate-weather and environmental services in Europe, and potentially beyond.

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Develop innovative applications to support the European Green Deal, building on meteorological satellite data HORIZON-CL6-2024-GOVERNANCE-01-6

Expected impact

Topics under this destination will have impacts in the following areas:

- "Climate change mitigation and adaptation";
- "Clean and healthy air, water and soil";
- "Enhancing ecosystems and biodiversity on land and in water";
- "Sustainable food systems from farm to fork on land and sea";
- "High quality digital services for all";
- "A Competitive and secure data-economy".



Previous call and new proposition

This year we submitted a similar with the same type RIA project (topic HORIZON-HLTH-2023-ENVHLTH-02-01) with the acronym **ProEnv** entitled:

Research platform for PROtection ENVironment and health on basis of hybrid spatio-temporal models with using sensors data

Question for discussion

We can develop, improve and update this project and submit proposal in a new call HORIZON-CL6-2024-GOVERNANCE-01-6. What do you think?



Proposition of the call:

HORIZON-INFRA-2024-TECH-01-03





New digital twins for Destination Earth HORIZON-INFRA-2024-TECH-01-03

Call

Next generation of scientific instrumentation, tools, methods, and advanced digital solutions for RIs (2024)

Type of action

HORIZON-RIA HORIZON Research and Innovation Actions

Planned opening date

06 December 2023

Deadline date

12 March 2024 17:00:00 Brussels time



New digital twins for Destination Earth HORIZON-INFRA-2024-TECH-01-03

Scope

Destination Earth, for which the operational capacity building is funded from the Digital Europe Programme, aims to develop a high precision digital model of the Earth to model, monitor and simulate natural phenomena and related human activities. As part of European Commission's Green Deal and the Digital Strategy, Destination Earth (DestinE) will contribute to achieving the objectives of the twin transition, green and digital.



New digital twins for Destination Earth HORIZON-INFRA-2024-TECH-01-03

Scope

As part of the build-up of Destination Earth, continuous preparatory scientific and technical developments need to be carried out to ensure integration of new digital twins, covering new areas, into the Destination Earth digital twin framework.

The aim is to develop new digital twin infrastructures that the core simulation, data fusion and supporting software infrastructures for high-performance computing and data handling can be seamlessly integrated with the Destination Earth platform components. These infrastructures should optimally support the scientific and technical performance of the entire digital twin ecosystem of Destination Earth.



New digital twins for Destination Earth HORIZON-INFRA-2024-TECH-01-03

Project results are expected to contribute to all the following expected outcomes:

- Emergence of new science-based digital twin infrastructures to be gradually integrated in Destination Earth;
- Establishment of new digital standards for software (including simulation and simulation-observation data fusion) and data for Destination Earth;
- Standards and science based approach for modelling, predicting and assessing the Earth systems and their socio-economic impact.





New digital twins for Destination Earth HORIZON-INFRA-2024-TECH-01-03

Proposals should address all the following aspects:

- development of additional and/or improved, advanced, very high-resolution, complex Earth-system model components representing, for example, atmosphere, ocean, land surface, hydrology, cryosphere and biosphere in the Earth-system simulation framework of Destination Earth;
- collecting advanced Earth observation data from satellites, established airborne and ground-based observatories as well as novel technologies (for example drones, buoys, IoT sensors) linked for use in the data fusion framework of Destination Earth for simulation and observation;

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New digital twins for Destination Earth HORIZON-INFRA-2024-TECH-01-03

Proposals should address all the following aspects:

- ensure appropriate representation of uncertainty to produce reliable estimates of both monitored and predicted states of the new components;
- development of scientific components of impact models associated with the new topical components for the management of user specific applications in areas such as renewable energy, food, water and health;



New digital twins for Destination Earth HORIZON-INFRA-2024-TECH-01-03

Proposals should address all the following aspects:

development of software and data handling infrastructures
 that use and enhance the extreme-scale computing and data
 handling infrastructure of the Digital Twin Engine of
 Destination Earth; support and enhance both the workflow
 management established by the existing Digital Twin Engine
 and its operation through the DestinE Core Service Platform
 and the data handling established by the existing Digital Twin
 Engine and its operation through the DestinE Data Lake.



