

**REGIONAL WORKSHOP ON FUNDING OF RESEARCH  
INFRASTRUCTURES  
Château Liblice  
Prague, 8-9 November 2017**

**Prague Report**

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# **1<sup>st</sup> REGIONAL WORKSHOP ON FUNDING OF RESEARCH INFRASTRUCTURES**

**Czech Academy of Sciences  
Château Liblice  
Prague, 8-9 November 2017**

## **1. EXECUTIVE SUMMARY**

The overarching objective of the 1<sup>st</sup> Regional Workshop on Funding of Research Infrastructures (RIs) was to provide a space for stakeholders from different research facilities and from public funding organisations to discuss and deliver recommendations for the improvement of RI funding in the next generation of structural funds and the European Union (EU) Framework Programme for Research and Innovation (FP9).

The workshop gathered attendees mainly from the Czech national community but also from other countries such as Austria, Bulgaria, France, Germany, Poland and Portugal. The applied selection criteria for the invitation of participants took into consideration the broadest possible representation of fields and expertise.

The opening remarks of Dr Jan Hrušák, Advisor to the Council at the Academy of Sciences of the Czech Republic, introduced participants to the three parallel session format, designed to address the roles of national funding organisations, the European Structural Investment Funds (ESIF) and of the current EU Framework Programme for Research and Innovation (H2020) with regard to the financial sustainability of RIs. More information on the outcome of each of the parallel sessions can be found in the following paragraphs.

## **2. ROUND TABLE DISCUSSIONS**

### **2.1 GROUP ONE PARTICIPANTS**

#### **2.1.1 Moderator**

- Ricardo Miguéis— National Innovation Agency of Portugal

#### **2.1.2 Rapporteurs**

- Carlos Silveira— Centro Regional Coordination and Development Commission, Portugal
- Carme de Andrés Sanchis— Helmholtz Association, Germany



### 2.1.3 Participants

- Eva Hajičová— National Coordinator of the Czech node in CLARIN-ERIC
- Jan Gruntorad—CESNET e-Infrastructure for Science, Research and Education
- Lukáš Levák—Ministry of Education, Youth and Sports of the Czech Republic
- Milan Váňa—Aerosols, Clouds and Trace Gases Research Infrastructure
- Radomír Pánek— Institute of Plasma Physics of the Czech Academy of Sciences

## 2.2 CONCLUSIONS AND RECOMMENDATIONS

Experience shows that building pan-European RIs requires a combination of regional, national and EU funds that come from different funding instruments such as state budgets, H2020 and ESIF. The establishment and alignment of these funding instruments with national RI strategies is a long process that can take many years to materialise. This, coupled with the lack of articulation between funding instruments, long-drawn efforts to meet different funding requirements and the need for closer inter-ministerial coordination represent some of the main bottlenecks identified by Group One participants.

There is also a strong feeling among these participants that a closer rapport between national strategies, funding frameworks and European priorities is essential to facilitate the fast and firm development of RIs, as well as their long-term planning, whilst respecting the principle of variable geometry <sup>1</sup> that accommodates differences in views among countries.

Other areas of concern refer to the improvement of transnational access policies to increase quality of services and extend availability to a wider range of users on a European and international scale, to the simplification of administrative conditions and regulations in the different funding programmes and to the need for finding feasible solutions to cover the operational costs of research infrastructures.

In addition to these observations, there is a shared consensus that EU funding is fundamental to initiate discussions among different scientific communities and public funding organisations, to develop national and transnational networks of players and to define common agendas and design strategies around these. In many cases the construction of state-of-the-art research facilities is supported significantly by European Structural and Investment Funds.

An equally significant topic considered during the session was the extent to which national funding systems are bound to national RI strategies, and how these converge with European priorities. In this respect, there is a general perception among participants that national pan-European RIs depend on

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<sup>1</sup> Variable Geometry: [http://eur-lex.europa.eu/summary/glossary/variable\\_geometry\\_europe.html](http://eur-lex.europa.eu/summary/glossary/variable_geometry_europe.html)



national priorities and to a lesser extent on the ones set by the European Commission.

## **2.3 GROUP TWO PARTICIPANTS**

### **2.3.1 Moderator**

- Teresa Jorge— Centro Regional Coordination and Development Commission, Portugal

### **2.3.2 Rapporteurs**

- Jan Hrušák— Academy of Sciences of the Czech Republic

### **2.3.3 Participants**

- Daniel Carapau— The Foundation for Science and Technology, Portugal
- Evgeni Evgeniev— Ministry of Education and Science of Bulgaria
- Ondrej Hradil— Central European Institute of Technology, Czech Republic
- Lukas Masopust— Institute of Physics of the Czech Academy of Sciences
- Martin Pumera— Institute Chemical Technology Prague
- Stéphanie Lecocq— French National Centre for Scientific Research
- Vlastimil Ruzicka— Technology Centre of the Czech Academy of Sciences

## **2.4 CONCLUSIONS AND RECOMMENDATIONS**

The development and operation of RIs involves large budgets from national, regional and European funds. To maximise the impact of multilevel investments throughout the different stages of a RI lifecycle, closer synergies between regional, national and European instruments are needed. In relation to this, the modification of ESIF framework conditions to better suit RI purposes through the alignment of structural funds with FP9 would be highly recommended by some countries (e.g. financial regulations, state-aid-rules and public procurement).

