CESAER

The strong and united voice of universities of science and technology in Europe

Best practices, lessons learned and recommendations for implementing CoARA commitments

CoARA workshop report

18 December 2025

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Contributors and acknowledgements

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- Christin Teskey (TU Braunschweig)
- Alessandra Cerato (Politecnico di Torino)
- Grace Murkett and Devon McHugh (University of Strathclyde)

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Editorial responsibility and approval

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Rooted in advanced engineering education and research, <u>CESAER</u> is an international association of leading specialised and comprehensive universities with a strong science and technology profile that advocate, learn from each other and inspire debates. Our <u>Members</u> champion excellence in higher education, training, research and innovation, contribute to knowledge societies for a sustainable future and deliver significant scientific, economic, social and societal impact.



Executive summary

This workshop report synthesises insights from the CESAER workshop on implementing the Coalition for Advancing Research Assessment (CoARA) commitments, organised in May 2025 by Task Force Human Resources. The workshop brought together representatives from universities of science and technology across Europe to exchange experiences, identify challenges, and share best practices in reforming research assessment strategies.

Four case studies – Aalto University, TU Braunschweig, Politecnico di Torino, and the University of Strathclyde – illustrate that while each institution's path to reform research assessment is unique, successful reform depends on several common factors. These include strong leadership commitment, the integration of CoARA principles into existing institutional strategies, the establishment of inclusive and interdisciplinary working groups, and the adoption of an iterative, pilot-based approach to implement the commitments.

Participants emphasised that responsible research assessment requires cultural change, as well as procedural change. It involves shifting away from over-reliance on traditional metrics toward more qualitative, transparent, and inclusive evaluations that recognise the diversity of research contributions and career paths. Engagement with the research community, clear communication, and alignment with national and European frameworks were identified as crucial enablers of sustainable reforms and successful integration of CoARA commitments.

At the policy level, universities called for greater coherence between CoARA principles and national funding and evaluation systems, as well as targeted support for developing interoperable digital infrastructures that enable transparent, qualitative assessment.

Overall, the workshop confirmed that the CoARA framework provides a credible and flexible basis for modernising research assessment. By sharing lessons and collaborating across borders, universities of science and technology can collectively accelerate progress towards a fairer, more inclusive, and higher-quality European research ecosystem.

Recommendations, best practices and lessons learned

For universities

Based on the workshop, we outline lessons learned and best practices for universities in implementing CoARA commitments:

- Secure leadership buy-in to provide authority, resources, and visibility for research assessment reform.
- Integrate CoARA principles into institutional frameworks, including strategic plans, quality assurance, and promotion criteria.
- Establish interdisciplinary working groups with academics, research support staff, and administrators to coordinate reforms and gather feedback.
- Pilot new assessment approaches in selected areas before scaling, to test feasibility and build momentum.
- Prioritise reforms based on institutional needs, focusing first on high-impact areas.
- Engage the research community continuously through consultations, workshops, and co-creation to ensure inclusivity and relevance.
- Promote transparency by clearly communicating assessment criteria, processes, and guidance to all staff.
- Provide training and resources to increase literacy in responsible, qualitative research assessment.
- Align recognition and reward systems with CoARA-aligned practices to reinforce desired behaviours.
- Monitor, review, and collaborate with national and international networks to embed cultural change and share best practices.
- Define research quality in ways that align with your university's mission. For science and technology universities, this may include applied research, industry engagement, knowledge exchange, and open research practices.
- Advocate for more inclusive research assessments that responsibly assess the full range of research outputs, including the research produced by S&T universities.

For EU institutions and national policy makers

Recommendations for EU and national levels to help advance CoARA implementation:

- Modernise research assessment by strengthening independent peer review processes to evaluate the quality of research jobs alongside research outcomes, expanding the founding principles launched by COARA and DORA and progressively adopted in Europe, as elaborated in our <u>2024 research career</u> report.
- Provide targeted funding and shared infrastructure. Ensure sufficient EU and national funding to scale interoperable systems and community-governed digital tools that allow universities to track and recognise diverse research outputs.
- Promote broad and inclusive notions of research quality at EU and national levels to ensure assessment practices recognise diverse types of research, support a variety of organisations in the research ecosystem, and enable researchers to move more easily between different types of institutions.

