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From: ERAC Secretariat
To: ERAC (European Research Area and Innovation Committee)

Subject: ERAC Plenary 5 December 2017 - agenda item 4.1 (Milestones of ERAC and the ERA-related groups since the first ERA governance review in 2015)

In view of the discussions under item 4.1 of the agenda of the ERAC plenary on 5 December, delegations will find attached a document describing the milestones of ERAC and the ERA-related groups since the first ERA governance review in 2015.

**MILESTONES OF ERAC AND THE ERA-RELATED GROUPS
SINCE THE FIRST ERA GOVERNANCE REVIEW IN 2015**

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Overview of the achievements of ERAC for Priority 1 since January 2015

The principal mission of ERAC is to provide timely strategic input to the Council, the Commission and Member States on research and innovation issues that are relevant to the development of the European Research Area (ERA).

ERAC is responsible for Priority 1 of the ERA Roadmap. The top action priority corresponding to ERA Priority 1 is "strengthening the evaluation of research and innovation policies and seeking complementarities between, and rationalisation of, instruments at EU and national levels".

Here below ERAC's major achievements since 2015:

2015

- ERAC established a set of core indicators for the monitoring of the implementation of the ERA roadmap. In its Opinion on the ERA Roadmap 2015-2020, ERAC indicated that visible progress in the implementation of ERA through Member States/Associated Countries, the European Commission and key stakeholder organizations („ERA Partnership“) must be made by 2020 and it should be possible to demonstrate this progress. The ERA Roadmap therefore is an integral part of the monitoring associated with future ERA Progress Reports.
- ERAC adopted an Opinion to mark the way forward for innovation procurement, which has over the last decade become an established part of policies in many EU Member States. The principal aim of the Opinion is to identify good practices across Europe and propose ways to promote and implement these good practices.

2016

- Building on the work of the ERAC Task Force on Open Access to Research Data, ERAC adopted an Opinion on Open Research Data.
- ERAC focussed on how best and timely to achieve top actions as defined in the ERA Roadmap. Most ERA National Action Plans were finalised during 2016.
- During the second half of 2016, through workshops and plenary meetings, ERAC identified a practical way forward on sharing experiences on the implementation of the ERA National Action Plans. Members agreed that the ERA National Action Plans would be used in learning exercises where best practice, notably in the field of implementation, would be shared and that this would result in increasing the efficiency of research systems. Regular workshops at ERAC Plenary meetings are held.
- ERAC adopted an Opinion on the idea of a European Innovation Council in July 2016. ERAC considered the idea of an EIC that focuses on market-creating innovation, simplifying and filling gaps in existing innovation support, in particular for scaling up, and including non-financial support such as mentoring. ERAC stressed that implementation of all ideas and measures related to an EIC should be made in full respect of the principle of EU added value and should complement national activities in line with the principle of subsidiarity.

- Two ad-hoc Working Groups, respectively on "Streamlining the Research and Innovation Monitoring and Reporting Landscape" and on "Measuring the Impact of EU Framework Programmes for R&I at National Level" were set up in 2016. The relevant Opinions were delivered in 2017.

2017

- ERAC adopted an Opinion on Streamlining the Research and Innovation Monitoring and Reporting Landscape which was used as input for the Council conclusions adopted in May 2017.
- ERAC adopted an Opinion on Measuring the Impact of EU Framework Programmes for R&I at National Level.
- Two ERAC Workshops on the follow-up of National Action Plans took place in St. Julian's (MT) and Tartu (EE). Building on experience, the workshop in Tartu was aptly organised in three sessions on respectively excellence, funding and complementarity.
- ERAC adopted an Opinion on the Interim Evaluation of Horizon 2020 and preparations for the next Framework Programme which acknowledged the achievements of the present Framework Programme. In view of FP9, ERAC called for reaffirming ERA as a top priority, a better involvement of new participants, reinforcing international cooperation, a good policy-mix for innovation, a FP at the service of EU sectoral policies, and a dialogue with European citizens.
- An ad-hoc Working Group on partnerships is in the process of being set up.

