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WORKING PAPER

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WORKING DOCUMENT

From:	ERAC Secretariat
To:	ERAC (European Research Area and Innovation Committee)
Subject:	Draft ERAC Annual Report 2019

Dear ERAC delegates,

Please find enclosed the draft ERAC Annual Report 2019.

Please send your eventual comments and remarks on the draft Report to the ERAC Secretariat (erac@consilium.europa.eu) **before 17 September cob** .

In the absence of comments by the deadline the enclosed draft Report will be deemed adopted by ERAC.

Following the endorsement of the content of the draft Report by the ERAC Steering Board on 1 July 2020, the text underwent a linguistic review by the English editing service of the Council during the summer.

This edited version is hereby presented to all ERAC delegations for adoption by written procedure with a view to its official publication.

Kind regards,

ERAC Secretariat

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NOTE

From: ERAC Secretariat
To: ERAC Delegations
Subject: ERAC Annual Report 2019

Delegations will find annexed to this Note the ERAC Annual Report 2019 as adopted by written procedure.

THE EUROPEAN RESEARCH AREA AND INNOVATION COMMITTEE (ERAC)

2019 ANNUAL REPORT

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1. Editorial by the ERAC co-Chairs

From the perspective of the current COVID-19 pandemic, the 2019 edition of the ERAC Annual Report may seem like a tale from distant times. Actually, 2019 was a year during which all ERA-related groups worked without any external threats and produced important results, which are presented on the following pages.

From our point of view, the ‘ERAC opinion on the future of the ERA’ was one of the most important achievements of last year. With this document, ERAC formulated its expectations regarding the further development of the European Research Area (ERA), thereby sending important content-related signals to the European Commission and the Council. ERAC thus fulfilled its strategic advisory function and created a broad consensus between the Member States and the associated countries on a core topic of European research policy.

Last year, the first steps were taken towards closer cooperation between the ERA and the European Higher Education Area. The efforts of the Finnish Council Presidency and of the Standing Working Group on Human Resources and Mobility (SWG HRM) created a basis for the preparation of concrete activities involving cooperation between ERA and the European Higher Education Area (EHEA).

Apart from SWG HRM, the other ERA-related groups also undertook important activities in 2019. We shall mention just a few highlights here: the High Level Group for Joint Programming (GPC) addressed openness and transparency of networks; the European Strategy Forum on Research Infrastructures (ESFRI) supported the implementation of the European Open Science Cloud ; SWG GRI addressed the issue of gender harassment in academia and presented a policy brief on gender and innovation; SWG OSI finalised its opinion on open innovation; and last but not least, Strategic Forum on International Cooperation (SFIC) established new topics regarding Africa, China and science diplomacy.

Cooperation between the ERA-related groups was strengthened in 2019. In addition, contacts with important stakeholders were expanded. All of this took place to comply with the Council's requirements on better governance of the ERA. In this context, ERAC experimented with new discussion fora in 2019, such as strategic debates on evidence-based reports by the Commission services, specific workshops, and the format of an informal lunch of ERAC heads of delegations for an exchange on the 'European Green Deal'.

The ERAC 2019 Annual Report allows us to look back with satisfaction on a successful working year for ERAC and the ERA-related groups. We would like to thank the members of all groups for their commitment, which contributed to giving shape to the ERA.

Jean-Eric PAQUET

Director-General for Research and Innovation

European Commission

Commission ERAC co-Chair

Christian NACZINSKY

Head of EU and OECD Research Policy Dept

Austria

Member States ERAC co-Chair

2. Personal contributions

(The personal contributions reflect solely the personal experience of the authors)

A new ERA paradigm for the next decade - A personal view by the chair of the ad hoc Working Group on the future of the ERA



Professor Eduardo Maldonado, President of the Portuguese Innovation Agency (ANI)

The European Research Area was created about 20 years ago. Over this period, it has undergone several shifts and conducted several priority-setting exercises to search for improved ways to achieve its grand objectives, set in the Lisbon Treaty (Article 179(1) TFEU). The most recent exercise, including the ERA Communication of 2012, ended with the 2015-2020 roadmap process. At one time, the ERA was even declared ‘completed’.

Indeed, comparing the ERA in 2000 and today, the achievements are many and obvious. ERA policies have produced significant advances over the last two decades. The ERA has been a success! But many ERA achievements fell short of the goals initially set. Is the glass half full or half empty?

In reality, the ERA will never be completed. The ERA is a dynamic space that should offer ever-improving conditions for research-based knowledge to be produced, shared and used for the benefit of society, and where its main actors, all researchers and institutions, also enjoy conditions that enable them to operate with as much freedom and efficiency as possible. The ERA is based on a set of rules and principles that can always be improved. Granted, one day, conditions will be so good that only marginal gains can be achieved, but that is certainly not where we stand today. We are far from having ideal working conditions for all researchers and institutions, and there is still much room to improve the current ERA.

The slowing pace of progress of the ERA since 2015 motivated the decision to launch this WG. Our main mission was to produce a new paradigm for the ERA, to propose a step forward to further advance the quality of the present ERA. The WG made its own first assessment of the main achievements and shortcomings of the ERA; it then heard views from ERA groups and ERA stakeholders, and gradually moved towards agreeing on the new framework, objectives and priorities described in its final report. At the end of its six months of intensive work, the WG believes that it has identified the main challenges to be faced in improving the ERA and the issues that need to be tackled to take the ERA towards a leap forward in the short and medium terms.

The new ERA paradigm and the resulting ERA objectives are based on the following three main premises:

- The ERA is not mobilising the whole of Europe. Collaboration among European researchers and institutions is now a good and very positive reality, but certain groups (defined by geography, by gender or by type of institution) are still mostly excluded, participating at a marginal level or not participating at all. We need an inclusive ERA that effectively mobilises all European resources. Clearly, there will always be differences among national research systems, but Europe should harness that diversity for a stronger ERA.
- The ERA cannot just address its internal problems. R&I policy must move beyond its usual players and highlight how it can contribute to the solving of societal challenges, including the Sustainable Development Goals (SDG)s, interacting with other sectoral policies. It must also prove its cost-effectiveness, contributing to EU overall competitiveness in a globalised world. This is the only way that society will value R&I and that the political leaders of the Union and its Member States, as well as associated countries, will consider R&I a priority EU policy.
- Nobody beyond a small group of specialists knows what the ERA is. Even most researchers are not familiar with the concept of the ERA. The ERA needs much more visibility, and ERA policy should seize every possible opportunity to show its value to society. The ERA needs to become a more familiar concept to a much wider group.

