

**Multilateral dialogue on principles and values  
in international research & innovation cooperation**

**Concept Note  
Workshop on Research Excellence  
on 1 June 2023**

***Organised by Canada and Italy, with Chile, The Guild, YERUN, the ERCEA and  
the European Commission***

Purpose

Research Excellence is one of the principles and values identified in the Multilateral Dialogue on Values and Principles for Research and Innovation launched by the European Commission at the beginning of July 2022. The aim of this dialogue is to have an open discussion between EU Member States and international partners and to develop a common understanding of these principles and values; as a reliable basis for international research and innovation cooperation.

Background

Research excellence can take different guises and is evaluated at different levels (i.e., at researchers', institutions', and research proposals' levels). Not all research policies, programmes and types of research organisations around the world understand the term in the same way. The assessment of research quality and excellence has traditionally been associated with quantitative criteria concerning publications in journals. With support from initiatives like the San Francisco Declaration on Research Assessment (DORA), and other interventions, however, there seems to be an increasing trend towards considering excellence as multidimensional and as integrating aspects other than scientific publications.

For example, a limited survey of researchers conducted in Africa stressed the value of working with a broader selection of research quality standards and indicators, adapted to the specific local context. In particular, the researchers pointed to the importance of considering scientific rigour and ethics, producing work with great social and policy impacts, and training young researchers as elements of research excellence [1]. The Latin American Forum on Research Assessment (FOLEC-CLACSO) recognises that research evaluation should not be reduced to scientific production in terms of publications but should also consider "*extension, transference, teaching and training of human resources*" [2], and the social relevance of knowledge as part of the impact of scientific research [3]. The UK Research Excellence Framework (REF) includes a diversity of research outputs, as well as their impact beyond academia, and the environment that supports research [4]. In addition, in the European Union (EU), the Pact for Research and Innovation recognises that quality implies that research "*produces verifiable and reproducible results and is carried out through transparent research processes and methodologies and through research management which allows the systematic re-use of previous results*" [5]. Most of the EU's Framework Programme for Research and Innovation evaluates research according to excellence, impact and quality of implementation. Excellence in this

context includes Open Science practices (e.g., engagement of citizens, sharing and management of research outputs etc.) and gender equality. At the same time, in the EU, research funders and performers are currently involved in a debate on how to assess research, which includes discussions on how to take a holistic approach when evaluating researchers and how to understand research quality and impact [6].

The objective of the workshop is to learn from different experiences and approaches on the understanding of research excellence in different parts of the world; including how policy-makers in different contexts apply the concept of excellence to design and implement R&I policies. The exchange of views will aim to identify several points of convergence or divergence regarding:

(1) the characteristics considered for research excellence in different national systems. Based on this peer learning, the workshop will equally explore (2) how research excellence should be assessed and achieved from an international research cooperation perspective.

To structure the discussion, the following questions will be addressed in two consecutive meeting sessions:

**Theme 1: *How is research excellence understood and practised?***

1. What are the characteristics and values attached to research excellence - at the individual, institutional, and project levels - and how have they been evolving in your country?
2. How is research excellence operationalised and prioritised/incentivised in the research policies of your country? How is it supporting your countries' strategic goals and values?
3. What are the anticipated benefits and risks of encouraging excellence in your country and internationally?

**Theme 2: *How should excellence be assessed and achieved in the context of international research cooperation?***

1. What measures and approaches can best promote research excellence, while also considering the move towards the reform of research assessment?
2. Can the same criteria be applied across different regions and countries, and to what extent do criteria need to be responsive to national contexts?
3. How can different or similar evaluation and reward systems limit or enable international collaboration?

## **References:**

- [1] Robert Tijssen, R. and Kraemer-Mbula, E. Research excellence – Beyond the buzzword, University World News (2017). <https://www.universityworldnews.com/post.php?story=20170111062145636>
- [2] Towards a transformation of scientific research assessment in Latin America and the Caribbean - Diagnosis and Proposals for a Regional Initiative, CLACSO-FOLEC (2020). <https://www.clacso.org/wp-content/uploads/2020/05/FOLEC-DIAGNOSTICO-INGLES.pdf>
- [3] A new research assessment towards a socially relevant science in Latin America and the Caribbean - Declaration of Principles, CLACSO-FOLEC (2022). <https://www.clacso.org/en/a-new-research-assessment-towards-a-socially-relevant-science-in-latin-america-and-the-caribbean/>
- [4] UK Research Excellence Framework, REF. <https://www.ref.ac.uk/>
- [5] European Union Council Recommendation on a Pact for R&I in Europe (2021). <https://data.consilium.europa.eu/doc/document/ST-13701-2021-INIT/en/pdf>
- [6] Agreement on Reforming Research Assessment (2022). <https://coara.eu/agreement/the-agreement-full-text/>