Annex: List of all adopted ERAC Opinions since January 2015

- The European Research Area Roadmap 2015-2020, 20 April 2015, ERAC 1205/15
 - Innovation procurement, 23 June 2015, ERAC 1209/15
 - The review of the European Research Area advisory structure, 15 October 2015, ERAC 1212/15
 - ERA Roadmap - Core high level indicators for monitoring progress, 4 December 2015, ERAC 1213/15
 - Open Research Data, 3 February 2016, ERAC 1202/16
 - The idea of a European Innovation Council, 14 July 2016, ERAC 1209/16
 - The streamlining of the expert groups set up by the Commission, 7 November 2016, ERAC 1211/16
 - Streamlining the Research and Innovation Monitoring and Reporting Landscape, 2 March 2017, ERAC 1202/17
 - The Interim Evaluation of Horizon 2020 and preparations for the next Framework Programme, 7 July 2017, ERAC 1207/17
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High Level Group for Joint Programming (GPC)

GPC is responsible for Priority 2a of the ERA Roadmap "*Jointly Addressing Grand Challenges*". When undertaking its activities¹, the GPC seeks to contribute to the progress of ERA, both at national and European levels. The main milestones of the GPC since 2015 were:

1. **Fostering the Joint Programming Process (JPP):** The first task of the GPC, was to identify the Joint Programming Initiatives (JPIs). By 2015, all ten JPIs had fully functioning governance systems in place and adopted their Strategic Research Agendas. Even though this development was considered as a remarkable achievement, the GPC acknowledged that it fulfilled only part of its objectives. Therefore, the GPC adopted a **new mandate** and **Work Programme 2016-2018** which reflected the decision that "*the focus of the GPC should shift from the JPIs to the JPP*".
2. **Empowering the Interplay Between the Actors of the JPP:** The GPC WG on "*Fostering Relationships among the JPIs and the GPC*" and the Hernani Report² suggested that the GPC should have a much more active role in creating a favourable environment for the implementation of JPP. The JPIs' representatives and other stakeholders have since then been invited to participate in the GPC meetings, WGs, workshops and GPC representatives are attending JP related events organised by other bodies to promote the GPC work and JP idea.
3. **Measuring the Progress and Implementation of Priority 2a of the ERA Roadmap:** According to the ERA Progress Report (2016), the indicators related to Priority 2a had the highest growth rate among all priorities (8%), which is considered as a significant progress. During the preparation of the National Action Plans, the GPC organised discussions on the objectives for Priority 2a and the exchange information on best practices. Subsequently, a TF prepared *an analysis of the relevant NAPs Strategies, as well as a Form for monitoring the progress* of each action under Priority 2a on an annual basis.
4. **Contributing to the Discussion on the Future of Joint Programming:** Following a systematic, long and open consultation and a fruitful collaboration between the GPC, the 10 JPIs, the EC and national and international stakeholders representing a wide spectrum of interests:
 - a. the GPC and the 10 JPIs **provided to the EC their input to the Horizon 2020 Work Programmes 2018-2020**.
 - b. each one of the 10 JPIs prepared its **Long Term Strategy (LTS) for the period beyond 2020**. The Strategies were presented in the GPC and a WG is currently analysing the LTS.
 - c. the GPC drafted its **Opinion** on the "*Future of Joint Programming to Address Societal Challenges*" in the context of the mid-term review of H2020 and the preparation of the next FP. The Opinion included, among others, the main challenges of the JPP, as well as the suggested measures to meet these challenges. The Opinion considered the idea of a «**JP Roadmap**» with regular evaluations in order to achieve sustainability for the overall JPP.

¹ The main activities of the GPC are promoted through the work done by Working Groups (WG), Implementation Groups (IG), Task Forces (TF) and Rapporteurs (RA).