To achieve these three objectives, formulated in a much more elaborated form in the final report, the WG believes that at present, to take the ERA forward and achieve further progress, ERA policy should target four main priority issues:

- Remove the many continuing barriers to research careers. Research careers are critical for a fully functioning ERA. Despite all the progress made so far, this is still clearly identified by most stakeholders as the prime ERA problem today. Researchers still face huge difficulties moving from country to country and from sector to sector. Career evaluation needs a major rethink. There are clear opportunities to establish stronger links between the ERA and the EHEA and to develop common evaluation and reward policies for researchers. The more recent open science and open innovation policies must be brought into the picture.
- Link R&I policy to other policy areas. We need to show how R&I can help solve societal problems (smart directionality), or, better yet, that societal problems cannot be solved properly without good R&I that makes it possible to formulate and subsequently to implement evidence-based policy. R&I must get other sectoral ministers to support R&I funding, get them to become allies of the science ministers when fighting for budget share.
- Increase the visibility of the ERA. First, the whole research community needs to know what ERA is! But above all, society needs to know how R&I improves its citizens' quality of life. Research policy must be closely linked to innovation policy. We need to seize every opportunity to establish this connection. Get political support for R&I at the highest political level, above the level of science ministers. This will be best done by communication professionals, not by the typical ERA actors alone, although the two groups will clearly need to work closely together.
- Promote broad inclusiveness. Nobody should be left out! There are excellent researchers everywhere, as well as infrastructures, institutions, resources, etc. Women and men must have equal opportunities. Participants from outside Europe should be welcome. Everybody should be able to carry out their work where they prefer, in their place of origin or elsewhere, but they should not be forced to move if they prefer not to: the brain drain phenomenon must be reduced.

To achieve these objectives and priorities, the WG took the bold step of recognising that, while the subsidiarity principle must always be observed, some form of central regulatory or other legal measures at EU level might be necessary, e.g. through the European Semester.

In a nutshell these, albeit presented in a much simplified way, are the main principles of the new ERA that the WG proposes. These priorities should however be considered in a dynamic way, with targeted, concrete shorter-term objectives to be achieved, building on incremental successes and solutions before moving on to the next goal, step by step, in a realistic way. Unrealistic goal-setting will quickly condemn the ERA to failure.

Thus, our proposed **motto**: *'ERA - mobilising knowledge for a better future'*.

And, as **ERA keywords**, I would propose: research-based knowledge; research careers; smart directionality; visibility!; and broad inclusiveness.

PS.: Yes, Visibility! With a '!'. It is not a typo.

3. Key achievements of ERAC and ERA-related Groups

a) Introduction

ERAC is a strategic policy advisory committee whose principal mission is to provide timely strategic input to the Council, the Commission and the Member States on research and innovation issues that are relevant to the development of the ERA.

Throughout 2019, for each of ERA's six priorities, the ERA-related groups took responsibility for specific areas of development and implementation and reported on them to ERAC. This Annual Report¹ has been prepared by ERAC and summarises challenges faced by ERA-related groups, their achievements in 2019, and plans for 2020 and beyond.

The key achievements of the ERA-related groups are summarised below.

Full individual reports from each of the groups are presented in the **Appendix**.

b) Key achievements

1. *ERA Priority 1 – More effective national research systems, led by ERAC*

During 2019, ERAC undertook an in-depth examination with the aim of designing a new narrative for the ERA, setting out possible new objectives, priorities and recommendations to respond to current and future challenges of the ERA. The reflection culminated at the end of the year in the adoption of the [ERAC Opinion on the future of the ERA](#). In this context, ERAC held important strategic debates on the 'Role of R&I for the future of Europe', 'Inclusiveness' and 'R&I investments for sustainability and competitiveness', co-organised with the Commission services and underpinned by Commission discussion papers.

¹ The Council conclusions on the review of the ERA advisory structure, adopted on 1 December 2015, state that the ERA-related groups 'will provide a short annual update to ERAC on progress and impact against the ERA Roadmap and that ERAC will annually report to the Council to ensure that Council is regularly and comprehensively sighted on progress.'

ERAC also took forward the implementation of the 2018 Council conclusions on the governance of the ERA, together with the recommendations of the ERAC Opinion on the review of the ERA advisory structure, by means of an [Action Plan 2019-2021](#). ERAC also adopted a final report on monitoring ERA priorities with ERA National Action Plans ([1212/19](#)) on 2 October 2019.

2. ERA Priority 2a – Optimal transnational cooperation and competition, led by the High Level Group for Joint Programming (GPC)

The year 2019 was the start of a transition period for the GPC. Indeed, in view of the new approach on partnerships and the start of the discussions on the future of ERA, it has become clear that the future forum on partnerships (which started in 2019 as a transitional forum) would include the Joint Programming Process. Consequently, the GPC adopted an updated work programme for 2019-20 in order 1) to carry out an assessment of the impact of JP, more than ten years since the launch of this process, and 2) to start a new activity dealing with openness and transparency of networks. In addition, the GPC has continued its monitoring of the implementation of Priority 2a of the ERA roadmap.

3. Priority 2b – Research infrastructures, led by European Strategy Forum on Research Infrastructures (ESFRI)

In 2019, ESFRI contributed to progress in ERA Priority 2b primarily by four actions.

First, ESFRI carried out a comprehensive reflection on the role of research infrastructures in the renewed ERA, developing a vision of how to foster long-term European leadership in this field globally and how to facilitate greater impact for investments in research infrastructure on the broader economic, social and environmental goals.

Second, ESFRI launched the update of its Roadmap for European Research Infrastructures.

Third, ESFRI developed a common, broadly applicable, approach to monitoring the performance of research infrastructures, based on key performance indicators.

Fourth, ESFRI established effective dialogue with the European Open Science Cloud (EOSC), facilitating the transfer of relevant knowledge and expertise from the RI field to foster EOSC implementation.

4. *Priority 3 – Open labour market for researchers, led by the ERAC Standing Working Group on Human Resources and Mobility (SWG HRM)*

The main achievements of the SWG HRM include the document on synergies between EHEA and ERA, which offered insight on how a common agenda could be achieved in the area of human resources for EHEA and ERA, especially by (1) supporting highly competent and socially responsible students, researchers, academics and professionals at higher education and research institutes (HE&RIs) in Europe throughout their working lives, (2) achieving effective mobility for students, researchers, academics, and HE&RI professionals within, to and from Europe and, finally, (3) creating more common human resources standards for HE&RIs in Europe, and striving for a common European identity for students, researchers, academics, and HE&RI professionals.

5. *Priority 4 – Gender equality and mainstreaming in research, led by the ERAC Standing Working Group on Gender in Research and Innovation (SWG GRI)*

For 2019, the Standing Working Group on Gender in Research and Innovation identified two important policy issues that have not yet received sufficient policy attention. Firstly, it launched a sub-group on gender harassment in academia, with a particular focus on international mobility, with a view to delivering recommendations in the first half of 2020. Secondly, it delivered a policy brief on gender and innovation, in which it identified necessary policy actions both in terms of innovation as a process and innovation as an output. It paid specific attention to the fast-developing area of artificial intelligence. SWG GRI maintained its focus on gender mainstreaming through cooperation with several other ERA-related groups (GPC, ESFRI, SFIC). The future of the European Research Area and gender equality was a major topic of exchange in the SWG GRI; the group agreed that the ERA roadmap was a catalyst for gender equality in R&I in many EU countries and that dedicated actions must continue post-2020.