## **Further reading:**

- Harris, W.C., Martin, B., Bonaccorsi, A. *et al.* Frontier Research: The European Challenge, High Level Expert Group Report. (2005). [https://erc.europa.eu/sites/default/files/publication/files/high-level\\_expert\\_group\\_report\\_full\\_report\\_2005\\_en.pdf](https://erc.europa.eu/sites/default/files/publication/files/high-level_expert_group_report_full_report_2005_en.pdf)
- Moore, S., Neylon, C., Paul Eve, M. *et al.* “Excellence R Us”: university research and the fetishisation of excellence. *Palgrave Commun* **3**, 16105 (2017). <https://doi.org/10.1057/palcomms.2016.105>
- Nature editorial. Science needs to redefine excellence. *Nature* **554**, 403-404 (2018). <https://doi.org/10.1038/d41586-018-02183-y>

**AGENDA**  
**WORKSHOP ON RESEARCH EXCELLENCE**  
**MULTILATERAL DIALOGUE ON PRINCIPLES AND VALUES IN INTERNATIONAL RESEARCH &**  
**INNOVATION COOPERATION**  
**1 JUNE 2023, 13:00-16:00 (CEST) VIA WEBEX**

13:00-13:10	<p><b>Opening and setting the context: The multilateral dialogue on values and principles in international R&amp;I cooperation</b></p> <ul style="list-style-type: none"> <li>• Maria Cristina Russo, Director, Global Approach &amp; International Cooperation in DG R&amp;I, European Commission</li> </ul>
13:10-13:20	<p><b>Introduction to the Workshop:</b></p> <ul style="list-style-type: none"> <li>• Roseann O'Reilly Runte, President and CEO of the Canada Foundation for Innovation</li> </ul>
13:20-14:10	<p><b>Breakout sessions on Theme 1: <i>How is research excellence understood and practised?</i></b></p>
14:10-14:25	<p><b>Plenary report by moderators of the break-out sessions on theme 1</b></p>
14:25-14:35	<p><b>Break</b></p>
14:35-15:25	<p><b>Breakout sessions on Theme 2: <i>How should excellence be assessed and achieved in the context of international research cooperation?</i></b></p>
15:25-15:40	<p><b>Plenary report by moderators of the break-out sessions on theme 2</b></p>
15:40-15:50	<p><b>Wrap-up</b></p> <ul style="list-style-type: none"> <li>• Jean-Emmanuel Faure, Team Leader, DG R&amp;I, Research Assessment, European Commission</li> </ul>
15:50-16:00	<p><b>Closing statement</b></p> <ul style="list-style-type: none"> <li>• Martin Penny, Head of Unit, DG R&amp;I/F1, International Cooperation Unit, European Commission</li> </ul>

# Summary Report

## Workshop on Research Excellence

The workshop on “research excellence” took place on 1 June 2023 and was the fifth of a series of workshops, supporting the European Commission’s Multilateral Dialogue (MLD) on Values and Principles in International R&I cooperation. The event was co-designed and co-organised by the European Commission together with Canada and Italy, Chile, the Guild of European Research Intensive Universities, the Young European Research Universities Network (YERUN), and the European Research Council Executive Agency (ERCEA). It attracted 119 participants from 35 countries and a range of European and international organisations including the Organisation for Economic Co-operation and Development (OECD) and the International Science Council.

This was the last workshop preceding a high-level meeting which will be the opportunity to discuss the implementation of the Dialogue to date and to agree on the future direction in view of further workshops in the autumn and a potential discussion at Ministerial level in 2024.

Research excellence can take different guises and is evaluated at different levels (e.g. at researcher, institution and research proposal levels). Not all research policies, programmes, and types of research organisations around the world understand the term in the same way.

The objective of the workshop was to learn from different experiences and approaches on the understanding of research excellence in different parts of the world; including how policy-makers in different contexts apply the concept of excellence to design and implement R&I policies. Indeed, the workshop intended to bring the values and principles of international cooperation into the discussion about research excellence and the definition of the concept itself along with its multidimensional aspects.

During the three-hour workshop, the delegates exchanged views over the following key aspects of research excellence:

1. The definition of research excellence and what it entails
2. The operationalisation of research excellence and the bidirectional influence of R&I policies
3. The perceived risks and benefits of encouraging research excellence and its assessment/evaluation
4. The influence of borders, national/regional contexts, and international cooperation in research excellence

The workshop started with an opening speech from Maria Cristina Russo from the European Commission to introduce the work done so far under the MLD, highlighting the values and principles of international cooperation in R&I and setting a good basis for participants to be incentivised to share their experiences. Roseann O’Reilly Runte from the Canada Foundation for Innovation introduced the context for the workshop, emphasising the importance and the urgency of discussing research excellence in a world of constant change (and of fake news in an informational era).