² Produced by the Expert Group that was established by the EC to carry out the evaluation of JPP.

In addition, following the discussions in the informal Council and ERAC meetings, the GPC opened the discussion on «*how to improve coherence of the partnership landscape and strengthen the delivery of partnerships on tackling specific societal challenges and related missions*», by organizing open Workshops.

5. **Setting up a New Framework for Evaluating JPIs:** The IG on ‘*Monitoring and Evaluating JPIs*’ developed a multi-dimensional set of criteria and a relevant mechanism for the assessment of new and existing JPIs. Using this procedure, the GPC considered that the proposal presented by an ad hoc TF for establishing a JPI in the field of «**Migrants, Migrations and Integration**», **did not fulfil the minimum criteria.**
 6. **Improving Alignment and Interoperability:** To promote the recommendations of the IG on “*Improving Alignment and Interoperability*”, the GPC launched a **Mutual Learning Exercise** (using the PSF of H2020), which supported the participating countries by developing solutions for increased MS/AC and EC commitment to the JPP, including enhancing the alignment of strategies and improving interoperability among MS/AC and EC instruments.
 7. **Enhancing Widening Participation:** The Inclusiveness TF examines the participation of low-performing countries in JPP (analysis of major bottlenecks) and assesses the best practices used for involving low-performing countries.
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European Strategy Forum on Research Infrastructures (ESFRI)

The key achievement of ESFRI in the period 2015-2017 was the development and publication of the **ESFRI Roadmap 2016**.

This Roadmap demonstrated that 29 pan-European research infrastructures, labelled **ESFRI Landmarks** have been successfully implemented in the last decade, delivering science services or effectively advancing in their construction. This demonstrates successful delivery of the Innovation Union Flagship Initiative commitment that 60% of the strategic European research infrastructures identified by ESFRI in 2010 would have been implemented or launched their construction by 2015. The 29 ESFRI Landmarks constitute a total investment of €12,6 billion in boosting the competitiveness of the European Research Area.

The Roadmap includes also 21 **ESFRI Projects**, which are pan-European research infrastructures considered strategic for implementation in the next years, as they fill in important gaps in the European research infrastructure landscape and respond to concrete needs of European research and innovation. These facilities will require an investment estimated at €4,1 billion in the next decade. As a result of ESFRI restrictive selection of new initiatives, all of these infrastructures have already received funding commitments for preparation from their coordinating countries.

As part of the 2016 Roadmap ESFRI also prepared a comprehensive **Landscape Analysis** of the European research infrastructures ecosystem, providing a unique picture of the state of the art of the facilities operating open access available to scientists and industry across Europe.

In the period 2015-2017 ESFRI also carried out important analytical work on the topics requested by the Competitiveness Council or at own initiative. This work resulted in an ESFRI recommendation to the Council on Coordination of Member States' investment strategies in e-Infrastructures as well as in three comprehensive reports published in the **ESFRI Scripta** series:

- 'Neutron scattering facilities in Europe – present status and future perspectives' (June 2016)
- 'Long-term sustainability of Research Infrastructures' (October 2017)
- A report on links between research infrastructures, industry and innovation (publication in preparation)

The outcomes of this work constituted substantial inputs into policy discussions at European level on how to further develop the research infrastructure ecosystem in Europe to better serve the competitiveness of our science and innovation.

Prof. Giorgio Rossi
ESFRI Chair

ERAC Standing Working Group On Human Resources And Mobility (ERAC SWG HRM)

The Steering Group on Human Resources and Mobility (SGHRM) was responsible for Priority 3 of the ERA Roadmap. In 2015 and 2016, the following actions of the SGHRM contributed to the progress of ERA in Priority 3:

