

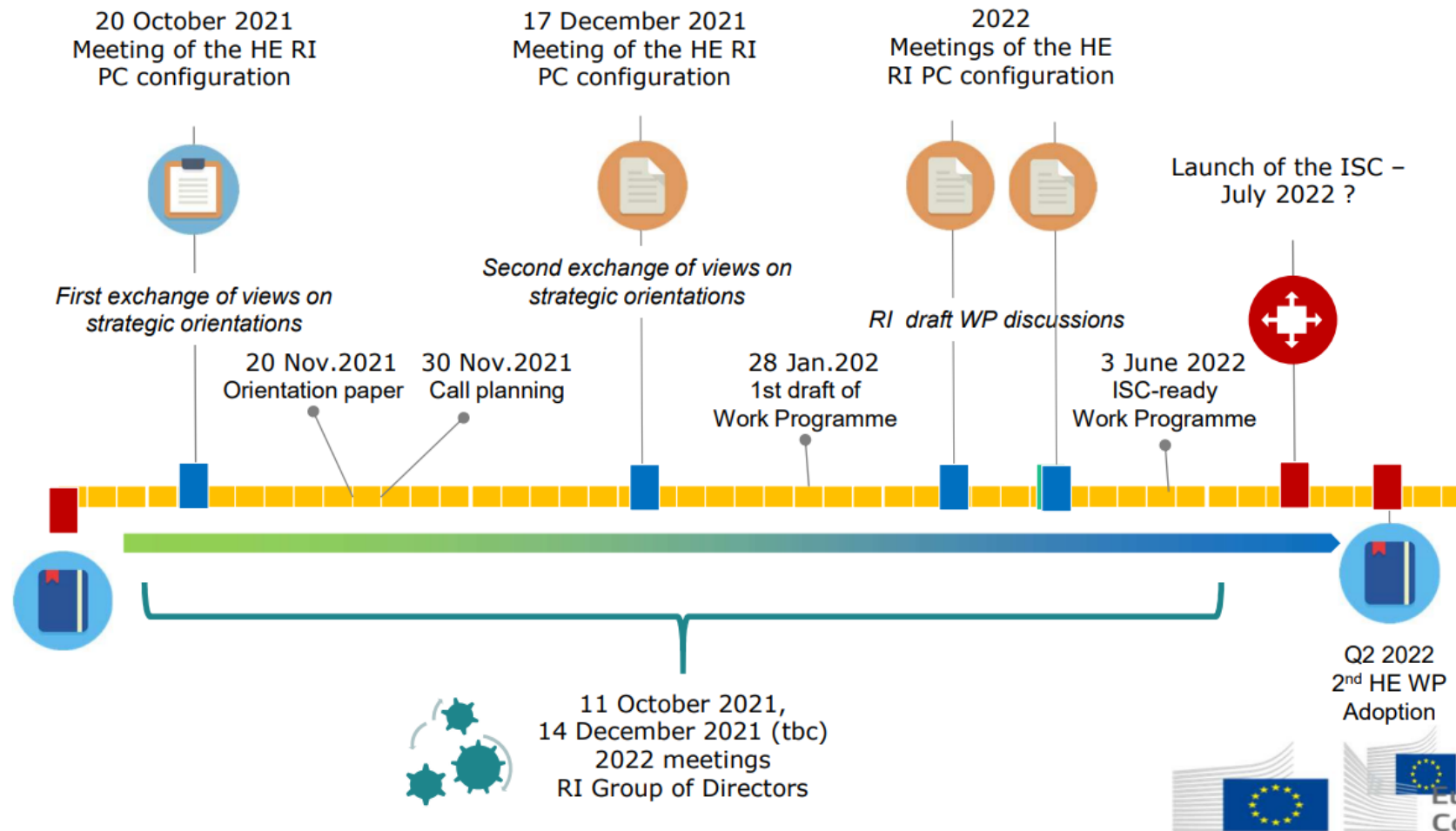
Horizon Europe
Work Programme 2023-2024
Priority Research Infrastructures

The WP is in its final phase of preparation. All information provided hereby is to be considered non final and subject to change.

