SMALL TO MEDIUM-SIZED DISTRIBUTED RESEARCH INFRASTRUCTURES (DRI) IN SUSTAINING EUROPEAN RESEARCH COMPETITIVENESS

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Introduction

Focus

"Small and Medium-sized Research Infrastructures (RIs) and their importance for European competitiveness"

Overview:

Who are these RIs?

What challenges do they face?

Why is sustained support vital?

Definition & Categories

No strict definition, but categorized as:

- Subgroup of mostly European distributed research infrastructures (DRIs)
- Established by national/regional governments; funded through national budgets
- Historically networked across Europe (Integrated Infrastructures Initiative - I3, FPs 6, 7, 8)
- Conducted transnational access and joint research activities through Integrating Activities projects
- Not included in the ESFRI roadmap or ERICs
- Focus on those aiming to maintain infrastructural services
- Example networks:
  - ChETEC-INFRA, EUFAR, Europlanet-RI, MOSBRI, Opticon, Radionet, ARIADNE, RISIS, NFFA, AQUACOSM

Rationale: Shift in European RI Policy

Background of the shift

- Traditional funding via Integrating Activities calls (Starting and Advanced communities)
- Launch of ESFRI Roadmaps & ERIC legal status; large-scale infrastructures emerge (e.g., ELI)
- Only a fraction of infrastructures have been admitted to the RM and became ERICs; most RIs remain outside this model
- Horizon Europe's shift away from Integrating Activities projects
- New instruments (INFRASERV & INFRATECH) are designed to cater to larger players, excluding small/medium-sized RIs

Key message:

- Concerned RIs struggle to offer Transnational Access (TA) or even sustain as a collaboration network without adequate support
- Both physical and remote access require sustained funding
- Maintaining TA for these infrastructures is crucial for Europe

Why Small & Medium-Sized RIs are Unique and Essential

Survey results:

- Unique services not covered by ESFRI RM
- Flexible organizational structures to adapt to changing priorities
- Ability to collaborate with large communities (e.g., ARIE, EUCALL, LENS)
- Act as entry points for new researchers, providing hands-on experience
- Vital for training non-academic users

Ensuring survival of these RIs amplifies research opportunities and drives innovation across sectors!

Concluding remarks

- Large infrastructures attract attention due to scale and impact, but non-RM and/or ERIC RIs are equally crucial
- Smaller RIs form the backbone of Europe's collaborative scientific ecosystem
- Risk: Neglecting these RIs could lead to loss of Europe’s competitive edge
- Conclusion: A resilient, adaptable, and dynamic research ecosystem requires strategic support for all RIs
- Call for balanced investment in both large and small RIs
- FP10 funding tools and mechanisms to be more conscious of the role of these RIs

Feedback on the White Paper

Commenters:

- Patrick England (MOSBRI)
- Izabela Rottmann (RadioNet)
- Agnieszka Slowikowska (Jive ERIC)
- Simon Berry (SKAO)
- Ondrej Hradil (EuroNanoLab)

Main themes & questions

- Challenging to define the boundaries of the group concerned
  - *Not all of them are small or medium size as it is also hard to define the size of an infrastructure.*
  - *Some have teamed up with RM RIs in INFRASERV projects or received co-fund projects*
  - *Some have since dissolved (e.g., INGRID, BRISK)*

- Being a distributed RI is not the common theme *since the insufficient support and distributed nature of the RIs are not correlated*

- Admission to ESFRI Roadmap and/or being an ERIC brings advantages but is no guarantee that support for TA is secured (maintenance of TA broader question). *Is the problem bigger than we think?*

- How would the landscape operate differently in the counter-factual scenario *with all IA projects continuing in addition to the existing funding tool, INFRASERV*?