- (2015) SGHRM organised a mutual learning seminar and subsequently published a report with concrete guidelines, a self-evaluation checklist and good practice examples for implementing the principles of **Open, Transparent and Merit-based Recruitment (OTM-R)**. OTM recruitment practices are identified key in implementing ERA.
 - Within a year of publication, the OTM-R principles were embedded within the revised HR Excellence Strategy for research, in Article 32 of the Horizon 2020 Model Grant Agreement and in the ERA-Roadmap.
 - The Member States and Associated countries identified OTM-R as the core objective of Priority 3 of the ERA Roadmap.
 - The OTM-R toolkit has been highly valued as tool for self-evaluation at institutional level
 - (2016) SGHRM organised a mutual learning seminar and subsequently published a report with concrete recommendations on **inter-sectoral mobility of researchers**. This has had impacted on:
 - The MSCA mobility guidelines highlight the relevance of intersectoral mobility and have sent a clear message to applicants that promoting such exchanges is beneficial in the early stages of career development for researchers.
 - Many institutions introduced research training addressing non-academic career opportunities, entrepreneurship skills and employability skills, as well as funding schemes to support the physical exchange of researchers between academic and non-academic employment sectors
 - (2015/2016) SGHRM elaborated a report that looked into more favourable conditions for **internationally mobile researchers** covering wider range of international mobility aspects: transnational research mobility and welcoming researchers to Europe. The recommendations are still valid and will be followed up.
 - (2016/2017) SGHRM coordinated two working groups which resulted in two reports: Providing researchers with the skills and competencies for practicing **Open Science (Education & Skills)** and Evaluation of Researchers practicing **Open Science (Rewards & Recognition)**. The reports provide concrete recommendations which have served as input to the Open science policy platform.
 - (2017) A preliminary analysis of national roadmaps within the SGHRM revealed a great number of similarities across groups of countries with regard to their thematic priorities under the ERA Roadmap for Priority 3. The analysis identified important policy issues regarding priority actions which contribute to the implementation of ERA.
 - (2017) The Standing Working Group on HRM (SWG HRM) was established on 1/7/2017, on the basis of the mandate given by ERAC in June. The meeting on 10/10/2017 included discussions on the next 2018-2019 Work Programme. This group plans to further build on the work done by the Commission expert Steering group on Human Resources & Mobility (SGHRM)
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Standing Working Group on Gender in Research and Innovation (SWG GRI)

A. Helsinki Group on Gender in Research and Innovation (HG)

The HG was responsible for ERA Roadmap Priority 4: Gender equality and gender mainstreaming in research. In 2015 and 2016, the following actions of the HG contributed to the progress of ERA in Priority 4:

1. Advice to the Commission and MS on gender issues in Horizon 2020 (H2020)

In its 2015 position delivered to Commissioner Moedas the HG stressed the need to pay specific attention to the evaluation of gender issues in H2020, to put in place a robust monitoring and evaluation mechanism; and to ensure appropriate dissemination of information. In 2016, the HG carried out a second survey on cooperation between the HG and the NCPs as regards gender equality in Horizon 2020, and drafted recommendations. The report was presented by the EC to the SwafS Working Group of the Strategic configuration of the H2020 PC. These results recommendations were further elaborated in a position paper on the interim evaluation of H2020 and the preparation of the next FP.

2. Best practice exchange and mutual learning on implementation of NAPS

In 2015 and 2016, HG members exchanged information about the state of preparation and implementation of ERA Roadmaps at national level, and country presentations were delivered to facilitate best practice exchange. A subgroup was established prepare a first analysis of ERA roadmaps on priority 4, which was presented and discussed at a NAPS workshop on 15 March 2017 in Malta.

3. LU PRES conclusions on advancing gender equality in the ERA

HG members were actively involved in negotiating support at the national level for the Council Conclusions of 1 December 2015 on advancing gender equality in the European Research Area.

4. Guidance on gender balance in decision-making

In line with Council Conclusions on advancing gender equality in the ERA, a subgroup on gender balance in decision-making worked in cooperation with the EC. A survey was performed among MS and AC on targets and quotas in decision-making and professorial appointments, a preliminary analysis of NAPS was carried out, and best practices were collected.