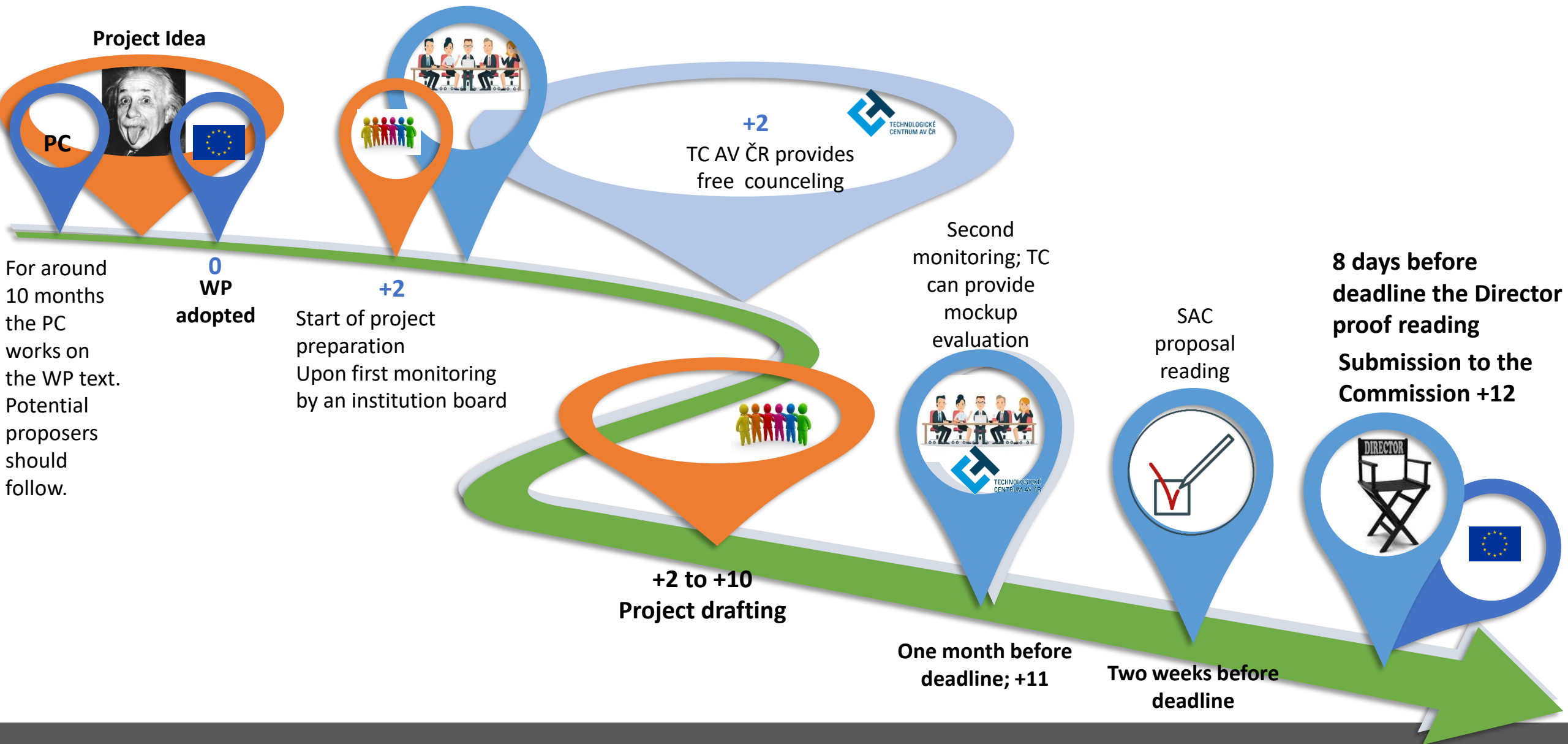
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CZ PC delegate
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How a Work Programme is prepared

Towards the RI Work Programme 2023-2024 **TIMELINE**



The Road from the idea to the proposal of a project



Structure of the Work Programme 2023-2024

5 Destinations

No. 2 Destination INFRAEOSC:

Enabling an operational, open and FAIR EOSC ecosystem.