- Align national frameworks and incentives. Harmonise national assessment frameworks and funding mechanisms with CoARA principles to remove conflicting incentives. Provide guidance for reforming performance-based funding models (e.g., LOM-type models) to prioritise quality, diversity, and broader contributions over traditional metrics such as H-index or publication counts.
- ► Facilitate evidence-based guidance and knowledge exchange. Encourage structured sharing of lessons learned, best-practice examples, and pilot outcomes across countries. Support the adaptation of alternative, qualitative assessment methods to local and disciplinary contexts, filling gaps where CoARA guidance is less prescriptive.
- ► Enhance transparency, monitoring, and accountability. Promote expanded monitoring, evaluation, and reporting on institutional implementation, lessons learned, and outcomes. Strengthen alignment with CoARA principles by ensuring these processes are transparent, iterative, and visible to stakeholders.
- Foster long-term political and structural commitment. Secure sustained support at EU and national levels to reform incentive structures and embed responsible assessment as a continuous practice. Support the development and adoption of open, interoperable digital infrastructures (including persistent identifiers and metadata frameworks) to enable transparent tracking and recognition of research contributions across institutions and borders.

Introduction

In <u>spring 2022</u>, our association was invited to be part of the shaping the development of an <u>agreement on reforming research assessment</u>. The efforts of the core group concluded in July 2022, and the agreement was formally opened for signature during a launch ceremony in September 2022.

In December 2022, a Coalition for Advancing Research Assessment (<u>CoARA</u>) was launched which was intended to support the signatories in their implementation of the agreement. While the <u>agreement</u> does not have any legally binding effect, it represents a public commitment to contribute actively and constructively to reforming research assessment.

While CoARA takes a primarily hands-on and implementation-focused approach on implementing the <u>ten</u> <u>commitments of CoARA</u>, in parallel there are ongoing discussions at the strategic and policy levels related to the advancement of <u>research careers</u> in general, and research assessment in particular. Supporting modern research careers is high on our association's agenda, and our association has previously signed <u>DORA</u> and <u>strongly supports</u> its advancement.

Despite efforts to implement CoARA and DORA-based recognition and reward systems, challenges remain, <u>particularly for early-career researchers</u>, as these systems require refinement for clarity and alignment with researchers' career stages, along with improved communication and robust feedback mechanisms to ensure active participation in career development.

We highlighted this issue also in our <u>research careers report</u> in December 2024. The report included concrete policy recommendations for the necessary next steps, to advance research careers and research assessment in Europe. The research career report also emphasised that modernising research assessment and empowering early-career researchers is crucial, recommending for the quality of research roles to be evaluated alongside research outcomes through independent peer review.

Although the CoARA vision for reforming research assessment is reflected in key political documents such as the <u>European Charter for Researchers</u>, a <u>European framework for research careers</u>, and a December 2023 <u>Council recommendation</u>, practical aspects, and the progress of implementing the reforms for assessing researchers and research-performing organisations remain uneven. Since there are still uncertainties and ambiguities surrounding the specific steps and methodologies needed to effectively execute these reforms, the workshop by Task Force Human Resources took stock of progress made in implementing CoARA across our membership by answering three key questions:

- (i) How can you get started in implementing CoARA commitments?
- (ii) What are key challenges in implementing CoARA reforms?
- (iii) What additional support do science and technology (S&T) universities need in further implementing CoARA commitments?

Case study 1 - Aalto University



Photo: Aalto University / Roee Cohen

Introduction to Aalto University

Anna-Kaisa Hyrkkänen (Information specialist at Leadership support services of Aalto University) and Virpi Liinalaakso (Senior Advisor at Human Resources Services at Aalto University), presented the CoARA implementation approach of Aalto University.

Aalto University is a relatively young university and was established in 2010 with the merger of three Finnish former universities, Helsinki University of Technology, University of Art and Design Helsinki, and the Helsinki School of Economics. Aalto is a multidisciplinary university, with six separate schools. This includes the School of Art, Design and Architecture, School of Business, School of Chemical Engineering, School of Electrical Engineering, the School of Engineering and the School of Science, and which all have specific needs when it comes to the evaluation of research outcomes.

Aalto is one of the largest universities is in Finland, with 13900 full-time equivalent degree students, nearly 5000 staff members and over 400 professors working at Aalto. With 80% of tenure track applications coming from outside Finland, Aalto is an international university.

A culture of working together and sharing knowledge in Finland

In Finland, progress of implementing CoARA commitments is advanced and strengthened by an active national collaboration on CoARA, aided by a culture of knowledge sharing and open collaboration. This takes both formal and informal forms.

Finnish institutions actively participate in CoARA commitments through a range of activities. Together, they have published 27 action plans, and Finnish organisations are involved in 10 of the 13 thematic CoARA working groups, underlining their commitment to reform research assessment.