5. Guidelines on a gender perspective for international cooperation in STI

In line with the Council Conclusions on advancing gender equality in the ERA, a sub-group was formed to draft the guidelines, in cooperation with SFIC. In 2017 a survey was carried out and the report was presented and discussed; adoption of the guidelines is planned in December 2017.

6. EIGE- RTD online tool on institutional change for gender equality (GEAR Tool)

The HG contributed to the elaboration of the online tool by reviewing and supplementing country fiches. HG members disseminated information about the EIGE- RTD tool at national level.

7. She Figures 2015

Throughout 2015 HG members and statistical correspondents supported and advised the EC in the preparation of comparable European statistics and indicators on gender equality in R&I and provided feedback and comments on individual chapters of the *2015 She Figures*.

8. EIC opinion

In 2016 the HG adopted a position paper on gender aspects in the EIC which concentrated both on gender balance and organisational issues as well as the inclusion of the gender dimension in research and innovation. Comments were also submitted on the two drafts of the EIC Opinion.

B. Standing Working Group on Gender in Research and Innovation (SWG GRI)

1. The SWG GRI, established on 1/7/2017, builds on the work done by the Commission expert group "Helsinki Group on Gender in Research and Innovation".
2. At the first meeting on 18/10/2017 two main analytical topics were identified for the draft Work Programme:
 - a) In 2018: Analysis of the implementation of the CC of 1 Dec 2015 on advancing gender equality in the ERA; a sub-group to be established to deal specifically with it.
 - b) in 2019: Sexual harassment and sexual assault in international mobility – analysis of actions and measures taken at national and institutional level.

Other issues of priority to be addressed by the group include the gender dimension in research and innovation content in the next Framework Programme and gender bias in evaluation.

ERAC Standing Working Group on Open Science And Innovation

The ERAC Standing Working Group on Open Science and Innovation (SWG OSI) is responsible for ERA Priority 5: optimal circulation, access to and transfer of scientific knowledge of the ERA Roadmap. Following the adoption of the December 2015 Council conclusions on the review of the European Research Area advisory structure, which took note of the setting up of a new standing working group on open science and open innovation to be operational by mid-2016, ERAC adopted the SWG's Mandate on 4 May 2016. The overall objective of the ERAC SWG on Open Science and Innovation (OSI) is to advise, in the context of open science and open innovation, on the development and implementation of policies and initiatives to enhance access to scientific information, and the circulation and use of knowledge for research and innovation for the benefit of scientists, research institutions, education, businesses, citizens and society at large, with the issues being considered primarily from the perspective of these end-users.

The first meeting of the group was held in June 2016. Five more meetings have taken place since then, where the following **milestones** were achieved:

- Organisational and procedural matters: election of the Chair (ES) and Vice-Chair (BE) and adoption of the Rules of Procedure.
- Adoption of the Work Programme 2016-2017: building on the work carried out by the ERAC Task Force on Open Access to Research Data and the former ERAC Working Group on Knowledge Transfer, the work programme includes five thematic priorities: 1) Open Research Data and Infrastructures, 2) Open Access to publications: models, costs and metrics, 3) Research and researchers' incentives, evaluation and impact assessment, 4) Innovation, 5) Training and skills. Furthermore, *Innovation* – including Open Innovation, Knowledge Transfer and Intellectual Property Rights - as well as *Training and skills* represent not only crucial thematic priorities in themselves, but also crosscutting dimensions embedded across all the thematic areas.
- The SWG OSI provided to ERAC on 23 June 2017 its Opinion on the Interim Evaluation of Horizon 2020 and preparations for the future Framework Programme in view of the development of the overall ERAC Opinion on this topic.

