EDSC-PIICAT Coordination and Harmonisation of National & Thematic Initiatives to Support EOSC

Consultation on synergies between Horizon and European structural and investment funds in EOSC Partnership

Webinar to launch the consultation Monday, July 20th 2020 12:00-13.30 (CET)



Coorganised with ERA Learn project with the support of





EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650.



Introduction to the consultation

Federica Tanlongo GARR Consortium, EOSC Pillar



Housekeeping

- For questions or comments, use the zoom chat.
- We'll reply offline to any unanswered questions, so let we know who you are!
- We will use sli.do for the interactive part (#EOSCESIF)
- Please be aware that the webinar will be recorded
- Materials will be available on the event page on EOSC Pillar website



Programme

- 12.00 12.15 Introduction to the consultation Federica Tanlongo, EOSC Pillar
- 12.15 12.30 European Partnerships: synergies with ESI Funds Maria Bianco, ERA Learn
- 12.30 12.45 Use cases on national and regional funding Donatella Lucchesi, INFN
- 12.45 13.20 Open discussion
- 13.20 13.30 Wrap-up and further work



Welcome & (brief) introduction

EOSC-Pillar:

 to coordinate national **Open Science efforts** across Austria, Belgium, France, Germany and Italy, to ensure their • contribution and readiness for the implementation of the European Open EOSC-Science Cloud Pillar (EOSC).

Federica Tanlongo – GARR federica.tanlongo@gart.it EOSC Pillar KoM, Rome, 3-5 July 2019



An ecosystem of regional projects

Multiplying the impact & reach of the EOSC and ensuring its EOSC-Synergy long-term sustainability at the national and regional level

national or
regional
catalogues;
infrastructure
interoperability;
policies
harmonisation;
training& skills

EOSC-

Nordic

ederica Tanlongo – GARR federica.tanlongo@garr.it EOSC-Pillar KoM, Rome, 3-5 July 2019

EOSC.



So why are we here?

Stable funding is one of the key ingredients of sustainability

- Structural/regional funds could be an important ingredient for it, but
 - They are not always as easily accessible as we'd like to complement European funding
 - It is not always possible to use what we funded with them as in-kind
 - Priorities must be harmonised to make good use of them

How can improve the situation for the next work programme?





European Partnerships Synergies with ESI Funds

Maria Bianco Project Officer Italian Ministry Universities and Research



Outline



- Era Learn: what we do
- Synergies: state of play
- How to match Horizon partnership topics with relevant MS / regions
- Pathway for Synergies
- Analysis of synergies for European Partnership
- Barriers
- Conclusion



ERA LEARN



- ERA-LEARN is a support platform for the Public-Public-Partnerships (P2P) community (now extended to all European Partnerships proposed for Horizon Europe), funded as a support action (CSA) by Horizon 2020.
- Since 2008, on behalf of the European Commission, ERA-LEARN :
 - operates a unique database of P2P networks, P2P calls and funded projects
 - provides studies and analyses on thematic clustering, internationalization, alignment, etc.

The specific objectives of current ERA-LEARN work programme are (among others) :

- identify and spread **good practices** for specific common challenges such as **widening of participation** and inclusiveness of less research-intensive countries, internationalisation of P2P networks;
- support impact assessments by offering trainings and real, full scale pilot assessment exercises, special tool-kits to provide guidance and advice addressing the development of key performance indicators (KPIs);



Synergies: State of Play



Horizon Europe: EU Partnerships

•European Partnerships allow for the use of cohesion funds:

- Sequential synergies
- Parallel synergies
- Integrated synergies
 subject to confirmation in ongoing negotiations

Cohesion Policy

- Joint EC-initiative (DG REGIO, GROW, AGRI, ENER, JRC, ...)
- Creation of interregional value chains
 Interregional investment projects
- Alignment of strategic investments (public/ private)

State Aid Rules

Pending amendment to general block exemption regulation (GBER) would allow exemption from **state aid rules** under certain conditions, e.g. :

 Transnational projects resulting from centrally organized calls for proposals and centrally evaluated;

EDSC-Pillar How to match Horizon partnership topics with relevant MS /regions



Eye@RIS3 Database: https://s3platform.jrc.ec.europa.eu/map

Identify relevant S3 coordinator: <u>https://s3platform.jrc.ec.europa.eu/s3-platform-registered-regions</u> Managing Authority: <u>https://ec.europa.eu/regional_policy/en/atlas/managing-authorities/</u>

Relevant Funding Programmes for synergies with ESIF (including ERDF and ESF)

- National Operative Programmes
- Regional Operative Programmes
- European Territorial Cooperation

Cohesion Policy and ERDF (CPR)

