



Roadmapping for High Energy Physics and Radio Astronomy

Convener: Sergio Andreozzi



Funded by
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SPECTRUM is funded by the European Union - Grant Agreement Number 101131550

2 Oct 2024 15:00–16:15
EGI Conference 2024

Agenda

SPECTRUM Project Overview

📅 Wed Oct 2, 2024 ⌚ 3:00 PM - 3:10 PM

Location: San Martino

Speaker: Sergio Andreozzi

SPECTRUM Project: Community of Practice and Survey

📅 Wed Oct 2, 2024 ⌚ 3:10 PM - 3:20 PM

Location: San Martino

Speaker: Tommaso Boccali

Data Processing Needs and Trends in High Energy Physics

📅 Wed Oct 2, 2024 ⌚ 3:30 PM - 3:55 PM

Location: San Martino

Speaker: David Southwick

Current and future needs in Radio Astronomy Computing

📅 Wed Oct 2, 2024 ⌚ 3:55 PM - 4:15 PM

Location: San Martino

Speaker: Jeff Wagg, Marco Iacobelli



SPECTRUM Project Overview

Sergio Andreozzi

Head of Strategy, Innovation and Communications, EGI Foundation

Project Director, SPECTRUM



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Project Vision and Overall Objective

VISION

Data-intensive scientific collaborations have access to a European exabyte-scale research data federation and compute continuum

PROJECT OVERALL OBJECTIVE

*Deliver a **Strategic Research, Innovation and Deployment Agenda (SRIDA)** which defines the vision, overall goals, main technical and non-technical priorities, investment areas and a research, innovation and deployment roadmap for data-intensive science and infrastructures*

Key Data

Fact sheet: [See page on CORDIS](#)

Duration: 30 months – **Start date:** 1 Jan 2024 – **End date:** 30 June 2026

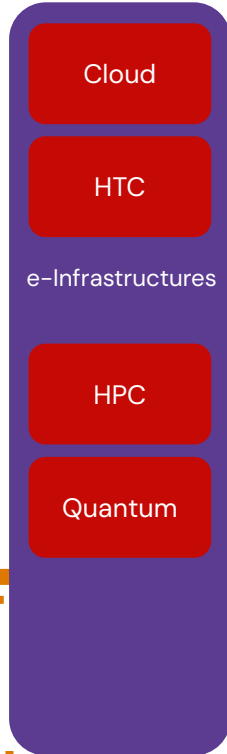
Partners: 9 partners + 1 affiliated

Budget: 2,449,542.50€

Funding Source: Horizon Europe – Call [HORIZON-INFRA-2023-DEV-01-05](#)

- *Preparation of common strategies for future development of RI technologies and services within broad RI communities*

Consortium Overview



SPECTRUM project



Community of Practice





Project objectives and related results

Project Objective 1

Join efforts of research infrastructures and e-infrastructures to address common research and innovation needs towards exabyte-scale computing

Project KER 1

Community of Practice of research infrastructures in physics, radio-astronomy and other scientific domains and related collaboration agreement

Project Objective 2

Identify the relevant use cases, related challenges and opportunities

Project KER 2

Compendium of use cases, related challenges, gaps and requirements covering technical and policy aspects

Project Objective 3

Understand the landscape and best practices

Project KER 3

Compendium of existing approaches, existing services, technical solutions and policies for the federation of data and compute infrastructures

Project Objective 4

Increase collaborative service delivery by e-Infrastructures at national, European and international level

Project KER 4

Recommendations for a jointly supported corpus of interoperable access policies

Project KER 5

Technical blueprint of a European compute and data continuum

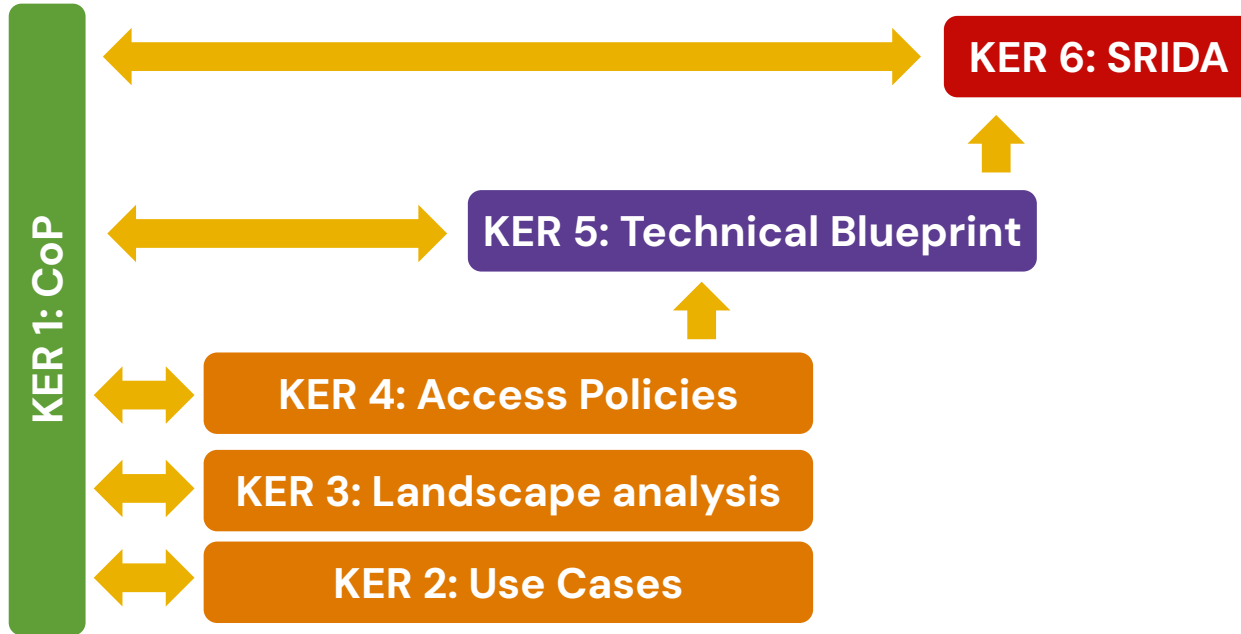
Project Objective 5

Agree on strategic action paths, specific actions and policy recommendations

Project KER 6

SRIDA (A strategy and plan for the implementation of exascale research data federation and compute continuum for data-intensive science)

