European Commission

Europe's objective to deliver on jobs and growth

The role of Research Infrastructures

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New College of Commissioners

➢ Carlos Moedas has been allocated the portfolio of Research, Science and Innovation

➢ Hearing on 30 September for the European Parliament ITRE Committee

➢ The European Parliament is set to vote on whether or not to approve the full Commission on 22 October

➢ New Commission could start work on 1 November

➢ Incoming Commission President Juncker was already approved in a vote on 15 July

New political guidelines

- "A new Start for Europe: My agenda for Jobs, Growth, Fairness and Democratic Change", Jean-Claude Juncker, 15 July 2014:

    - Strengthen Europe's competitiveness and stimulate investment for the purpose of job creation;
    - € 300 billion Investment Package to focus in infrastructure, education, research and innovation and energy through more effective financial instruments

- Mission statement of the Commissioner candidate, Carlos Moedas, 10 Sept 2014:

    - *"Improving research infrastructure and making better use of research results is essential to strengthen innovation further, develop new activities and boost the productivity and competitiveness of our economy"*

Commissioner for Research, Science and Innovation

➢ Mobilise innovative financial instruments available under Horizon 2020 to facilitate investment in education, research and innovation infrastructure and maximise synergies with implementation of the ESIF

➢ Promote international excellence of the EU's research and science

➢ Strengthen research capacities and innovation strategies across all MS

➢ Make progress towards the targets set in the Europe 2020 strategy

➢ Establish strong coordination across the Commission regarding Science and innovation matters

➢ Focus more on applied research with greater participation of private sector incl SME to reinforce our industrial leadership and our capacity to address societal challenges

➢ Maximise the impact of Horizon 2020, ensure effective use and dissemination of results

➢ Maximise synergies between Horizon 2020 and the Digital Single Market & the European Energy Union.

Translation for Research Infrastructures

- Facilitate investment in RI : towards long term sustainability

- Increase effectiveness (planning, decision making process, governance, management, cost control…)

- Exploit the innovation potential of RI

- Maximise research results (data)

- Promote EU excellence abroad and "internationalise" when necessary (support international collaboration and facilitate the integration of partners from third countries)

- Stairway to excellence (train and attract young talents, facilitate transnational access on the basis of merit but not exclusively)

Strategic orientations for the RI WP 2016-2017

➢ Fostering long term sustainability of Research Infrastructures

➢ Expanding the role of research infrastructures in the innovation chain

➢ Optimising the management and the exploitation of research data produced or collected by research infrastructures, included e-infrastructures

➢ Harmonising evaluation procedures of Research Infrastructures

Fostering long term sustainability of Research Infrastructures - I

Challenge: to sustain and manage investment cycles in research infrastructures and e-infrastructures while ensuring scientific excellence and widening access to the key research and education resources.

This will entail developing a strategy with MS and EU to ensure:
➢ Coordination and complementarity of different sources of financing at MS, EU (H2020, ESIF) and, where relevant, at global levels
➢ harmonised ex-ante and ex-post evaluation procedures of RI
➢ regular monitoring of RI even after their implementation
➢ synchronisation of national roadmaps and corresponding budgetary commitments

Fostering long term sustainability of Research Infrastructures - II

H2020 support:

➢to facilitate and support the preparation, implementation, long-term sustainability and efficient operation of the research infrastructures identified by ESFRI and of other world-class research infrastructures such as ERICs.

➢to support to the coordination, integration of and trans-national access to the existing national RIs with a long lasting effect in term of harmonisation, structuring and optimisation of the services to users, essential to foster users' and stakeholders' trust in the services and to ensure a long term sustainability.

Expanding the role of research infrastructures in the innovation chain - I

Challenge: to stimulate innovation both in the RIs themselves and in their supplier and user industries

- ➤ R&D partnerships with industries to develop EU capacities in high-tech areas such as scientific instrumentation including detection and imaging technology
- ➤ stimulate the use of RIs by industry
- ➤ Encourage the integration of RIs into local, regional and global innovation ecosystems

Expanding the role of research infrastructures in the innovation chain - II

H2020 support:

➢Customised services to increase participation of industry incl. SMEs as users of RI.

➢Support PCP/PPI or any other financial co-funding scheme that would enable synergies amongst the RI, academia and industry.

➢Support technology transfer and joint development of high-tech components and solutions in the integrating activities and in the activities supporting the implementation and operation of ESFRI projects and e-infrastructures.

➢Coordination and networking of technological infrastructures, which provide R&D platforms on key technology for RI so as to develop a partnership with industry and SMEs.

Exploitation of research data - I

Challenge: ensuring appropriate management practises as well as technologies and methods for acquisition, curation, analysis and visualisation of the increasing amount of digital ("big") data made available by the RI.

Need to address safety and quality of storage, access to data and develop appropriate legal, social and technical frameworks for the novel ethical, privacy, security, copyright and Intellectual Property Rights (IPR) issues raised by the use of research data and data infrastructures.

Exploitation of research data - II

H2020 support:

➢Developp new e-infrastructure and services to address the era of extreme-scale systems and meet the needs of future RIs

➢Customize e-Infrastructures services across several scientific domains to meet specific users' requirements

➢Integrate and open national research infrastructures also by means of "virtual" access to the research resources through integrating activities

➢Use data management plans as a key tool to raise awareness of the importance of research data for society and the economy

➢Support the Research Data Alliance (RDA) to engage communities in developing open standards for their different data types.

Evaluation procedures

Challenge: building an effective RI landscape in Europe requires long-term commitments by funders, efficient decision making processes and well-conceived governance and management practises for RI

Funders' commitment is based on quality criteria, evaluation procedures and opt-out options. Ex-ante evaluation processes should be based on rigorous metrics, carried out by experienced experts and scientists, and take into account development potential and societal impact. Assessment and strengthening of evaluation practices for RIs is therefore crucial.

H2020 support:
➢coordination of national bodies/agencies involved in the evaluation of RIs, promotion of joint work to harmonise their ex-post evaluation and monitoring mechanisms as well as joint evaluation exercises.

Next steps

- ➢ ESFRI roadmap update (2014-2016)

- ➢ Conclusions on ERIC report + ERA (Dec 2014)

- ➢ Work Programme 2015 (Prioritised ESFRI projects, Innovation)

- ➢ Preparation Work Programme 2016-2017:
  - ➢ Consultation with stakeholders (2014)
  - ➢ Discussion with Programme Committee (2014-2015)
  - ➢ Draft Work Programmme (first half 2015)
  - ➢ Adoption of the WP (third quarter 2015)
  - ➢ Publication of the calls (2016)

Thank you for your Attention!

HORIZON 2020