6. Priority 5 – Optimal circulation, access to and transfer of scientific knowledge, led by the ERAC Standing Working Group on Open Science and Innovation (SWG OSI)

The SWG OSI's work throughout 2019 remained in line with its mission to monitor the implementation of Priority 5 of the ERA roadmap, provide forward advice to ERAC, the Council and the European Commission on policies and initiatives related to open science and open innovation for the benefit of research, education, businesses and society, coordinate a common policy on open science in the ERA perimeter and share good practices, as outlined in its revised mandate. This was reflected in the new 2019-2020 work programme adopted on 21 June 2018 (7610/2019). The election in June 2019 of the new Chair and Vice-Chair for the group ensured the continuity of the work of the group.

2019 saw the completion of the intensive work carried out in order to develop the opinion on open innovation, which represented a landmark of the SWG in this fast-evolving policy field. The exchange of best practices and regular updates on the different initiatives, the launching of short surveys among OSI delegates and collaboration with the other ERA-related SWGs intensified, and all will continue in 2020, with a particular focus on training, skills and evaluation in open science (OS) and open innovation (OI).

7. Priority 6 – International cooperation, led by the Strategic Forum on International Cooperation (SFIC)

SFIC plays an important role in driving forward the EU Member States/associated countries partnership on international S&T cooperation, as well as in contributing to the external dimension of the ERA, mainly by providing strategic advice to the Commission, the Council and the Member States. In 2019, SFIC adopted a report on the benchmarking exercise on strategies and roadmaps for international cooperation in R&I and a SFIC opinion on international research and innovation cooperation ([1359/19](#) and [1360/19](#)), established task forces on Africa, China, science diplomacy and SFIC communication and visibility, adopted a report on SFIC communication and visibility ([1358/19](#)), developed a SFIC progress tool to monitor the progress of ERA Priority 6 in the National ERA Action Plans and intensified networking with ERA stakeholders.

c) **List of chairs**

ERAC Co-Chairs:	Jean-Eric Paquet and Christian Naczinsky
GPC Chair:	Emmanuel Pasco-Viel, replaced Leonidas Antoniou from 9 March 2019
ESFRI Chair:	Jan Hrušák
SWG Human Resources and Mobility Chair:	Cecilia Cabello Valdés
SWG Gender in R&I Chair:	Marcela Linkova
SWG Open Science and Innovation Chair:	Marc Vanholsbeeck
SFIC Chair:	Martina Hartl, replaced Rozenn Saunier from 16 October 2019

4. Appendix

Full reports from each ERA-related group

ERA Priority	ERA Priority	Group responsible for the ERA Priority	Page
1	More effective national research systems	ERAC	15
2a	Optimal transnational cooperation and competition	GPC	18
2b	Research infrastructures	ESFRI	21
3	Open labour market for researchers	ERAC Standing Working Group on Human Resources and Mobility	24
4	Gender equality and mainstreaming in research	ERAC Standing Working Group on Gender in R&I	28
5	Optimal circulation, access to and transfer of scientific knowledge	ERAC Standing Working Group on Open Science and Innovation	31
6	International cooperation	SFIC	34

Priority 1: More effective national research systems

In 2019 ERAC continued to focus on the best way to achieve the top action relevant to ERA Priority 1, namely ‘Strengthening the evaluation of research and innovation policies and seeking complementarities between, and rationalisation of, instruments at EU and national levels’. Its activities can be divided into four main strands, as follows:

Review of the ERA advisory structure

In 2018, ERAC and the other ERA-related groups were tasked by the Council with implementing the measures contained in its conclusions on the governance of the ERA, as well as the 43 recommendations of the 2018 ERAC Opinion on the review of the ERA advisory structure.

The Council conclusions stipulated that the new measures had to be implemented through an action plan, which was duly drafted and adopted by ERAC in April 2019. The Action Plan 2019-2021 includes two categories of actions to be implemented: 1) strategic and/or policy-oriented; 2) operational and/or process-oriented.

The ERAC Steering Board set up a help desk to support the implementation and monitoring of the Action Plan. A state of play of the implementation was presented at the ERAC plenaries in June, October and December 2019. The first phase of the monitoring process, corresponding to the first semester of 2019, showed that the reporting system could be improved in some respects. An alternative and more efficient reporting system was announced by the help desk at the end of 2019.

Follow-up on the implementation and monitoring of the impact of ERA National Action Plans

In 2019, ERAC continued to follow up on the implementation and monitoring of the impact of the ERA National Action Plans (ERA NAPs). As previously agreed, the results of the monitoring exercise will feed into reflections on future ERA priorities.

The process of monitoring the ERA priorities was to a great extent carried out by means of a monitoring tool developed by the High level Group on Joint Programming (GPC), which is also used by the other ERA-related groups. For some of the ERA priorities, the monitoring tool had to be adapted to fit their particular monitoring needs.

The conclusions of the final report on monitoring the ERA priorities with ERA NAPs, adopted in October 2019, indicate that usually pure evaluation actions cover a long cycle and are still ongoing, while evaluation measures give recommendations that result in new, updated or revised actions. The report draws a number of recommendations and lessons useful for the future, building on the analysis of quantitative and qualitative information provided by the ERA-related groups on the progress of their ERA priorities. It also invites reflection on the future monitoring of ERA NAPs, given that ERA priorities are rapidly changing domains. Finally, it considers that the ERA progress report and the monitoring of ERA NAPs are complementary mechanisms.

Strengthening ERAC's strategic capacity

Beginning in 2019, ERAC has been holding strategic debates regularly, twice a year. Each debate is preceded by a strategic workshop (organised together with the Commission services and underpinned by Commission discussion papers) back to back with the plenary meeting, and is structured with a dynamic format designed to lead to practical conclusions, while its outcomes can easily feed into preparations for future ERA ministerial conferences.

The topics of the first strategic workshop, in June 2019, were: 'Investing in the Sustainable Development Goals' and 'Inclusiveness'. The main conclusions were that education and R&I must be better linked; more measures are needed to support innovators and foster excellence, but also to help overcome the innovation gap across the EU; the European Semester could play an important role to monitor and promote inclusiveness; synergies among different instruments at the various levels are of paramount importance to achieve inclusiveness.

During the subsequent first strategic debate, ERAC discussed the 'Role of R&I for the future of Europe' in the context of the EU's strategic agenda for 2019-2024 and the Commission's reflection paper 'Towards a sustainable Europe by 2030', concluding in particular that it is important to ensure coherence between competitiveness, inclusiveness and the SDGs.

ERAC has also regularly been involved in discussions of relevant reports in the R&I arena, such as the European Innovation Scoreboard, where dedicated technical workshops were held under the auspices of ERAC, including privileged access to the report before its publication.

The topics of the second strategic workshop, held in December 2019, were: ‘R&I investments for sustainability and competitiveness’ and ‘brain circulation’. The relevant strategic debate at the plenary focused on ways to increase the directionality of national public R&I investments in support of the SDGs and the main elements within the national systems with the greatest potential to support sustainability transitions, together with the necessary R&I reforms that should accompany those investments. The main conclusions from the workshop and the strategic debate were that a systemic approach to R&I policy is required to maximise directionality across all policies; directionality should be achieved through a combination of regulations, investments (e.g. Horizon Europe missions) and reforms (e.g. smart specialisation strategies, ERA, European Semester); that private sector investment must be leveraged (e.g. by using public funding smartly and increasing SME engagement); and that citizens and higher education institutions can be better mobilised to engage in addressing sustainability challenges.