After an introduction of the workshop’s objectives, the above topics were discussed in two rounds of parallel breakout sessions, following the Chatham House Rule<sup>1</sup> to encourage open discussion. In order

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<sup>1</sup> [Chatham House Rule | Chatham House – International Affairs Think Tank](#) (25/04/2023)

to address the above points and foster discussion, these sessions were guided by the following common questions:

**Round no. 1 of breakout sessions: *How is research excellence understood and practised?***

4. What are the characteristics and values attached to research excellence – at the individual, institutional, and project levels - and how have they been evolving in your country?
5. How is research excellence operationalised and prioritised/incentivised in the research policies of your country? How is it supporting your countries' strategic goals and values?
6. What are the anticipated benefits and risks of encouraging excellence in your country and internationally?

**Round no. 2 of breakout sessions: *How should excellence be assessed and achieved in the context of international research cooperation?***

4. What measures and approaches can best promote research excellence, while also considering the move towards the reform of research assessment?
5. Can the same criteria be applied across different regions and countries, and to what extent do criteria need to be responsive to national contexts?
6. How can different or similar evaluation and reward systems limit or enable international collaboration?

The breakout sessions resulted in lively and interactive debates on the key elements of research excellence. Key takeaways can be highlighted from the overall session:

- The measurement of outputs and impacts as a means to assess research excellence is generally agreed by Member States of the European Union and the countries participating in the MLD such as Canada, USA, Australia, Mexico, Brazil, South Africa, New Zealand, Japan and China.
- There is a common agreement to consider different definitions of excellence: including from the perspective of the scientific community and as defined by policy. However, all have two common fundamental underlying aspects that are “quality” and “impact”.
- Regional and national differences, as well as language barriers have a great influence on how research excellence is perceived and evaluated.

It is important to emphasise that the discussion about research excellence raised new questions. A selection of the observations and general conclusions of the breakout sessions is presented below:

**There is no agreed definition of research excellence**

- Who defines what is excellence? What is the role of scientists, politicians, and industry/market representatives in specifying the definition? How is the definition affected by political priorities?
- Impact is a cornerstone in the definition toward addressing societal challenges and creating benefits to the society.
- Quality and high impact, high-risk/high-gain are considered in the definition, but this might be seen as exclusive rather than inclusive (e.g. practicality, basic/fundamental research – what about originality and expertise?)
- Definition of research excellence should be open and flexible.

- International cooperation, transdisciplinarity, open science, responsible science and innovation are seen as key enablers of excellence.
- Diversity and inclusion are increasingly important.
- There is a risk of establishing too narrow definitions: underappreciation of young researchers, under-representation of less well-established research institutions, brain drain inequity.

#### **The way research excellence is evaluated needs to be changed**

- The creation of an international framework and the definition of assessment criteria has not reached a consensus yet.
- Scientific progress and research excellence are frequently assessed through quantitative indicators, which are highly focused on scientific publications.
- Indicators of international cooperation should be considered.
- Qualitative peer-review is useful to assess the excellence in research, but the peer-review system needs to be adapted to make it as open and fair as possible.
- How to integrate the scientific competitiveness and capabilities of different countries in the evaluation framework is still to be understood.
- Several EU institutions and funding agencies use the evaluation criteria defined by the EC funding programmes, but there is no consensus.
- Reforming processes and evaluation systems require lots of cooperation and dialogues outside of Europe; these cannot be defined by the EU nor by North American standards only.

#### **Regional/national differences affect research excellence in the way it is conducted, perceived, and assessed**

- There is no standard for research excellence: it depends on the context of the country.
- To obtain concrete framework conditions of research excellence, one needs to build proper infrastructures in combination of funding, administrative support, and networks nationwide and internationally.
- An imbalance between countries will always exist, especially considering those countries with smaller research communities and less evidenced R&I ecosystems.
- Research takes place in a bordered world: national research priorities, national capacities, cultural differences, different disciplines have different needs.
- The role of international initiatives like DORA is important: it is essential to incentivise cooperation at the international level to converge values and principles that underly research excellence.
- There is a need to agree on common basic principles to foster global mobility and support excellence assessment through this lens.

# Final Report

## Workshop on Research Excellence

### Introduction

In July 2022, the European Commission (EC) initiated a Multilateral Dialogue (MLD) on Values and Principles for Research and Innovation (R&I) with the objective of fostering an open discussion of the principles and values that form the foundation of international collaboration in research and innovation. The fifth online workshop supporting the dialogue was focused on ‘research excellence’ and took place on 1 June 2023. It was co-organised and co-designed by the European Commission together with Canada and Italy, with Chile, The Guild of European Research-Intensive Universities, the Young European Research Universities Network (YERUN), and the European Research Council Executive Agency (ERCEA). Following this workshop, a high-level meeting to be held on 28 June 2023 will take stock of the work carried out so far and will discuss the next steps on this multilateral dialogue.