- European Regional Development Fund (€ 216 billion, incl.€8.4 billion "Interreg")
- **Cohesion Fund** (€ 41 bn, incl.€11bn under CEF2)
- European Social Fund Plus (€100 bn)
- European Maritime and Fisheries Fund (€6.1 bn)
- Asylum and Migration Fund (€ 11.3 bn)
- Internal Security Fund (€ 2.5 bn)
- Border Management and Visa Instrument (€ 8 bn)



Pathway for synergies



- Open dialogue among European Partnership consortia, Managing Authorities and National/Regional Stakeholders for enabling the identification of R&D priorities in compliance with S3 priorities and planning of appropriate ERDF / ESF measures;
- Introduce in national and regional Smart Specialization Strategies (S3) provisions that enable parallel/alternative and complementary funding among different EU and national programmes (Horizon Europe, European Territorial Cooperation funds, etc.);
- Coordinate with National and other regional authorities the selection of R&I Partnerships to join, their funding and the monitoring process (not mandatory but strongly encouraged).



Analysis of synergies for EP





Creation of pre-condition and eco-system facilitating the participation in a EP or when it provides resources for follow up of funded projects through EP calls

Supporting a parallel or complementary activity related to EP funded projects Cohesion funds are used within the work plan of a EP and counts as a partner/national contribution.





Italian National Programme for Research Infrastructures (PNIR) is part of the National Programme for Research (PNR)

The PNIR has a direct link to the strategies and priorities shared at European level, by adopting the ESFRI Roadmap process and results, including the ESFRI definition of research infrastructure and on the other side, the development of PNIR was done in close consultation with the Regions that indicated their own regional priorities (S3).

The call for Research Infrastructures of National Operative Programme is worth around 300 million euros and it funded **18 projects for upgrading priority Research Infrastructures** in Italian convergence regions

National Programme for RIs: multi-fund strategy



2

- Government block funding to RIs for development, construction and operation
- PROs complementary funds: preliminary/design phase, personnel, ...
- funding of upgrade/update projects of national priority RIs complementary funding for upgrade/update projects of national/ regional priority RIs







Parallel Synergies

The Andalusian Promotion Programme for International **R&D&I** funds Complementary Actions linked to Clean Sky 2 calls.

Through such actions synergies are created with ESIF by broadening the scope of CS2 projects, adding **parallel activities** and **continuing work** that has already been supported in order to build and enhance capabilities and skills.

Such complementary actions should be linked to a CS2 project that received the maximum score in the evaluation and that was funded as part of the CS2 call. The complementary action itself should also receive a favourable assessment from CS2 in order to be funded by ESIF.



It concerns in all cases an **additional project** (always R&D focused). It **can consist** of a **successive** project where the additional project builds on the initial project, or a **parallel project complementing the main one**.



Integrated Synergies



Horizon 2020 – Use of ERDF in ERANET Cofund

- ERDF is not eligible for Top-up calculation: it's a matter of MAs choices to renounce to EU contribution – Many Managing Authorities opted for this solution increasing the resources of the Common Pot through ERDF
- Calabria Region ROP's didn't foreseen any specific measure for funding ERANET projects:

They found a solution by **including in ROPs' Selection Criteria a note allowing direct fundability of projects evaluated under the H2020 selection criteria**.

Final disclosure of ERDF to ERANET (just for additional joint calls) and SoE projects.

Horizon Europe Proposal

"Financial contributions stemming from Cohesion Policy funds, EMFF and EAFRD shall be considered as a contribution of the participating Member State."

 Wording under negotiation for co-funded and institutionalised European Partnerships



Barriers



Regulatory barriers: State aid, double funding, lack of synchronization between ESIF and EU Direct funding

Organizational barriers: administrative and managerial fragmentation, inability to forecast

Attitudinal barriers: silo approach, language barriers, lack of practical support and tailored guidance.





Conclusion

- Explore the state of play related to own regional/national S3
- Open a dialogue with Managing Authorities on ESIF negotiation in order to create a proper **funding landscape** for implementing (through NOP / ROP) measures which support EOSC objectives and goals in any Research/Innovation fields.
- Explore possibility to establish «regional networks» in the frame of ETC-Interreg at different cooperation levels for the implementation of parallel-complementary projects
- Explore the possibility to develop bilateral collaborations based on MoUs with Regions for disclosing additional resources



Thank you!

Maria Bianco Italian Ministry of Universities and Research



Use Cases on National and Regional Funding

Donatella Lucchesi University of Padova and INFN

Thanks to: Gianpaolo Carlino, Giacinto Donvito, Claudio Grandi for providing material for slides and the useful discussions







INFN infrastructure has been built to analyze data produced by LHC (Large Hadron Collider) at CERN



EOSC-Pillar

The e-infrastructure includes also software tools and services!

They have been developed for high energy physics experimental data analysis and now they are available to any community:

GRID middleware is used world-wide:

- Tools for management, maintenance and support of CPU and disk space.
- Very high levels of security: identification and authorization methods and tools.
- CLOUD services advanced at the level or even higher of the commercial ones!