As regards the **real-world impact** of the work of the ERAC SWG OSI, it will be two-fold:

- **Assessment of the Amsterdam Call for Action on Open Science**: the Council requested the ERAC SWG OSI through its May 2016 Council conclusions on the transition towards an Open Science system to assess the proposed actions on the Amsterdam Call for Action on feasibility, effectiveness and prioritisation, and to report on this. The SWG OSI gathered inputs from delegations through two questionnaires issued in November 2016 and June 2017 and undertook a stock-taking exercise of existing and ongoing work groups, recommendations, suggested actions and other relevant information, in order to carry out the assessment. The SWG OSI is currently finalising the report on its in-depth assessment of the Amsterdam Call for Action. It is expected that the report will provide guidance to the Commission, Member States and stakeholders as regards the twelve actions identified in the Amsterdam Call in order to guide future policies in this field.

- **European Open Science Cloud:** the SWG OSI has been cooperating closely with the Commission on the development of the European Open Science Cloud (EOSC). The Chair, Vice-Chair and a number of delegations participated in the EOSC summit organised by the Commission in June 2017 and a workshop with the Commission was held on 5 September 2017, mainly to discuss the governance and financing of the EOSC. The SWG OSI is providing advice to the Commission in order to develop the Roadmap for the implementation of the EOSC and align it to existing national strategies. The SWG OSI is currently finalising its opinion on the governance of the EOSC, on the basis of the national positions that have been collected by the Chair and Vice-Chair.

To enhance its impact on Open Science and Open Innovation policies, the SWG OSI will collaborate with the experts of the currently running Mutual Learning Exercise (MLE) on Open Science, as the results of the assessment of the Amsterdam Call for Action on Open Science by the SWG OSI and the outcomes of the MLE are deemed as complementary.

Furthermore, the ERAC SWG also expects to deliver on the task requested by ERAC to develop initial recommendations on ERA Priority 5 once the Assessment of the Call for Action and the work on the EOSC Roadmap is finalised, in order to guide the development of policies at national level on the dynamic field of open science and innovation.

Strategic Forum for International S&T Cooperation

The Strategic Forum for International S&T Cooperation (SFIC) is responsible for international S&T cooperation as well as for the European Research Area (ERA) Roadmap Priority 6 relating to international cooperation. Following the adoption of the Council conclusions of December 2015 on the review of the ERA advisory structure, the Council approved SFIC's revised mandate on 11 April 2016. The overall objective of SFIC is to facilitate the further development, implementation and monitoring of the international dimension of ERA with a focus on the external dimension of the European Union and Member States' research and innovation activities through the sharing of information and consultation between its members (Member States and the Commission) with a view to identifying common priorities that could lead to coordinated or joint initiatives, and coordinating activities and positions towards third countries and within international fora.

Since the revision of its mandate, SFIC has successfully implemented its work programme and has notably:

- provided sound and timely advice to the Commission and the Council on international cooperation in science, research and innovation via relevant formal opinions;
 - proactively worked on joint strategic approaches and actions for international R&I cooperation with Brazil, China, Russia and the United States as well as on common principles and on a toolbox for international collaboration, *inter alia* in the format of dedicated working groups;
 - provided input for the implementation and further development of the ERA Roadmap, in particular through its opinion on ERA governance;
 - addressed ERA developments through increasing cooperation with ERAC and ERA-related groups by means of various activities including a joint opinion on a gender perspective for international cooperation in science, technology and innovation currently being prepared together with the ERAC Standing Working Group on Gender in Research and Innovation;
 - contributed to the development of the Commission's second progress report on international cooperation and the multiannual roadmaps with constructive input through workshops;
 - coordinated the evaluation, transmission and follow-up of service requests to the Commission for the International Service Facility in the area of international cooperation;
 - shared best practice and information on international cooperation among Member States/ Associated Countries through presentations of best practices done by delegations and invited speakers during the SFIC Plenary meetings, SFIC-related workshops, and through information communicated by the SFIC Secretariat;
 - collaborated with national and international research stakeholders, both governmental and non-governmental, in order to learn from experience, have a factual basis to discuss and share relevant information.
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