Research excellence can take different guises and is evaluated at different levels (e.g., at researcher, institutional and research proposal levels). Not all research policies, programmes, and types of research organisations around the world understand the term in the same way. The assessment of research quality and excellence has traditionally been associated with quantitative criteria concerning publications in journals. With support from initiatives like the San Francisco Declaration on Research Assessment (DORA)<sup>2</sup> and other interventions, however, there seems to be an increasing trend towards considering excellence as multidimensional and as integrating aspects going beyond scientific publications. By advocating for the evaluation of research based on its intrinsic merit rather than relying solely on journal impact factors, DORA and similar initiatives encourage a more comprehensive and fair assessment of research outputs. This trend was broadly reflected in the workshop discussing research excellence.

Through the sharing of current practices and embracing a multilateral approach, this workshop facilitated and encouraged the exchange of different experiences on the understanding of research excellence in different parts of the world. With the participation of 119 attendees from 35 countries (Annex 1), along with various European and international organisations, the workshop attracted significant interest and diverse perspectives.

### Agenda and welcoming remarks

During the three-hour workshop, the delegates exchanged views over the following key aspects of research excellence:

5. The characteristics of research excellence and what it entails;
6. The operationalisation of research excellence;
7. The perceived risks and benefits of encouraging research excellence and its assessment/evaluation;
8. The influence of national/regional contexts and policies, and the role of international cooperation in research excellence.

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<sup>2</sup> <https://sfдора.org/>

The workshop started with welcoming remarks from Maria Cristina Russo, Director, Global Approach & International Cooperation in DG R&I, European Commission. She introduced the MLD and the previous workshops, highlighting the values and principles of international cooperation in R&I and setting the scene for participants to be incentivised to share their experiences. She emphasised that the MLD initiative has successfully brought together many countries across the world that expressed strong interest in participating in discussions on values and principles. Ms Russo identified two main questions: What do these values and principles mean for us? How can we do better to integrate these principles in our work?

Martin Penny, Head of Unit, Directorate for Global Approach & International Cooperation in DG R&I, European Commission, then gathered initial perspectives of the participants on the topic via Mentimeter (Annex 2).

Roseann O'Reilly Runte, President, and CEO of the Canada Foundation for Innovation, set the context for the workshop. She stressed that excellence in research measured in outputs and impacts is a cornerstone around the world; that every investment made, e.g., for facilities, has an impact that extends beyond their time and the facilities itself; and that research excellence contributes to society. Various questions were raised to guide the debate: What do we mean by research excellence? Does it depend on the research question? Does it depend on the research methodology? Is there one definition of excellence? Should assessment be standardised? Roseann O'Reilly Runte reiterated the importance of considering equity, diversity, and inclusion in research excellence, emphasising the relevance and the urgency of discussing research excellence in a world of constant change.

### **Parallel breakout sessions**

The topics were then discussed in parallel breakout sessions, following the Chatham House Rule<sup>3</sup> to encourage open discussion. The breakout sessions were characterised by lively and interactive debates on the key elements of research excellence. All delegates attended two rounds of breakout sessions, with sometimes discussions overlapping the two distinct topics foreseen for the two rounds of breakout sessions.

#### **1. Round of breakout sessions: How is research excellence understood and practised?**

**The following questions guided the debate:**

7. What are the characteristics and values attached to research excellence – at the individual, institutional, and project levels - and how have they been evolving in your country?
8. How is research excellence operationalised and prioritised/incentivised in the research policies of your country? How is it supporting your countries' strategic goals and values?
9. What are the anticipated benefits and risks of encouraging excellence in your country and internationally?

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<sup>3</sup> [Chatham House Rule | Chatham House – International Affairs Think Tank](#) (25/04/2023)

## **Main outcomes:**

### **The characteristics of research excellence**

The complexity of defining research excellence was a first topic of discussion, considering the different perspectives and considerations coming into play, notably various disciplines, different individual/institutional levels, missions, countries, contexts, and evolution over time.

During the discussions, participants noted that there is a need to differentiate between definitions established by the scientific community through peer review (definition “internal” to the scientific community) and those driven by policies, priorities, and initiatives, the latter potentially influencing the community driven ones. The importance of scientists defining excellent science, of high-quality peer review panels and of thorough evaluation of applications by researchers was emphasised by several countries. Some conservatism in peer review was however also mentioned as potentially limiting highly innovative research.