No. 4 Destination INFRATECH:

Next generation of scientific instruments, tools and methods and advanced digital solutions.

No. 1 Destination INFRADEV:

Developing, consolidating and optimising the European research infrastructures landscape, maintaining global leadership

No. 3 Destination INFRA SERV:

RI services to support health research, accelerate the green and digital transformation, and advance frontier knowledge.

No. 5 Destination INFRANET:

Network connectivity - enabler for collaboration without boundaries.

INFRADEV Developing, consolidating and optimising the European RI landscape, maintaining global leadership

- This destination should support and encourage the development of **new RI concepts** to ensure a continuous feeding of the ESFRI process and address important gaps in the European landscape;
- **early implementation phase** of ESFRI projects;
- specific actions for RI **policy developments** and **international cooperation** measures in priority areas.
- Call estimated opening in 2022: 22 Dec 2022; Deadline: 28 Mar 2023
- Call estimated opening in 2023: Dec 2023; deadline March 2024
- Estimated budget 97+21 million EUR

INFRADEV

	Type of action	MEUR per GA	No. of prop
Concept development for a new research infrastructure to manage, integrate and sustain large medical cohort studies	RIA	1-3	1
Early phase implementation of ESFRI Projects which entered the ESFRI Roadmap in 2018 (IFMIF – DONES, DiSSCo, eLTER, EU-IBISBA, METROFOOD-RI, EHRI)	CSA	1-1,5	5
Consolidation of the RI landscape –Individual support for evolution and long term sustainability of pan-European research Infrastructures (reorientation or evolution of ESFRI Landmarks...)	RIA	3-4	12
Consolidation of the RI landscape –development of complementarities, synergies and/or integration between a set of pan-European research Infrastructures (ERICs intergration, SLA)	RIA	2-5	5
Preparation of common strategies for future development of RI technologies and services within broad RI communities	CSA	1,5-2,5	5
Strengthen bilateral cooperation on RI with Latin America (energy, health, biodiversity, climate Change, food security, ICT)	CSA	1-1,5	2
Observatory on the implementation of the ERIC legal framework		?1,5	1
Preparatory phase of new ESFRI RI projects	CSA	3	1
RI concept developing (technical solutions -new and upgrades)	RIA	1-3	4
Strengthen the bilateral cooperation on RIs with Africa (physics eligible topic)	CSA	1,5	1
Strengthening the international dimension of ESFRI/and/or/ERICs	CSA	1-1,5	5

Destination INFRAEOSC: Enabling an operational, open and FAIR EOSC ecosystem

- This destination develops the EOSC in a more structured way as an federated ecosystem, **Web of FAIR Data and Services**, based on **existing RIs** and comprising the **whole research data lifecycle**:
 - FAIR research data commons (data services, tools), based on core horizontal functions
 - E-infrastructures
 - Service layers
- Call estimated opening in 2022: 22 Dec 2022; Deadline: 28 Mar 2023
- Call estimated opening in 2023: Dec 2023; deadline March 2024
- Estimated budget 70+61 million EUR