INFN has exploited the H2020 and structural funds in order to build and to evolve the e-infrastructure: <u>Indigo-DataCloud</u>



The project, funded in 2015 by the EC H2020 research and innovation program under grant agreement RIA 653549, has provided e-infrastructures with tools, applications and cloud framework enhancements to manage the demanding requirements of scientific communities, either locally or through enhanced interfaces. The middleware developed allows to federate hybrid resources, to easily write, port and run scientific applications to the cloud.



EDSC-Pillar INFN has exploited the H2020 and structural funds in order to build and to evolve the e-infrastructure: ReCaS





Large data centers have been built at Bari and Napoli in the framework of the ReCaS project (PON Research and Competitiveness 2007-2013 Notice 254 / Ric) Catania and Cosenza were also part of the project.



ReCaS data centers and Indigo-DataCloud services and tools are part of the INFN e-infrastructure.



EDSC-Pillar On-going projects: IBiSCo, National Operational Program, 2019-2023



Scope of the call:

 strengthening of research infrastructures identified as priorities in the 2014-2020 National Program of Research Infrastructures (PNIR).

Involved Research Infrastructures that are functional to the implementation of projects responding to ESFRI areas and impact on the trajectories of the National Smart Specialization Strategy.

Eligible expenses:

- Scientific instrumentation and research equipment including their replacement;
- Technical systems functional to the project;
- Software licenses or patents.

Ineligible expenses:

personnel



SC-Pillar On-going projects: IBiSCo, National Operational Program, 2019-2023



Objectives:

- Strengthening of the RECAS scientific computing infrastructure of Southern Italy: increase and update of the computing and storage resources available to keep the infrastructure competitive in the international context.
- Evolution of the current infrastructure towards a federation of Data Centers to facilitate synergic and transparent integration of GRID and CLOUD services for all scientific and non-scientific needs.
- Multidisciplinary and multifunctionality: create a multi-entity collaboration for sharing a multidisciplinary and multifunctional computing infrastructure capable of adapting to different needs.











2014-2020 Research and Innovation Action 1.5.1

On-going projects: SUPER, Emilia Romagna POR-FESR

Scope of the call:

 strengthening of research infrastructures present in Emilia-Romagna, as foreseen in Action 1.5.1 of the ERDF Regional Operational Program 2014-2020: Supercomputing and big data.

Eligible expenses:

- Scientific, technological and advanced IT equipment.
- Technical-scientific and design consultancy.
- Personnel dedicated to the specific activities.







Total amount of funds: 4 M€

Computing

• More than 300 servers for HTC, HPC, GPU.

Storage

- Around 15 PB of disk space.
- Tape library and 5 PB of tape space.

Services

- Integration of applications to the infrastructure.
- Federation of services already developed by the project partners and made available to SUPER.



EOSC-Pillar On-going projects: SUPER to the Future



The new European Centre for Medium-Range Weather Forecasts (ECMWF) data center will be located in Bologna and will host also INFN Tier-1 and CINECA computing centers among the others.



SUPER is the first step toward an integrated computing and data infrastructure in Emilia-Romagna



EDSC-Pillar General considerations: IBiSCo

- Lack of flexibility of the call that is propagated in the project implementation: for example, it is not possible to modify the amount of CPU or disk space resources purchased depending on new needs.
- Complexity in the purchase of the equipment due to bureaucracy → delay in the project execution.
- No synergy between EOSC and the project : for example, it is not possible to publish services in EOSC Marketplace or EOSC Catalogue.



EOSC-Pillar General considerations: SUPER

- Regional administrations not always ready to manage large projects with National or International relevance → delay in the project execution.
- Complexity in the purchase of the equipment due to bureaucracy
 → delay
 in the project execution.
- With the current regulation, it is not possible to destine the resources acquired with projects funds or the services developed within the project to other scopes.
- No mention of EOSC in the call, but EOSC is considered in the project execution.





- Regional and National funds play a crucial role in the developments, the upgrade and the maintenance of the e-infrastructure.
- The regional and national administrations should see EOSC as added value, for example, it should be required to provide services or resources to EOSC and formally verified in the audit report.
- The EOSC should see national and regional projects as an opportunity and facilitate the integration of resources and services in its infrastructure and catalogues.





Join at slido.com #EOSCESIF





Participate in the consultation online

The consultation will be open until **10 August 2020**, upon which, the results will be analysed and will feed into the reports of EOSC Pillar and ERA Learn Projects, providing inputs to the CE for a better coordination between ESIF and H2020 to implement EOSC.

Please fill the online form now!

https://www.eosc-pillar.eu/form/consultation-synergies-between-hori zon-and-esif-eosc-partnership

EDSC-PILOT Coordination and Harmonisation of National &Thematic Initiatives to support EOSC

Thank you!

ERA

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