The diversity of perspectives across institutions was mentioned. It was evident from the parallel sessions that geographical and cultural differences strongly influence the views of excellence and the definition of research excellence. Small countries with a reduced research ecosystem also mentioned the challenges in competing and cooperating internationally, especially with larger programmes and institutions, which may be reflected in the definition of research excellence. Also, the definition of research excellence was shown to vary across sectors, although quality aspects remain closely associated. Concerns were raised about the different interpretations of research excellence among various stakeholders, however all caution against over-reliance on journal impact factor as the sole or main measure.

Additionally, the participants discussed the role of government funding agencies in aligning research with national priorities, and the link between political priorities and research excellence. The OECD raised questions about competitive research funding and the complexity of defining research excellence. They discussed the dependence of research excellence on specific aims and funding considerations and highlighted the dichotomy in research excellence between innovative basic research and applied research.

Despite a diversity of perspectives, research excellence was recognised as a multidimensional concept, encompassing characteristics such as high quality, diversity of impacts on society, and adherence to values such as openness, rigour, integrity, ethics, diversity, and inclusiveness. The discussion identified risks associated with narrow definitions such as overlooking young researchers or inhibiting creative and innovative approaches. A wider definition of research excellence may however pose some challenges as well, including expecting more from researchers, and potentially losing track of the best science.

Overall, the discussion emphasised that there is no globally agreed definition of research excellence, rather it relates to a multifaceted concept, and efforts in providing a unique definition may in fact have a narrowing effect rather than increasing diversity and inclusiveness.

### **Benefits, risks and implementation across countries**

Participants highlighted some anticipated benefits of encouraging research excellence: fostering innovation, achieving sustainable outcomes, building research capacity, addressing global challenges and promoting international collaboration. Risks were also identified: over-focusing on selected

individuals and organisations and contributing to brain drain from regions with lower research capacities.

Encouraging excellence nationally and internationally were seen as interconnected concepts, with the pursuit of excellence within a country supporting local innovation and collaboration with other countries to address global problems. Participants therefore also highlighted the importance of establishing a shared understanding and language across borders when it comes to evaluating and assessing research excellence, to ensure consistency, adhere to international standards, and promote global collaboration.

Discussions revolved around various approaches and perspectives on evaluating research excellence. It was noted that evaluation currently shifts from quantitative to qualitative judgment, with also more emphasis on both quality and impact of research. Some participants supported a bottom-up approach for fundamental research with qualitative peer review. Participants also shared their experiences of transitioning from traditional approaches relying solely on quantitative evaluation criteria, to incorporating factors that go beyond mere publications, such as the practice of open science, collaboration with business and society, societal impacts, equality and diversity, scientific integrity and multi-disciplinarity. This was raised by both EU and non-EU countries showing a global trend in this shift. The need for a change in mindset among researchers accustomed to quantitative assessment was also raised. As an example, a survey to Chinese researchers indicated that high impact journals and innovation were key criteria for assessing research excellence. Indeed, participants from China discussed their traditional emphasis on quantitative criteria, such as the number and quality of publications, but expressed efforts to promote global collaboration and adherence to international standards.

The values, norms and guidelines driving research excellence were highlighted, with a focus on incorporating both quantitative and qualitative methods and adopting interdisciplinary approaches. Efforts to promote global collaboration and adhere to international standards, despite traditional reliance on quantitative criteria, such as publication quantity and quality, have been highlighted.

Additionally, the challenges associated with evaluating research proposals were acknowledged, and the importance of providing proper training to researchers in proposal writing was emphasised – with the aim to ensure that researchers can effectively convey their research ideas and contributions. Participants emphasised the significance of funding programmes that support research excellence but highlighted the need for careful consideration of criteria for inclusion in such programmes. Concerns were raised regarding the potential limitations of relying solely on track records for funding decisions. Participants stressed the importance of recognising and rewarding new research contributions, rather than relying solely on past achievements.

Throughout the discussions, the importance of quality and impact in evaluations, the need to consider societal impacts and the need to contextualise research excellence within the broader societal framework were emphasised.

The interconnectedness of education, innovation, and research systems, with an emphasis on collaboration with businesses and society was mentioned as a major aspect, reinforcing the need to go beyond (traditional) quantitative indicators. As an example, the alignment of the research funding strategy with the country's strategy was referred to be the case in Finland, transpiring the transversal aspects of science and the relevance of knowledge transfer and valorisation. Some non-EU countries shared their strategies for enhancing research capabilities. They emphasized providing facilities,

funding (including dual support systems such as in the UK), administrative support, and establishing central laboratories. These efforts aim to support excellent scientists working on national priority domains and promote collaboration and networking at a nationwide level.