As for brain circulation, the important challenge is to find a good balance between incoming and outgoing researchers. This is not a zero-sum process, and there will always be some kind of imbalance. Every country should aim to gain some benefits and reduce negative effects. It should be remarked that under Horizon Europe there will be a strong instrument to enhance the circulation of knowledge and experience through brain circulation.

ERAC ad hoc Working Group on the future of the ERA

In April 2019 ERAC established an ad hoc Working Group to work on:

- options for a new narrative/paradigm on the future of the ERA, taking into account both the experiences of 20 years of ERA policies and emerging needs for policy reforms;
- possible future ERA priorities and other relevant trends, *inter alia* in connection with Horizon Europe, which could feed into a new ERA policy framework post-2020.

The ad hoc group worked to a very demanding schedule, and a first set of conclusions and recommendations on the new ERA paradigm was discussed and approved by ERAC in October 2019. All ERA-related groups and 18 ERA stakeholders provided input during the process. In December 2019, ERAC discussed the final report and approved it by unanimity in the form of an ERAC Opinion on the future of the ERA. This Opinion will feed into the preparations for the upcoming relevant Commission communication.

More details can be found in the chapter of this report titled ‘A new ERA paradigm for the next decade: a personal view by the Chair of the ad hoc Working Group on the future of the ERA’.

Priority 2a: Optimal transnational cooperation and competition

During 2019:

- in the framework of its specific ERA priority, which action(s) of the group contributed to the progress of ERA?
- how did the group contribute to the top action priority it is responsible for, at
 - a) national level?
 - b) European level?

At the beginning of 2019, the GPC adopted an updated work programme for 2019-20, including the following topics:

1. Measuring the impact of the Joint Programming Process at national level

In the context of the future of the ERA and the transition towards a new approach for partnerships and joint programming (JP), in 2019 the GPC decided to publish, by the end of 2020, a report on the impact of the Joint Programming Process, notably at national level, it being more than ten years since the launch of this process. In order to prepare the report, the year 2019 was mainly dedicated to the preparation of a questionnaire on the impact of JP at national level. This questionnaire was prepared by a task force including GPC delegates and joint programming initiative (JPI) representatives, with the help of ERA-LEARN. All GPC delegations were then invited to answer this questionnaire, and the results were first presented at the end of the year.

There were contributions from 21 delegations (19 Member States and two associated countries), as well as a contribution from Flanders. It was first of all an opportunity for GPC delegates to assess the impact of JP at national level, in liaison with colleagues involved at national level in JP processes and in some JPIs in particular. One of the overall findings is actually the variability of impact at national level, even within a country, as in some cases the national R&I system is very decentralised and the impact can vary between, for instance, different JPIs.

In general, it was not possible to link the level of satisfaction with the impact of JP with the level of participation of the countries in JP, and JPIs in particular. However, most of the countries which assessed the impact of JP at national level very positively are known to have significant involvement in JP and JPIs.

2. Monitoring progress and implementation of Priority 2a of the ERA roadmap

As requested by ERAC, an update of the status of implementation of Priority 2a of the ERAC roadmap was carried out by the GPC in 2019 ², using the tool already developed previously. The MS/AC response rate for the monitoring exercise was much lower in 2019, at 60%, than in 2018 (when it was 79%). The total reported share of on-track and finished measures amounts to 85%.

We consider that impact at national level consists in *stimulating delegates* to examine whether other countries' ERA roadmap measures/approaches can be transferred to their own national ERA roadmaps and action plans. Continuous reporting of ERA Priority 2a monitoring, enriched with cases and presentations, also sparks ideas for possible updates of ERA roadmaps and the inclusion of best practices of other Member States and associated countries.

Incidentally, it can be stated that the GPC monitoring tool had a big impact, as all national delegations of all ERA-related groups, including ERAC, use the tool, albeit in a slightly modified form in the case of two ERA groups.

² WK 6994 2019.

3. Proposing recommendations to enhance the openness and transparency of networks

In the context of the new approach on partnerships within Horizon Europe and the establishment of the Transitional Forum for R&I Partnerships, which should also cover joint programming and JPIs, the GPC was asked by ERAC to launch a new activity addressing inclusiveness, as this topic is very important in the ERA. The GPC therefore established a task force on openness and transparency of networks. The task force carried out most of its work in 2019 (the final report was published in March 2020³). Based on the work and analysis, the group made eight recommendations, two addressing the national level, three the of partnership initiative level and three the EU level. These recommendations are expected to have an impact from 2020 onwards. However, some impact was reported at the level of partnerships, which were covered by the questionnaire, as the questionnaire itself already provided various ideas for measures to increase inclusiveness among joint technology initiatives (JTIs) and Art.185s.

4. Contributing to the discussion of the partnerships in Horizon Europe and the future of the Joint Programming Process, in the context of the future of ERA

In 2019 the GPC continued to be involved in the preparation of the new approach for partnerships. In particular, the Chair of the GPC participated in meetings of the transitional forum, as an observer, and a significant number of delegates in this forum are also GPC delegates. This ensured that the Joint Programming Process was also included in this new approach on partnerships as a significant expertise coming JP and JPIs will also be useful for the success of future partnerships. Continued dialogue was also possible with the Commission in the GPC, which allowed GPC delegations and JPIs representatives to contribute to this preparation.

In 2019 the GPC – like all ERA-related groups – also contributed to the work of the ERAC ad hoc group on the future of ERA.

³ ST 1302 2020 REV 1.

Priority 2b: Research infrastructures

Within its general mandate to support a coherent and strategy-led approach to policy-making on research infrastructures in Europe, during 2019 ESFRI contributed to the progress of the ERA through the following actions:

1. ESFRI white paper on research infrastructures in the ERA

In the autumn of 2018, ESFRI launched an internal reflection process on the role of research infrastructures in the renewed ERA. On 31 January 2019, ESFRI organised an internal brainstorming workshop in a participatory format, to reflect on a number of key questions on the development of the research infrastructure landscape in Europe, the evolution of the ESFRI roadmap and role of ESFRI in this context. The workshop was followed by a series of reflection papers and discussions throughout 2019 at the level of the ESFRI Forum. The general discussions concluded with a participatory workshop with stakeholders on 6-8 November 2019 to exchange ideas with the broader research infrastructure community. The topics raised in these discussions included:

- Strengthening the strategic role of research infrastructures in the ERA, increasing their impact on science and relevance for sectoral policies;
- Consolidating the research infrastructure landscape in Europe, increasing the effectiveness of investments;
- Evolution of the ESFRI roadmap;
- Effective organisation of ESFRI and its activities in the evolving ERA context.