Relationship among KERs



Primary Target Groups

TG1 – Scientific Communities / Research Infrastructures

Scientific Communities in HEP and RA and other relevant domains.

Participate in CoP and WGs, Implement outputs

TG2 – Computing & Data Service Providers/e-Infrastructures

Existing Data, HPC, HTC, Cloud, Quantum

Participate in CoP and WGs. Implement outputs

TG3 – Policy Makers / Funding Bodies

European Commission, EuroHPC, EOSC, National Authorities, ESFRI...

Provide inputs, align policies

TG4 – ‘Long Tail of Science’

Inputs to use cases through represented communities

How do we measure success?

KPI1: Number of established Working Groups

5+

KPI2: Number of participants in the Community of Practice

30+

KPI3: Number of data-intensive science use cases agreed & analysed

30+

KPI4: Number of large-scale European providers (HPC, Cloud, HTC) covered by the landscape analysis and access policies

15+

KPI5: Number of countries covered by the landscape analysis

10+

KPI6: Number of capabilities aligned across communities

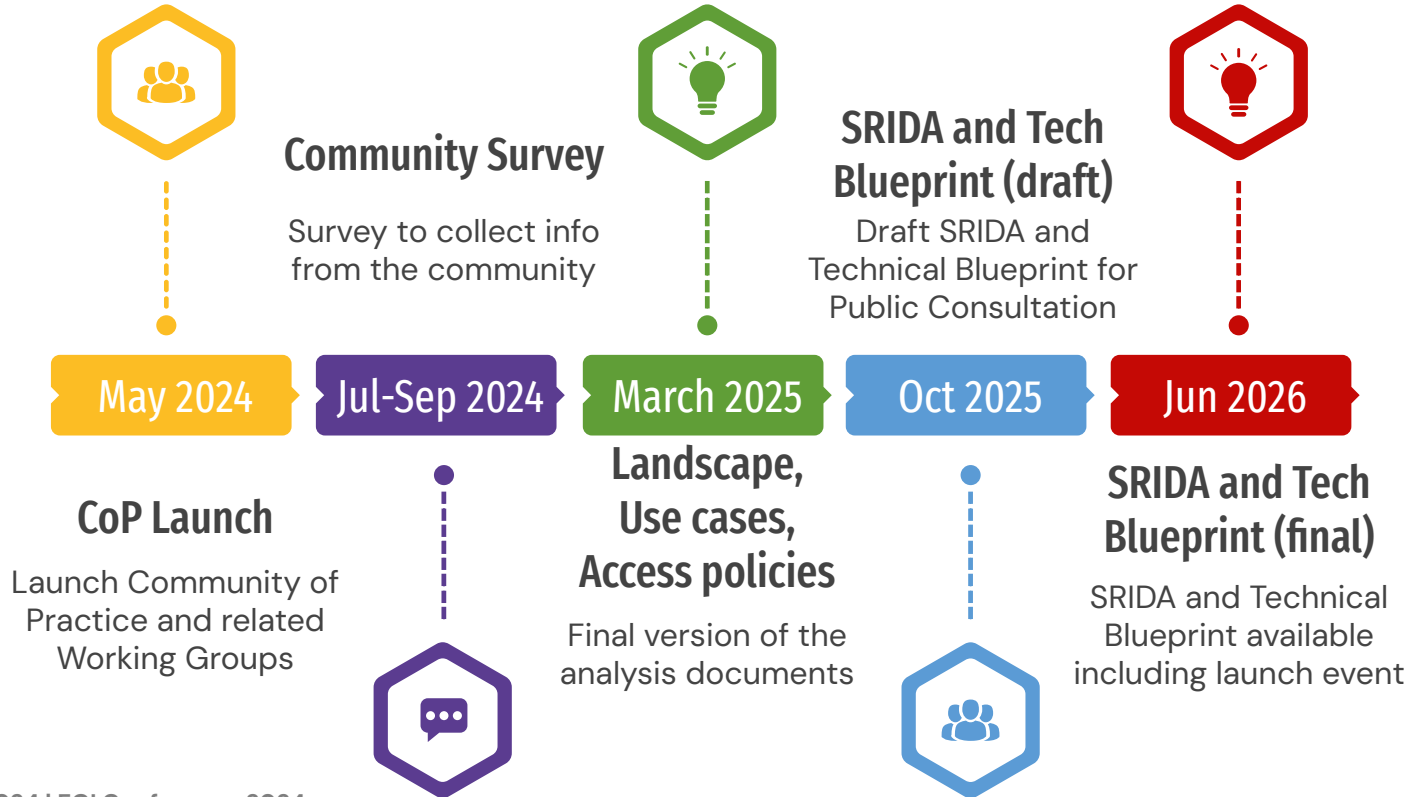
10

KPI7: Number of entities that contributed inputs to the Technical Blueprint and SRIDA

50



Timeline





Thank you! Questions?

 spectrumproject.eu

 linkedin.com/company/spectrum-project-eu



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