In line with this, the fundamental role of peer review in research evaluation was emphasised and the significance of coordination and communication between funding agencies stressed. The importance of ensuring equity, diversity, and inclusion in research proposals was also highlighted. The idea of having trained individuals within institutions who can specifically address these aspects and incorporate them into research proposals was raised. This approach aims to foster a more inclusive and representative research landscape. The challenge of expecting reviewers and researchers to fully understand the country's strategy and priorities was also acknowledged.

Finally, some concerns were raised about the role of Artificial Intelligence and the potential for automated systems to produce high-quality research, posing a challenge in particular to the research performers, research funders and the publishing industry, for instance.

**Main takeaways as summarised by the moderators:**

- The development of an excellence system, including infrastructure and networks, is seen as beneficial.
- There is a need to acknowledge the diversity of research excellence definitions and understand how research is conducted in different contexts.
- Interoperability is needed at some level to facilitate collaboration. Global interoperability is important for avoiding wide differences and ensuring cooperation and mobility of researchers.
- In the absence of international collaboration, a sole or main focus on research excellence may however lead to brain drain.
- Research excellence may be viewed as a bottom-up or top-down exercise.
- Small countries face challenges in achieving international peer review evaluation and meeting metrics, with potential discrimination against non-English speakers.
- Discussions on research excellence are intertwined with funding, academic and career considerations. Excellence is context-dependent, making the discussion complex.
- Evaluation of science as a global common good was emphasised by several countries.
- Many countries are engaged in a national debate on reforming excellence and assessment criteria.
- The discussion is shifting from qualitative to quantitative aspects.
- Diversity of contributions and inclusion are increasingly important.
- International cooperation, multi- and trans-disciplinarity, open science, responsible science and innovation are seen as integral enablers of research excellence.
- The risk of narrow definitions of excellence includes overlooking young researchers, inhibiting creativity and innovation, and causing inequity.

## **2. Round of breakout sessions: How should excellence be assessed and achieved in the context of international research cooperation?**

The following questions guided the discussions:

7. What measures and approaches can best promote research excellence, while also considering the move towards the reform of research assessment?
8. Can the same criteria be applied across different regions and countries, and to what extent do criteria need to be responsive to national contexts?
9. How can different or similar evaluation and reward systems limit or enable international collaboration?

### **Main outcomes:**

#### **Operationalisation of research excellence assessment**

The discussions built on those under round 1 but were marked by a more operational character.

Participants pointed to efforts made to reduce reliance on journal impact factors and promote descriptive backgrounds in applications for funding, aiming for a more balanced evaluation process. The need to address biases and adopt a comprehensive approach that considers both potential impact and excellence was highlighted. The value of global collaboration to foster alignment and reduce biases related to gender and institution was emphasised.

The use of narrative CVs, anonymisation and recognition of cooperation were discussed as ways to improve the evaluation process. The use of narrative CVs in an international context gained support, with an emphasis on contextualising excellence beyond metrics. Portugal and Ireland shared positive experiences with narrative CVs and the inclusion of anonymity in proposal evaluations. Nonetheless, language barriers and the development of separate domestic and international CV systems were noted as challenges, prompting discussions about the need for a future assessment system that combines various approaches.

The importance of promoting risk taking and allowing for failure as part of excellent research and celebrating these paths towards success was stressed. It was noted that current evaluation systems focus too much on safe research and thus the importance of allowing for failure as part of excellent research was discussed, with contributions of EU and non-EU countries.

Evaluating research bodies rather than individual researchers, employing qualitative evaluation methods, and considering specific objectives of different research bodies were discussed as alternative approaches by participants.

Standardisation in research excellence evaluation was highlighted as important for facilitating international collaboration and addressing priority issues. Concerns were raised about systemic inequities, emphasising the need to address inclusivity, collaboration, and interdisciplinary aspects in research evaluation. Challenges related to evaluating international cooperation proposals due to variations in terms and criteria for research excellence at the national level were also mentioned.

It was mentioned that the use of terms and criteria are different at the national level (for example in Canada), which translates into increased difficulties when evaluating international cooperation proposals without a common agreement on definitions, characteristics, and methodologies, making the process even more complex. On the other hand, the Swedish Research Council's approach is driven

by researchers, and different ways of evaluating quality are being explored, including considering factors beyond publications.

Various countries shared their approaches to selecting laboratories based on excellence, considering factors such as publications, patents, and societal impact. As an example, in the last years, 33 laboratories have been distinguished for their excellence in Algeria. The country highlighted that selection was based on the publications and on the profile of the scientists who took part in the laboratories and who managed to translate the economic issues into the research programme, i.e., they provided deliverables that outline specific solutions to improve society.