Ensuring a transitional period from one phase to another through investments is important for the financial sustainability of RIs. In this context, securing the costs associated to the operational phase of RIs through the reconfiguration of existing and new tailor-made financial mechanisms would be well received by RI Operators.

Improving awareness of RIs and their portfolio of services and products is vital to increase the level of user involvement of those inside and outside the scientific community. Promotional activities aimed at informing on the benefits and socio-economic impact of RIs can help encourage favourable attitudes in advance of cultural and scientific progress, thus, stimulate the innovation process in Europe.

The creation of an ERASMUS-type of scheme for short secondments of public civil servants working in RI policy and funding could contribute to a better



understanding of RIs and the factors that determine the use and non-use of specific and non-specific funding instruments as potential sources for RI funding in different countries. In consequence, this would enable more informed funding decisions, as well as a stronger funding alignment among countries through the mobility of these civil servants.

There is a recognized need for all RIs to define access policy and to address the fragmentation and diversification of resources through alignment. Access policy and modalities require common standards and harmonised access rules and conditions for researchers across the European Research Area (ERA).

Another idea raised during the discussion was the establishment of an independent body to monitor and evaluate performance, financial and accounting practices of RIs to help identify managerial and financial issues more easily, as well as to contribute to the formulation of success metrics. Moreover, the application of tailored KPIs, both for internal managerial purposes and for external monitoring/evaluation, could facilitate the tracking and monitoring of a research infrastructure's performance. This shift would then generate valuable evidence to influence the development of corrective measures and effective research and innovation policies and practices. It remains to be further explored to what extent this concept resonates with other research infrastructure communities, as well as how these procedures could be implemented, if feasible. –Indeed, something to consider for the upcoming regional workshops.

## **2.5 GROUP THREE PARTICIPANTS**

### **2.5.1 Moderator**

- Augusta Maria Paci— National Research Council of Italy

### **2.5.2 Rapporteurs**

- Beata Lubicka— Wroclaw Research Centre EIT+, Poland
- Ute Krell— German Electron Synchrotron

### **2.5.3 Participants**

- Pedro Alberto— University of Coimbra, Partnership for Advanced Computing in Europe, Portugal
- Ivana Paidarova— J. Heyrovsky Institute of Physical Chemistry Academy of Sciences of the Czech Republic
- Gerd Rucker— German Aerospace Centre
- Jiří Chýla— Institute of Physics of the Czech Academy of Sciences, European Light Infrastructure
- Nataliia Voievoda— French National Centre for Scientific Research
- Beata Lubicka— Wroclaw Research Centre EIT+, Poland
- Ute Krell— German Electron Synchrotron



## 2.6 CONCLUSIONS AND RECOMMENDATIONS

Investments in RIs have generated new opportunities to access specialised knowledge, which in 10 years' time (in the majority of cases) will become a commodity resource to European scientific communities. In light of this, exploring further the flexible application of ESIF, for instance by allowing the possibility of using structural funds as a national contribution to a RI outside the country, could open the door to new collaboration models. An initiative of these characteristics, however, would have to be supported by the scientific communities and funding authorities inside and outside the hosting country.

Research Infrastructures are usually embedded or part of other institutions. More often than not, the funding that feeds the RI comes from various sources, which is indistinguishable to the operating RI. For digital RIs such as PRACE<sup>2</sup>, this represents a major challenge, since maintaining the operation of its facilities entails a renewed investment in computing hardware every 5 years. In most cases, therefore, operational costs associated to a RI do not rely on one single funding source or on a specific national RI funding channel.

Placing increasing importance on flexible financial models that accommodate alternative funding sources for RI development, for instance, the involvement of private companies with established consortia to help leverage or attract private investments would be welcomed by some countries. Private co-financing in this context would become an eligibility condition for the selection of national RI projects.

There is a general consensus that transparency is key to a successful and sustainable strategy. From a regulatory perspective, some participants commented that even though national RI funding systems follow certain rules, still the overall level of transparency is rather limited in some countries. Thus, the diffusion of publicly available information on national calls through electronic communication services should be provided. In connection to this, the use of the European Charter of Access to Research Infrastructures as a reference could ensure the establishment of a regulated framework.