In order to formalise the outcomes of these discussions, a drafting team was established to develop an ESFRI white paper in which the Forum intended to draw up a comprehensive vision for the future development of research infrastructures in Europe and their role in the renewed ERA. The paper was finalised and adopted by ESFRI in the first quarter of 2020 and was publicly presented and discussed during the Croatian Presidency Conference on ‘European Research Infrastructures for a smarter future’.

2. Launch of the ESFRI roadmap update process

In response to the invitation of the Competitiveness Council⁴, ESFRI has announced the publication of the next roadmap in 2021. The Public Guide describing the methodology applied, and other related documents, are available on the ESFRI website⁵. The update process was presented on 25 September 2019 in Brussels at a dedicated Info Day organised as a side event to the European R&I Days. It brought together around 200 participants from all over Europe, with substantial representation of new initiatives interested in developing unique research infrastructures at European level through the ESFRI process.

The 2021 update of the ESFRI roadmap, like the two previous editions in 2016 and 2018, consists of a call for new proposals, monitoring of progress towards implementation of ongoing ESFRI projects and a reviewed landscape analysis of the available research infrastructures in Europe.

It is planned that the ESFRI roadmap for 2021 will be presented to the public during a dedicated event under the Slovenian Presidency of the Council.

3. Monitoring of performance of research infrastructures

In response to the invitation of the Competitiveness Council to develop a common approach for the monitoring of research infrastructure performance⁶, ESFRI established an ad hoc Working Group on Monitoring, whose starting point was a workshop on ‘Monitoring of RIs, periodic update of Landmarks, use of KPIs’, held in Milan on 19-20 November 2018. The report resulting from the Group’s work was adopted by ESFRI on 18 December 2019⁷.

⁴ **Conclusions of the Council of the European Union of 30 November 2018** on [Governance of the European Research Area](#) (14989/18).

⁵ <https://www.esfri.eu/esfri-roadmap-2021>.

⁶ **Conclusions of the Council of the European Union of 29 May 2018** on [Accelerating knowledge circulation in the EU](#) (9507/18).

⁷ <https://www.esfri.eu/working-group-reports>.

The report describes a common approach to monitoring the performance of research infrastructures, applicable to all types of facilities, single-sited and distributed, European, national and regional, providing all kinds of services across all fields of science. The framework is based on key performance indicators (KPIs) developed to address the most commonly held objectives of RIs, so as to ensure that they were likely to be relevant and adopted by the widest range of facilities. The proposed KPIs were tested against the RACER criteria, i.e. they had to be Relevant, Accepted, Credible, Easy to monitor and Robust, to ensure their consistency and feasibility for implementation.

Details of each KPI are provided in the accompanying reference sheets. The suitability of the KPIs to facilitate the monitoring of performance was tested by surveys and a dedicated stakeholder workshop held in Brussels on 3 July 2019. The results of this consultation indicate that, given the diversity of types and missions of RIs, the KPIs can be implemented effectively if they are adapted to the specific character and context of individual RIs. The report proposes that this be achieved through dialogue between the relevant parties for all of the RIs, noting that it is particularly important for RIs under construction, which require customised KPIs suited to their phase of development.

4. European Open Science Cloud (EOSC)

With a view to establishing effective coordination between ESFRI and EOSC, as called for by the Competitiveness Council in 2018⁸, ESFRI took a number of actions in the course of 2019.

On 30 January 2019, ESFRI held a workshop on ‘EOSC and ESFRI RIs services: how do they tango?’ With over 100 participants, the workshop was very effective in bringing together the horizontal e-infrastructures with thematic ones and RI clusters. Ideas were shared on how the EOSC vision and principles could be translated into actions, and what could be done in the immediate future. The workshop clearly showed that ESFRI and the ESFRI RIs had a lot of experience and expertise that must be shared with the EOSC Executive and Governance Boards, especially in the area of governance and business plans. The workshop showed that there was a need for a more structured dialogue between ESFRI and EOSC to explore synergies in helping EOSC implement its roadmap and deliver on the timeline.

⁸ **Conclusions of the Council of the European Union of 29 May 2018** on the [European Open Science Cloud](#) (9029/18), and **Conclusions of the Council of the European Union of 30 November 2018** on [Governance of the European Research Area](#) (14989/18).

In the follow-up, ESFRI established a special task force on EOSC to foster such dialogue and coordinate ESFRI input to the implementation of the EOSC. The task force established effective communication channels with the various EOSC bodies, mapped the landscape of relevant RI stakeholders and engaged in pooling the available knowledge and expertise, but also endeavoured to identify, from the perspective of RIs, the bottlenecks and challenges linked to EOSC development. The task force also started the preparations for a second workshop between EOSC and RIs, planned for 2020.

Priority 3: Open labour market for researchers

The main achievements in 2019 included the following:

- **Synergies between ERA and EHEA**

The SWG HRM group produced a document on how the **ERA** and the **EHEA** could strengthen their collaboration and work towards common goals. The document was intended to support discussions at the joint meeting of the European Research Area Committee (ERAC) and the Directorate General for Education, Youth, Sport and Culture (DG EAC) during the Finnish Presidency, held in Helsinki on 1 October 2019. The document focused on the **human resources dimension of both ERA and EHEA**.

Some of the main messages of the document included the following:

- ERA and EHEA share the same knowledge base of universities and research organisations in the EU that have important responsibilities relating to research and innovation, researchers' education (doctoral studies) and training of undergraduate and master's degree students. In 2017, EU28 had 1 973 733 researchers (FTE), 743 364 (38%) of whom were working in the higher education and research sectors. Thus, the higher education system is of fundamental importance to the task of making ERA collaborative, competitive and successful, and both frameworks should share clear, synergistic and 'interoperable' policies. This is particularly important with regard to the implementation of ERA Priority 3 (open labour market for researchers).

- EHEA and ERA are closely linked through the body of students who are educated via research experiences at different stages of their careers, in particular the third cycle (doctoral studies), which is the first phase of a research career and allows access to advanced research careers (outside and within academia) and highly skilled positions outside academia.
- ERA and EHEA share the need to promote virtual, blended and geographical mobility, mainly within Europe, but also outside it. This mobility should not be an exception anymore and should become a general rule, a normal component of all European researchers' and academics' curricula and students' education. The motto should be 'studying, researching and working as at home'. Students, researchers, academics and other higher education and research-institution professionals should have the same conditions, rights and duties abroad as within their own institutions (services, rewards, pensions, etc.).
- Beyond 2020, a common agenda for ERA and EHEA should work towards three main goals:
 - a) supporting highly competent and socially responsible students, researchers, academics and professionals at HE&RIs in Europe throughout their working lives;
 - b) achieving effective mobility of students, researchers, academics, and HE&RI professionals within, to and from Europe;
 - c) creating more common human-resources standards for HE&RIs in Europe, and striving for a common European identity for students, researchers, academics and HE&RI professionals.
- Finally, the document concluded by identifying shared challenges and some suggestions on tools and ideas to facilitate links between ERA and EHEA in relation to the following aspects:
 - a) supporting highly competent and socially responsible students, researchers, academics and professionals in Europe;
 - b) effective mobility of researchers, academics, students and staff;
 - c) common standards for higher education and research institutions in Europe and building up a European identity for researchers, academics, students and staff;
 - d) inclusiveness in higher education and research.