Efforts to promote knowledge exchange beyond conventional institutions and countries, promoting diversity in collaborations, were highlighted. Emphasis was placed on the role of journals as platforms for publishing excellent research results and efforts to promote international cooperation. In this respect, China outlined an action been launched by seven Chinese Ministries in 2019 to encourage international participation in publications, incentivise journals to foster a global readership, authorship and include international peer reviewers in their boards.

The OECD discussed the universal aspects of rigour, integrity, and openness in research and proposed using these measures to develop a common global definition of excellence. They mentioned their benchmarking of country performances based on high-impact publications, highly cited documents, and articles in high-impact journals. While acknowledging the limitations of this approach, they emphasised the importance of countries' buy-in and avoiding a top-down imposition of standards.

Overall, insights into evaluation criteria and considerations for research excellence were provided by different participants, including impact, quality of implementation, multidimensional evaluations, wider portfolio assessments and context-specific evaluations.

Within the reform of research assessment, it was emphasised that communication and resource allocation were crucial. Allocating additional resources, making research data widely available and involving decision-makers in the process were seen as important steps. The level of assessment and the inclusion of young scientists were also discussed, along with challenges related to transdisciplinary and interdisciplinary research and their connection to international cooperation.

Overall, the discussions focused on improving research excellence evaluation through a balanced and inclusive approach, addressing biases, promoting collaboration, and considering diverse perspectives and contexts.

### **Role of international cooperation and diversity in research excellence**

The discussions brought to light various perspectives on research excellence and international cooperation. First of all, seamless alignment of assessments and criteria was emphasised as crucial for facilitating international collaboration. The importance of having consistent criteria across regions and countries was emphasised to enable collaboration. In turn, the value of global collaboration for fostering alignment of assessment methodologies and reducing biases related to gender and institution was emphasised. Global mobility was seen as hindered by variance in excellence assessments.

The role of existing international collaborations has been acknowledged by different countries, reinforcing the value of cooperative efforts and the influence of diversity in contributing to scientific advances worldwide. Germany stressed a notable shift in international cooperation and the ongoing process of negotiating framework conditions and understanding of excellence. Participants emphasised

the importance of changing how research was assessed but also acknowledged the challenges in combining national research culture with global competitiveness. The discussion highlighted the need for shared fundamental values and global standards to facilitate collaboration and cooperation. Multinational initiatives such as DORA (Declaration on Research Assessment) or CoARA (Coalition for Advanced Research and Assessment) were recognised as valuable spaces for exchanging views, visions and implementation processes. Collaboration at the international level was emphasised to enhance values and principles underlying research excellence, learn from each other and progress in assessment practices.

Concerns were raised about global imbalances, and the participants stressed the need to define excellence from a broader perspective, rather than considering specific geographical regions. Indeed, the discussions recognised that research excellence is not limited to Europe or North America and called for nuanced discussions on European values. Cooperation, dialogue, and collaboration beyond Europe were seen as crucial, with recognition that innovative processes can exist outside Europe.

During the discussions, an important point was raised regarding the need to encourage diverse contributions and impacts in research. It was emphasised that funders and policy instruments play a significant role in promoting research excellence by being open to diversity. To foster diverse contributions, it is crucial for funders to support a wide range of research topics, methodologies, and approaches. By embracing diversity, funders can create an environment where researchers are encouraged to explore innovative and unconventional ideas that may lead to breakthrough discoveries and transformative impacts. This approach acknowledges that research excellence extends beyond traditional measures and encompasses a variety of disciplines and perspectives.

Furthermore, funders need to be open to diverse funding mechanisms and policy instruments. This includes considering different grant schemes, funding models, and evaluation criteria that can accommodate the unique needs and characteristics of various research communities. By adopting a flexible and inclusive approach, funders can ensure that researchers from different backgrounds and regions have equal opportunities to access resources and contribute to research excellence.

Additionally, policy instruments play a crucial role in shaping the research landscape. Policies should aim to create an inclusive and supportive environment that encourages collaboration, interdisciplinary research, and the integration of diverse perspectives. This can be achieved by promoting initiatives such as joint research projects, international collaborations, and funding programmes specifically designed to support underrepresented groups or research areas.

By being open to diversity, funders and policy instruments can nurture a vibrant research ecosystem that values and celebrates the contributions of researchers from diverse backgrounds. This approach not only enhances research excellence but also addresses the potential biases and inequalities that can arise from a narrow focus on a few dominant research areas or groups. Embracing diversity in funding and policy instruments allows for a broader representation of ideas, expertise, and experiences, ultimately leading to a more comprehensive understanding of complex societal challenges and the development of impactful solutions.