INFRAEOSC

	Type of action	MEUR per GA	No. of prop
Build on the science cluster approach to ensure the uptake of EOSC by RIs and research communities (PanOSC consolidation with other communities)	RIA	24	1
Development of community-based approaches for ensuring and <u>improving the quality of scientific software and code</u> and other digital object as workflows, computational models	RIA	8	1
Planning, tracking, and assessing scientific knowledge production (DMPs linked to SKG – Science Knowledge Graphs)	RIA	10	1
Next generation services for operational and sustainable EOSC Core Infrastructure (User feedback for improvement of EOSC core)	RIA	10	1
EOSC Architecture and Interoperability Framework	CSA	3	1
Trusted environments for sensitive data management in EOSC (public and commercial EOSC users)	RIA	7,5	2
FAIR and open data sharing in support of the mission adaptation to <u>climate change</u>	RIA	6-8	2
Supporting the <u>EOSC Partnership</u> in further consolidating the coordination and sustainability of the EOSC ecosystem	CSA	Around 4	1
Enabling a network of EOSC federated and trustworthy repositories and enhancing the framework of generic and discipline specific services for data and other research digital objects (TRUSTWORTHY REPOSITORIES)	CSA	Around 5	1
Long-term access and preservation infrastructure development for EOSC, including data quality aspects	RIA	Around 8	1
Innovative and customizable services for EOSC Exchange	RIA	Around 7	4

Destination INFRASERV: RI services to support health research, accelerate the green & digital transformation, and advance frontier knowledge

- This destination provides RI services (e.g. access to unique facilities, samples provision, processing and analysis, data and modelling services) in support of research aimed at the addressing the EU priorities (e.g. Health, transition to green economy and digital transition). Synergies with priorities in Pillar II. of HE will be developed.
- Call estimated opening in 2022: 22 Dec 2022; Deadline: 28 Mar 2023
- Estimated budget 148,3 (2023) + 8,7(2024) million EUR

INFRASERV

	Type of action	MEUR per GA	No. of prop
RI services to enable R&I addressing main challenges and EU priorities (TA) <ul style="list-style-type: none"> -RIs services to enable research linking environmental factors to human health -RIs services for improving clinical research in the paediatric field -RIs services for climate-change risks -RI services for sustainable Arctic/Polar Regions -RIs services for healthy ocean, seas and rivers -RIs services for sustainable aquaculture, fisheries and blue economy -RIs services for renewable energy and smart grids -RIs services for innovative applications of nanoscience and nanotechnology -RIs services to enhance the EU capacity for the development of semiconductors -RIs services for shaping the future generation society 	RIA	8-14,50	8
RI services advancing frontier knowledge <ul style="list-style-type: none"> -RIs services in Biosphere: terrestrial biodiversity and ecosystems, including forest -RIs services in Astronomy and Astroparticle physics -RIs services in Arts and Humanities 	RIA	8-14,50	2
RI services advancing frontier knowledge: co-fund pilots with pan-European RIs and/or national RIs; 70% funding rate	COFUND	2-5	3
No calls in 2024	RIA	6-8	2

Destination INFRATECH: Next generation of scientific instrumentation, tools and methods and advanced digital solutions

- This destination aims at developing ground-breaking technologies, instruments, tools and digital solutions. Sensors, detectors, robots etc.
- For RIs and the wider technological use.
- Call estimated opening in 2023: Dec 2023; Deadline: Mar 2024
- Estimated budget 161,8 million EUR

INFRATECH

	Type of action	MEUR per GA	No. of prop
R&D for the next generation of scientific instrumentation, tools, methods, <u>solutions for RI upgrade</u>	RIA	5 - 10	9
Development of tools, solutions, modules to enable R&I <u>on the social aspects of the green transition</u>	RIA	5	1
New digital twins for <u>Destination Earth</u>	RIA	15	3
AR/VR-empowered digital twins for <u>modelling complex phenomena in new RI application areas</u>	RIA	12	2

Destination INFRANET: Network connectivity enabler for collaboration without boundaries

- This destination aims at delivering state of the art network connectivity, above-net innovative services and operational excellence for the National Research & Education Networks (NRENs) and their researchers
- Building on Framework Partnership Agreement between the federation of NRENs- National Research and Education Networks it provides the building block of the European e- infrastructure.
- Specific Grant Agreements implementing the FPA are included into other actions.
- This means no specific call is opened for this destination.



Other actions

- Grants to identified beneficiaries
 - ICRI 2024
 - Observatory on the implementation of the ERIC legal framework
 - Collecting data, platform to upload data, monitoring, support of ERIC Forum
- Specific Grants Agreements for REN (NRENs)
- Expert contracts