- The SWG HRM Chair participated in the **MSCA Conference of the Romanian Presidency** for the Open Science & Human Resources session, which took place in Bucharest on 4 June 2019. Following the recommendation to increase dialogue with ERA-related stakeholders, as indicated in the ERAC Action Plan, the session was used for exchanges with these stakeholders on issues relating to the Human Resources Strategy for Researchers (HRS4R) and on how to strengthen human capital and skills development throughout ERA, in the context of the MSCA programme. The conclusions of the session were that the MSCA programme has proven useful in stimulating cultural changes in institutional settings to improve overall career development; however, more effort was still needed to ensure that Europe succeeded in achieving an open labour market. Research institutions and universities can only maintain high levels of excellence in the long term if they offer promising career paths for researchers and competitive working conditions.
- **Contribution to Horizon Europe.** Through a specific task force, the SWG HRM advanced with the preparation of a document providing a consensus position on issues concerning human resources in Horizon Europe. The document outlined the need to further address issues related to: (i) mobility of researchers; (ii) promotion of international cooperation between researchers; (iii) improvement of open-science-related skills; and (iv) implementation of the Charter and Code for researchers and the HRS4R. The document is to be finalised in 2020.
- Review of ERA Roadmap NAPs for Priority 3

In the review of Priority 3 of the NAPs of the ERA roadmaps using the common methodology agreed, the results show that for this priority the actions are primarily seen as a continuous/ongoing effort (69% of the actions/measures), while 30% of relevant actions/measures have been finished/completed. The SWG HRM classified the actions in the NAPs into five types on the basis of countries' responses:

Type of action/measure	Finished	Ongoing	Cancelled
Remove legal and other barriers	34%	63%	3%
Support EURAXESS	36%	64%	0%
Support innovative doctoral training	31%	69%	0%
Implement HRS4R	11%	89%	0%
Other types	0%	100%	0%
TOTAL	30%	69%	1%

Finally, analysis of the Priority 3 NAPs led to the following conclusions:

- In many cases, EU-level initiatives (e.g. the use of EURAXESS jobs for internationalisation and to attract talent, uptake of Innovative Doctoral Training Principles to foster intersectoral mobility or implementing Charter & Code principles to improve career development support in the institutions) are proving very valuable in contributing to human resources policies at national level.
- Most countries reported actions to foster intersectoral mobility and intersectoral collaboration. Such actions range from specific funding programmes to advances in the recognition of non-academic experience in academic positions.
- The second most common type of actions are those linked to attracting talent, with countries actively promoting the use of EURAXESS Jobs to advertise positions, but also some specific funding programmes, as well as actions aimed at improving visa conditions.
- Finally, there are also quite a large number of actions aimed at improving research careers, which can include increases in numbers of positions, but most commonly involves the development of national-level frameworks and/or strategies to improve researcher career development.

Priority 4: Gender equality and mainstreaming in research

POLICY ADVICE

Horizon Europe consultation

The Chair participated in the co-design session Think Gender, Think Different at the EU Research and Innovation Days in Brussels in September 2019, and communicated recommendations from the SWG GRI for the next Framework Programme, Horizon Europe. These included recommendations for addressing gender issues across the six clusters, recommendations for bridging the continued differences in gender-equality implementation among Member States, and a mission dedicated to tackling gender inequality.

Policy brief on gender and innovation

Innovation is one of the main drivers of economic, technological and social development and has a major impact on people's daily lives. As numerous studies show, the gender perspective is rarely adopted either in innovation processes, innovation studies or innovation policies. As a result, new solutions and products may be of limited usefulness and may even involve risk to human health or wellbeing. For this reason, SWG GRI prepared a policy brief addressing various gender-related aspects of innovation and presented policy recommendations both for the Commission and for Member States. Particular attention was paid to the topic of artificial intelligence, given the rapid advances in that area and the major ethical issues that need to be addressed, including gender equality.

Sub-group on gender harassment in academia, with a particular focus on international mobility

In 2019, SWG GRI launched a sub-group on gender harassment in academia, with a view to mapping and assessing the degree to which this serious issue is addressed in Member States and their research funding organisations. Particular attention is paid to international academic mobility, in view of its role in the EHEA and the ERA and the heightened vulnerability of young people and early-career researchers in foreign environments. Given the importance of the #MeToo movement in several Member States and the effect it has had on tackling gender-based violence, the sub-group is also focusing on assessing the impact of #MeToo in the higher education context. Findings and recommendations to Member States and the Commission will be delivered in the first half of 2020.

POLICY COORDINATION

ERA and implementation of NAPS

SWG GRI recognises that the ERA roadmap has been a catalyst for gender-equality actions in many European countries. It was the first policy document on gender equality in R&I in 57% of the newer Member States. The SWG GRI members made presentations on and discussed policy monitoring and evaluation at a mutual learning workshop in March 2019 organised within the framework of Horizon 2020 project GENDERACTION. The analysis of actions in Priority 4 shows that differences exist in how countries conceptualise gender equality and in the ambition of their actions. An important finding is that the ERA headline indicator for Priority 4 (proportion of women in Grade A / full professors) is poorly suited to assess implementation of the Priority, and the SWG GRI called for the development of both quantitative and qualitative indicators to measure progress in the implementation of gender equality in ERA.

Cooperation with other ERA-related groups

Cooperation with the other ERA-related groups is crucial for the purpose of ensuring that gender is mainstreamed across all priorities. For this purpose, SWG GRI first discussed opportunities for collaboration with GPC, and it is planned that a workshop should take place in 2020. SWG GRI and ESFRI also worked together, and SWG GRI provided input for the ESFRI Roadmap 2021 Guide to reflect gender-equality concerns. In December 2019, the SWG GRI chair was invited to an ESFRI meeting, and further collaboration is under discussion. Lastly, the SWG GRI and SFIC have come together to follow up on their analysis of gender equality in international cooperation in STI, contributed to ongoing work on the topic carried out in the GENDERACTION project and will discuss new policy recommendations in 2020 on gender equality in international cooperation in STI.

Cooperation with EU PRES

SWG GRI contributed insights and suggestions for the direction of the FI PRES conference. Several delegations served as members of the Steering Committee and the chair served as a member of the Scientific Committee of the conference. The SWG GRI chair participated in the panel discussion on disruptive measures for gender equality in research and innovation policy, together with Director-General Jean-Eric Paquet; Anita Lehtikoinen, Permanent Secretary, Ministry of Education and Culture, Finland; and Jenni Raitoharju, Chair, Young Academy Finland.

Cooperation with the Commission

SWG GRI and the DG RTG Gender Sector have maintained very active contact with a view to coordinating developments in the field of this Priority. SWG GRI is a very important policy forum that acts as a liaison between the Member States and associated countries and the Commission on gender-equality developments in R&I.