Other recommendations relate to future EU funding initiatives aimed at the development of ecosystems around RIs. Opportunities in this line of thought include the new call for proposals under the Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing (NMBP) programme 2018-2020 on creating innovation hubs. An initiative of this kind could help strengthen the network of innovation hubs across the ERA. Under the proposed programme, a RI could become part of a larger multidisciplinary and multi-sectorial initiative, thereby enabling capacities to tackle bigger challenges.

On the whole, the Prague regional workshop was a useful starting point for understanding the experiences and main concerns of the RI Operators, as well

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2 Partnership for Advanced Computing in Europe (<http://www.prace-ri.eu>)



as the perspectives of representatives from public funding organisations with regard to the national roadmapping process, its timing and funding. The information gathered throughout these parallel sessions, as well as those gap areas identified afterwards by InRoad consortium partners, will serve as the basis for future discussions in the upcoming regional workshops in Rome, Hamburg, Aveiro and Wrocław.



### **3. ANNEX**

#### **3.1 AGENDA**

## **1<sup>st</sup> Regional Workshop on Funding of Research Infrastructures**

**Prague, 8-9 November 2017**

**Conference Centre at Liblice Castle**

#### **8<sup>th</sup> of November**

**11h00-13h30 Registration of Participants**

**12h00-13h45 Light Lunch**

#### **14h00-15h30 Plenary Session**

Moderator Ricardo Miguéis—National Innovation Agency of Portugal

Welcome speech by Jan Hrušák—Czech Academy of Sciences

Introductory speech by Lukáš Levák—Ministry of Education, Youth and Sports

Keynote speech by Vlastimil Ružička—Ministry of Education, Youth and Sports

**15h30-16h00 Coffee break**

#### **16h00-18h00**

Round table discussion on the funding of Research Infrastructures (RI), along the different phases of the RI life cycle, considering the past experience and projections for the future, namely the following topics will be addressed:

#### **The Role of ESIF in the funding of RI**

- How can ESIF contribute to the funding of the different phases of the RI life cycle?
- What are the major advantages and bottlenecks in ESIF RI funding? How is the ESIF funding linked to national prioritization and funding processes? How should these links be improved?
- How should the ESIF framework conditions be modified to better suit the RI purposes?

#### **The role of national and institutional funding of RI**

- To what extent are national funding systems directly bound to national RI strategies, and how are these processes linked to European priorities? Are there good practices?



- How transparent are national RI funding systems?
- Are contributions to European RI evaluated differently/funded differently than contributions to national RI, and what are the advantages/disadvantages?

### **The role of European funding of RI**

- How important is European RI funding in the different life cycle phases of the RI?
- What is the focal point of EU funding and how strong is the role of the European Commission as a funder influencing national processes?
- Specifically, do we need a strong intervention from the European Commission to facilitate transnational access to RI?
- Are there particular changes to be proposed with respect to the RI funding within the next Framework Program?

**18h00-18h30 Meeting of Rapporteurs**

**20h00-22h00 Dinner**

## **9th of November**

**9h00-11h00** Continuation of discussions with the objective of arriving at conclusions/recommendations to be presented by the rapporteurs and discussed in the final plenary session

**11h00-11h30 Coffee break**

**11h30-13h00 Plenary Session**

Presentations of conclusions by the rapporteurs  
Concluding debate and recommendations

**13h00-13h30 Closing Session**

**13h30-14h30 Light Lunch**



## 3. 2 PRESENTATIONS

### 3.2.1 Research Infrastructures of the Czech Republic in the context of the European Research Area - Dr. Lukáš Levák

This presentation provided an overview of the Czech national research and development (R&D) system with special attention to:

- a) the role of the Ministry of Education, Youth and Sports as the main body involved in the making of national R&D policy and strategy;
- b) the different RI in which the Czech Republic participates, including international organisations, AISBL and ERIC;
- c) the Large RIs funding scheme and its follow-up activities;
- d) the roadmap of large RIs of the Czech Republic (2016-2022); and
- e) the 2017 evaluation of the national RIs.

### 3.2.2 Research Infrastructures, an international comparison - Professor Ruzicka

Professor Ruzicka's presentation provided an overview to the findings gathered in a comparative study among countries of similar size to the Czech Republic, e.g. Austria, Estonia, Denmark and Netherlands (just to name a few) revealing the differences and similarities among them in a range of categories such as:

- a) number of researchers per country in 2015;
- b) number of researchers per thousand employed (2015);
- c) number of RIs and international Research Organisations on NRRI<sup>3</sup> (2015);
- d) number of RI/IRO<sup>4</sup> per number of researchers (2015); and
- e) volume of funds for RI and IRO in 2016 (annual funding of RI/IRO as a percentage of government R&D funding).

Furthermore, professor Ruzicka mentioned that the data collected (in particular the funding figures) was often difficult to compare as in some countries funding from a major agency is supplemented by other bodies like regions or by private sources.

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<sup>3</sup> National Roadmap of Research Infrastructures

<sup>4</sup> International Research Organisation