New digital twins for Destination Earth HORIZON-INFRA-2024-TECH-01-03

Proposals for topics under this destination should set out a credible pathway to contributing to one or several of the following impacts:

- Enhanced global competitiveness and technological excellence of the EU and Associated Countries in an extremely fast-moving environment through investments into the development, of forward-looking technical instruments and tools for European RIs.
- Enhanced competitiveness of EU and Associated Countries industry through co-development with industrial actors of advanced RI technologies and technology transfer;
- Opening up of new areas of research and development of new industrial applications/products;



New digital twins for Destination Earth HORIZON-INFRA-2024-TECH-01-03

Proposals for topics under this destination should set out a credible pathway to contributing to one or several of the following impacts:

- Development of skills of RI staff aligned with the advancements of the RI technologies;
- Transdisciplinarity, cross-fertilisation and a wider sharing of knowledge and technologies between academia and industry;
- Wider use of AI in research and enhanced data-driven research across the EU and Associated Countries.





Previous call and new proposition

This year we submitted a similar with the same type RIA project (topic HORIZON-HLTH-2023-ENVHLTH-02-01) with the acronym **ProEnv** entitled:

Research platform for PROtection ENVironment and health on basis of hybrid spatio-temporal models with using sensors data

Question for discussion

We can basis on this project submit similar with new ideas proposal in a new call HORIZON-INFRA-2024-TECH-01-03. What do you think?





Proposition of the call:

PRIMA MED WEFE Nexus



Partnership for Research and innovation (PRIMA) in the Mediterranean Area (MED) Water Energy Food and Ecosystems (WEFE)

PRIMA

PRIMA programme is supported by Horizon 2020, the European Union's Framework Programme for Research and Innovation. WEFE Nexus is sustainable and innovation Mediterranean path to interconnect and combine water management sustainable management of water resources, farming systems and agro-food value chains.

Type of action

HORIZON-RIA HORIZON Research and Innovation Actions





PRIMA MED WEFE Nexus

Planned opening date

January 2024

Deadline date

March 2024 - Stage-1 September 2024 - Stage-2

The applied page limits are:

- Stage-1, for the scientific document (Part II): max 10 pages, all sections included;
- Stage-2, for the scientific document (Part II): max 50 pages, all sections included;

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PRIMA MED WEFE Nexus

So the eligibility rules can be read as follows:

At least four legal entities established in at least three different countries considered as PRIMA Participating States, out of which:

- at least one must be established in an EU Member State or a third country associated with Horizon 2020 and not being an Mediterranean Partner Countries (MPC),
- at least two must be established in third country/countries bordering the Mediterranean Sea (MPC): Algeria, Jordan, Israel, Tunisia, Morocco, Lebanon, Egypt, Turkey.





PRIMA MED WEFE Nexus

Previous call of proposal 2023



THEMATIC AREA: Nexus

TOPIC: 1.4.1-2023 (IA) Accelerate adaptation and mitigation to climate change in the Mediterranean region by deploying WEFE nexus solutions.

TYPE OF ACTION:(IA) Innovation Action

TOTAL INDICATIVE AMOUNT ALLOCATED TO THIS CALL: EUR 8.2 million

OPENING DATE: 25 Jan, 2023

DEADLINE:

Stage 1 Pre-proposals – 22 March, 2023 (17:00h Central European Time (CET) Stage 2 Full proposals – 6 September, 2023 (17:00h Central European Time (CET)





Summarize of deadlines in 2024

- End of project submission 28th February 2024:
 - HORIZON-MSCA-2023-SE-01-01,
 - HORIZON-CL6-2024-GOVERNANCE-01-6
- 2 End of project submission in March 2024:
 - HORIZON-INFRA-2024-TECH-01-03
 - PRIMA MED WEFE Nexus (Stage-1)





Thank you for attention:)