POLICY DEVELOPMENTS AT NATIONAL LEVEL

SWG GRI notes the following policy advances at national level in Priority 4:

- in Austria, the SWG GRI delegate has been involved in the strategy development process RTI 2030 within a specific working group on human resources which took the Commission Gender Equality policy into account;
- a conference was held in the Czech Senate under the auspices of the Prime Minister on research and work-life balance issues, with recommendations presented to the government; as a follow-up, the Czech Research, Development and Innovation Council held the first discussion of the issue in its existence;
- the Dutch Ministry of Education, Culture and Science, together with [Portia](#), organised the 17th international Gender Summit in Amsterdam, with policy recommendations sent to the European Parliament and Commission;
- in Estonia, changes were made in 2019 to the formation principles of the Evaluation Committee of the Estonian Research Council, which evaluates applications for funding submitted to the Estonian Research Council. It is recommended, when possible, that gender balance be taken into account in the formation of the Committee, with preference being given to candidates of the under-represented gender in the Committee. The representation of researchers of different academic ages in the Committee is also monitored;
- the Finnish Presidency organised a conference with the title '[New Pathways for Gender Equality](#)', with the resulting Helsinki Call for Action, delivered to relevant stakeholders in Europe.

POLICY OUTREACH

SWG GRI members have actively contributed to advancing gender-equality actions in R&I by speaking at national and international events and participating in policy design actions, *inter alia*:

- the Annual Conference of the European Platform of Women Scientists;
- the Annual Conference of eument-net, the European network of mentoring programmes;
- organisation of actions on the occasion of the International Day of Women and Girls in Science on 11 February (for example, an event organised by the Women and Science Committee in the Wallonia-Brussels Federation of Belgium focusing on gender, digitalisation and artificial intelligence, or a social media campaign presenting promising early-career women researchers in Czechia);
- The Association for the Advancement of Women in Science & Technology at the Israeli Ministry of Science and Technology, led by its Chair, Professor Navah Ratzon, hosted a two-day bi-national event with Sweden's innovation agency, VINNOVA, on gender equality in entrepreneurship and innovation.

Priority 5: Optimal circulation, access to and transfer of scientific knowledge

Preliminary remark

The current description of the 5th Priority of the ERA roadmap is somewhat outdated. On the one hand, Priority 5B focuses on open access, while the SWG OSI has been working since its launch on the broader notion of open science (open access and open research data, as well as other types of open collaborations, including citizen science). On the other hand, Priority 5A was originally focused on the notion of knowledge transfer, while open innovation has since come to the fore. Hence in the year 2019, as in 2018, the SWG OSI organised most of its work around the complementary notions of OS and OI, exploring a broad range of OS- and OI-related issues and considering what challenges and opportunities the openness paradigm brings to the research and knowledge transfer ecosystems.

In so doing, the SWG OSI's main aim has been to work on a more harmonised OS and OI approach in the ERA, to support intra-European and international cooperation in these fields and to address competitiveness outside of Europe.

In 2019, the SWG OSI focused particularly on the concept of innovation. The SWG OSI adopted an **opinion on open innovation (OI)** on 12 March 2019 (1203/19), which argued that OI would facilitate the meeting of current demands, anticipate future needs and generate an innovation dynamic that could not be achieved with traditional methods. Furthermore, the opinion outlined 14 recommendations and included the following definition: 'Open innovation is a heterogeneous approach which favours cutting across the boundaries between organisations, sectors, disciplines and communities to develop new products, services, processes and practices and to generate new knowledge, implying increased inclusion, empowerment and sustainability.' The opinion aimed to contribute to ongoing work on innovation policy at both EU and national levels, as innovation policy issues are to be integrated into most policy areas in Europe, a process that should be intensified with developments in other ERA priorities, such as gender equality and mainstreaming. The opinion also includes a large set of good practices across Europe.

The SWG has continued to update delegates on developments on OS and OI concerning initiatives in this field, such as **the European Open Science Cloud, the Plan S initiative**, and the **provision of legal copyrights** in open scholarly publication.

In addition, the Task Force on **Mapping of OS and OI groups** worked throughout 2019 to identify and map the different groups working in this field. The aim was to avoid overlap between the SWG OSI's work and the work done by other OS- and OI-related groups and to facilitate networking and complementarity between the SWG OSI and the other groups.

In addition, the Task Force on **monitoring ERA NAPs (Priority 5)** completed a quantitative and qualitative analysis of input received from delegations and had in-depth discussions on the monitoring of OS policies and their impact on science and society.

Furthermore, a new joint task force with the SWG HRM was launched in the second half of 2019 to develop an opinion **on the training, rewards and evaluation of researchers in the context of OSI** in 2020.

The SWG also continued its **exchange of best practices**, including on open innovation (with case studies from DK, BE and FR), national OS plans (with a NL case study), copyright in the context of OS and OI (SI, BE, FR) and on the issue of incentives and evaluation (BE, FI).

In the context of the development of the ERAC opinion on the future of the ERA, in June 2019 the SWG OSI provided its contribution to the ERAC task force on the new ERA narrative as regards **future OS & OI objectives and priorities in the ERA (7866/2019)**. Following the adoption of the ERAC opinion in December 2019, the SWG OSI will continue its work and in 2020 will draft an opinion on future open science and open innovation priorities in the ERA. For this purpose a dedicated task force on **OS and OI priorities in the future of the ERA** has been launched.

As regards the ERAC Action Plan 2019-2021, the SWG OSI reviewed its mandate in order to give the group a clearer mission with concrete and tangible tasks, while allowing it to respond to newly emerging topics in a fast-developing field. The **new mandate** was adopted in October 2019 (1214/19). An OI task force was established to develop an opinion on OI, as indicated above. The preparation and content of meetings was enhanced and the SWG decided to reduce the number of its plenary meetings from four to three in 2020, while adding a working session dedicated to the OSI task force.

Regular updates on **EOSC** were provided by the Commission and/or one of the SWG OSI delegates involved in the EOSC Governance Board. The SWG also fulfilled the Action Plan's action of setting up a task force on mapping OS initiatives and OS-related groups, **interaction with ERA stakeholders – like the European University Association (EUA) – and other ERA-related groups** was intensified both through the ERAC Steering Board and through specific meetings, such as an informal meeting held by a small delegation of the SWG OSI with ESFRI in June 2019, the SWG OSI's participation in the SWG GRI's discussions on OI, the integration of their feedback into the SWG OSI's opinion on open innovation, as well as the SWG OSI Chair's presentation of the communications template to SFIC. The collaboration between the SWGs OSI and HRM is ongoing and will continue in 2020 through the joint task force on **training, skills and evaluation of researchers in OS and OI**.

Moreover, the SWG OSI set up a task force on improving the internal and external **communication** of the group, which delivered a template to be used by ERAC SWGs for the dissemination of their outputs: a document template, online visibility and the use of social media (the SWG decided to use exclusively the hashtag #SWGOSI while tweeting, via personal accounts, about the deliverables of the group). The template was presented to the ERAC Steering Board and SFIC.