The concept of Open Science (OS) was raised as an argument for promoting excellence in international cooperation, although challenges related to data access and publishing models were acknowledged. The question of whether OS should be developed and made accessible worldwide led to further debate. While the benefits of OS were acknowledged, concerns were raised about dual use and

knowledge security. It was suggested that OS should be as open as possible but as closed as necessary to address geopolitical challenges and prevent misuse.

Overall, the discussions highlighted the importance of defining excellence, ensuring consistency across regions and countries, embracing global standards, fostering collaboration, and addressing challenges related to OS and knowledge security.

#### **Main takeaways as summarised by the moderators:**

- International collaboration plays a significant role in bringing and spreading excellence, thereby increasing research quality.
- Diversification of research is crucial for enhancing excellence.
- Regional dimensions and language barriers influence research excellence assessment.
- A common assessment framework is desirable for promoting research excellence and international cooperation.
- Assessing research excellence requires qualitative assessment, peer involvement, contextual considerations, and a focus on diverse aspects beyond research outputs.
- Open Science and open access are a mean to overcome imbalances in research capacities across countries in the World.
- Multinational initiatives like DORA and CoARA facilitate the exchange of views, visions, and implementations.
- International collaboration and sharing experiences enable convergence, enhancement of values and principles, and progress in assessment practices.

#### **Wrap-up**

Jean-Emmanuel Faure, Team Leader, DG R&I, Research Assessment, European Commission shared his view on the main conclusions of the breakout sessions, highlighting the following:

- The discussions surrounding research excellence have been of utmost importance, considering their implications for funding and careers in the field. However, these discussions have also illustrated the numerous challenges associated with research excellence, often leaving us with more questions than answers.
- One of the primary difficulties lies in defining research excellence itself. It encompasses a multidimensional nature that is influenced by factors such as the discipline, individual or institutional level, mission of the entity being assessed, as well as the context and time involved. Contributions to the discussions have underscored diverse characteristics and considerations associated with research excellence.
- Among these considerations is the emphasis on high quality research, which necessitates appropriate assessment methods that themselves require a clear definition of quality. Additionally, there is a growing shift towards seeking out important questions that lead to a diversity of impacts, particularly on society. The research process itself and the values attached to it, such as openness, rigour, integrity, ethics, diversity, and inclusiveness, are also seen as contributing to excellence.
- The wide definition of research excellence poses challenges as it places greater demands on researchers and risks losing sight of the best science. However, narrow definitions and limited

measures bring many other challenges. They fail to fully appreciate the contributions of young researchers and can neglect creative and innovative approaches. Over-focusing on a few individuals and research organisations raises questions about how to support the majority of researchers. Considering excellence at a cluster level might be a more inclusive approach, preventing inequity and brain drain from regions with lower research capacities.

- Promoting and assessing research excellence presents its own set of challenges. There is a movement towards more qualitative assessment methods but conducting assessments by peers can be time-consuming and prone to biases. Assessment processes need to consider the context, culture, and language in which research is conducted. It is important to go beyond focusing solely on research outputs and consider diverse aspects such as competences, career progression, and mobility. The influence of open science and open access on research necessitates assessment methods that reflect the fact that publications are not exclusively confined to journals with high impact factors.
- Multinational initiatives like DORA or CoARA provide valuable spaces for exchanging views, visions, and implementation strategies. Collaboration at the international level is essential in order to converge on and enhance our values and principles in research and innovation, which are fundamental to research excellence. Through such collaboration, we can learn from one another and make progress in our assessment practices.

### **Closing statement**

Martin Penny closed the workshop. All participants, moderators and note-takers were thanked for the excellent workshop.

The outcomes of the workshop on research excellence will be presented at the second high-level meeting of the Multilateral Dialogue on Values and Principles in International R&I Cooperation on 28 June 2023 in Brussels.

Three workshops of the MLD are in the planning for the second half of 2023, dealing with 1) knowledge valorisation 2) cooperation with low- and middle-income countries and 3) knowledge security and risk management; and countries are invited to express their interest to be part of the committees to co-organise these workshops.

## **ANNEX 1**

### **LIST OF PARTICIPATING COUNTRIES AND STAKEHOLDER ORGANISATIONS**

Algeria	Switzerland
Australia	United Kingdom
Austria	Ukraine
Belgium	United States of America
Brazil	
Canada	
China	ALLEA
Czech Republic	EU Life
Denmark	European Molecular Biology Laboratory
Egypt	Euroscience
Estonia	International Science Council
Finland	OECD
France	Science Europe
Germany	The Guild of European Research-Intensive Universities
Greece	
Hungary	Yerun
Ireland	
Italy	European Commission
Japan	European Research Council Executive Agency
Latvia	
Lithuania	
Luxembourg	
Malta	
Mexico	
Netherlands	
Norway	
Portugal	
Slovenia	
South Africa	
Spain	
Sweden	