Priority 6: International cooperation

The SFIC Work Programme 2019-2020, adopted by SFIC at its plenary on 12 June 2019, groups SFIC's seven main activities as contained in its mandate into **five priority areas of action**. The priority areas reflect SFIC's strategic mission, cover ongoing SFIC initiatives and new activities and build on work already done and the current international context. In 2019, networking with stakeholders was added as an activity in the second half of each year.

Concerning **sharing and structuring information and good practices on international R&I cooperation activities**, i.e. the core role of SFIC, in 2019 SFIC members and observers continued to contribute to peer-learning activities and to the exchange of best practices, mainly via exchange of information between delegations (e.g. on a bilateral basis, within SFIC working groups, via systematic tours de table of international activities during SFIC plenary meetings). On 11 June 2019, a workshop was held together with the Commission services on the international perspective of the Horizon Europe cluster 'Energy, Climate and Transport'. SFIC also continued to promote presentations during plenary meetings on EU and national STI strategies, as well as on R&I cooperation activities and projects.

Moreover, following a workshop on science diplomacy on 3 October 2019, SFIC decided at its plenary meeting on 4 October to establish a task force on science diplomacy. The main working areas of this task force include the integration of aspects of science diplomacy into Horizon Europe, the identification of key actors, networks and practices, facilitating dialogue and collaboration between relevant communities, the EU institutions and the Member States and associated countries regarding science diplomacy, and exchanging current practices relating to science diplomacy strategies and activities developed at national and regional levels, including work on ERA NAPs.

In addition, as networking with stakeholders had been added to the SFIC Work Programme 2019-2020 in view of the ERAC recommendations, SFIC invited representatives of EARTO, EUREKA, the EUA, the League of European Research Universities and Science Europe to its plenary on

18 December 2019. Each of the organisations gave a presentation on its activities, focusing on the international dimension of the ERA and the role of international cooperation in Horizon Europe.

In 2019, SFIC continued to focus on **joint strategic approaches to and actions for international R&I cooperation, including pooling and sharing relevant knowledge concerning third countries**, and decided to establish task forces on Africa and China. The deliverables for the SFIC Africa task force in 2020 will be a workshop in March (this took place on 3 March) and a strategic report to be adopted by SFIC in May, together with a SFIC opinion. The SFIC China task force aims to establish a more structured interface between Member States and with Commission services, especially as the Commission is currently focusing on R&I collaboration with China and organised a meeting, held on 18 December 2019, between the Member States (at Directors-General level) and stakeholders. SFIC launched a survey of Member States to frame the issue and learn more about the sensitivity of the topic in the various countries, and presented the outcomes at the meeting between the EU and Member States and China and at the SFIC Plenary, both on 18 December 2019, as well as at the ERAC Steering Board on 11 February 2020.

SFIC also continued to work intensively on **the development and implementation of the ERA roadmap and cooperation with ERAC and the ERA-related groups** in 2019. The SFIC ad hoc Working Group for a benchmarking exercise on strategies and roadmaps for international cooperation in R&I, established in September 2018, had the objective of carrying out a benchmarking of national initiatives, frameworks, structures and roadmaps of EU Member States and associated countries for R&I cooperation with third countries. Its work consisted of collecting (via an online survey) and mapping out the various approaches taken in the drafting of national roadmaps and strategies for international cooperation in R&I, identifying priority countries for cooperation, comparing the different approaches and identifying transferable good practices and joint approaches where relevant. The mandate of the ad hoc Working Group was extended for six months in September 2019 in order for it to finalise its tasks. At the December 2019 SFIC plenary, the final report of the ad hoc Benchmarking Working Group ([1359/19](#)) and the SFIC opinion on international research and innovation cooperation ([1360/19](#)), based on the work carried out by the ad hoc Benchmarking Working Group, were adopted by SFIC. The SFIC opinion highlights, *inter alia*, that in order to maintain the evidence basis to show common interests in key focus countries, the collection of relevant data on structures in and actions towards third countries should take place on a more regular basis and in a structured way, and also include relevant data from the Commission. This should be considered in connection with the request by SFIC to see the

international cooperation activities of Member States and associated countries integrated into the EU Research and Innovation Observatory.

The Benchmarking Working Group had close links with the Mutual Learning Exercise (MLE) on national strategies and roadmaps for international cooperation in Research & Innovation that was launched by the Commission in 2019. A preliminary version of the draft report of the ad hoc Working Group was presented and discussed during the second country visit of the MLE, and the MLE experts provided useful feedback, which was consequently taken into consideration in the draft report.

Regarding the monitoring of the National ERA Action Plans (NAPs), as requested by ERAC in December 2018, SFIC set up a monitoring mechanism conceived as a self-assessment tool by adapting the tool used by GPC. The SFIC progress tool is intended to show how the entire ERA Priority 6 is progressing. The tool was circulated to SFIC in the form of a living document, to be updated when new or revised NAPs become available. The updated data will enable SFIC to contribute to the ERAC report on the monitoring of ERA priorities.

In the context of the ERAC Action Plan, SFIC held a strategic workshop on the future of SFIC on 6 March 2019, back to back with the SFIC plenary on 7 March. This was a follow-up to the discussions that started in SFIC in 2018 on ideas for improving its organisation (by means of, *inter alia*, a strengthened steering board, the possible introduction of ‘sentinel task forces’ focusing on topical issues, interactions with other ERA-related groups, new meeting formats, etc.). The workshop focused on discussions on the revision of the mandate of SFIC, the organisation of SFIC meetings, the governance of SFIC, its communication/visibility, and topics of interest that should be part of the future SFIC work programme. These discussions were based on the results of an internal online survey launched in early 2019 and took into account the ERAC Action Plan recommendations. As a result of this workshop and the discussions at the SFIC plenary, SFIC agreed that its mandate covers ERA Priority 6 to a large extent and that the SFIC’s activities are mostly in line with its mandate. The elements of the mandate could be restructured thematically in the framework of a future revision of the mandate, but the main points were still considered valid at this stage. SFIC therefore agreed that engaging in the time-consuming process of changing the mandate (which has to be adopted by the Council) was not essential for the sake of wording. At its plenary on 12 June 2019, SFIC adopted a document reflecting this agreement. That document (WK 10301/19) was submitted to ERAC for information. SFIC also adopted a one-pager on its impact and submitted this document (WK 10302/19) to ERAC for information.

Still in the context of the ERAC Action Plan, at its plenary on 7 March SFIC agreed to establish a task force on SFIC communication and visibility. At the SFIC plenary meeting on 4 October 2019, the Chair of the ERAC Standing Working Group on Open Science and Innovation (SWG OSI) and the coordinator of the action in the ERAC Action Plan related to communication and visibility reported on the work done at SWG OSI and ERAC level. The final report of the SFIC task force on communication and visibility ([1358/19](#)) was adopted by SFIC at its 18 December plenary, and subsequently submitted to ERAC for information. At the December plenary, SFIC also took note of the SFIC presentation prepared by the task force. The idea is that SFIC delegations can use this presentation to present the Forum's activities in other ERA-related groups, at national level and in other international bodies.