At the national level, collaboration on CoARA is informed by a <u>Finnish national recommendation the</u> <u>responsible evaluation of a researcher</u>, which stems from 2020. The recommendation was accepted in 2020 by a working group set up by the Federation of Finnish Learned Societies (TSV) in October 2018.

Furthermore, a <u>steering group</u> for Responsible Researcher Assessment assesses the need to update the national recommendation and monitors and promotes the implementation of the action plan. This steering group has also appointed a working group which has made a draft version of the <u>FIN-CAM</u> (Finnish Career Assessment Matrix) assessment tool, designed for the diverse assessment of individual researchers.

Finland also has a <u>CoARA National Chapter [Finland]</u>, which had 43 members as of May 2025. It consists both of Finnish CoARA members and members who have not signed the agreement. Working with those who have not signed the agreement has been a valuable experience for all involved in the chapter. The main objectives of the national chapter are to raise awareness and discussion through monthly meetings, to engage all types of stakeholders, to discover most responsible assessment approaches, and to facilitate effective and timely implementation of CoARA in Finland.

The Finnish culture of working together is also facilitated through informal national networks. This includes a Network for Responsible Researcher Assessment Support and Services, which is an informal coordination group of practitioners in universities and research organisations, exchanging experiences and aligning practices around responsible assessment.

Moreover, <u>Finn-ARMA</u> – the Finnish Association of Research Managers and Advisors - is a Finnish association of research managers, advisors and administrators from higher education institutions and research institutes in Finland. The network has roughly 20 thematic working groups (including one on research evaluation), to exchange information and promote cooperation.

Lastly, one of the thematic working groups of Finn-ARMA, the Network for Publication metrics, has published a <u>Finnish national guide to publication metrics</u>. This guide is intended for people who, in their work or other activities, need information on the analysis of publications and the tools used for this purpose. The responsible use of publication metrics plays a central role in the content of the guide.

Finland's experience in implementing research assessment shows that combining formal and informal cooperation, both at national-level and institutional level, combined with a culture of openness and knowledge sharing, can significantly accelerate and contribute to the country-wide implementation of CoARA commitments over time.

Aalto's journey towards responsible assessment

Aalto University's journey towards responsible assessment has been a long-term process of reform, evolving over several years in parallel with the development of national and international recommendations. Aalto University has had the European Commission's HR Excellence in Research award (HRS4R) since 2012.

The university's principles for assessing research and researchers are grounded in a series of both national and international commitments, most notably the <u>San Francisco Declaration on Research Assessment</u> (DORA, 2013), <u>the Leiden Manifesto</u> (2015), and the Agreement on Reforming Research Assessment (ARRA) and <u>Coalition for Advancing Research Assessment</u> (CoARA, 2022).

Aalto University joined CoARA in 2022 and published its Action Plan in 2024, with full implementation planned by 2027. Responsible assessment is embedded into existing procedures, with updates to researcher guidelines and career policies. The development of new guidelines follows a co-creation approach, involving wide consultation across the university community and collaboration between human resources services, researchers, and university leadership, to ensure shared ownership and alignment with institutional priorities.

A key challenge for Aalto is that only a small number of staff are actively engaged in CoARA, and only on a part-time basis. This, however, is mitigated by strong national cooperation and support, which greatly assists in identifying ways to improve research assessment practices and in fostering a shared national understanding of the vision and implementation outlined in the CoARA agreement.

How is responsible researcher assessment implemented at Aalto University?

At Aalto University, responsible researcher assessment is implemented through a holistic and qualitative approach, with evaluations based on expert peer review and the overall quality and impact of work. While publication metrics may be considered, they serve only to support qualitative evaluation. Researchers present their key achievements in narrative portfolios covering research, artistic work, and teaching, supported by fact-based evidence.

The university also encourages diverse career paths, valuing a broad range of outputs, practices, and contributions, and provides clear guidance to internal evaluation committees and external reviewers to ensure consistent application of these principles. Transparency and fairness are central, with publicly available assessment criteria and processes emphasising integrity, impartiality, and the promotion of diversity and non-discrimination.

Evaluations are grounded in reliable data and applicant narratives, and institutional commitment is reflected in updated university-wide guidelines and codes of practice (including templates) in 2023, with all six Aalto schools aligning their practices accordingly.

How to get started in implementing CoARA – recommendations and best practices for universities

- Build awareness and shared understanding Organise internal discussions, workshops, or information sessions on responsible research assessment and CoARA principles.
- Map your current practices Identify areas where traditional assessment dominates and where responsible practices are already in place.
- Start with pilots Test new approaches (e.g., narrative CVs, broader merit criteria) in selected processes or fields.
- Engage your community Involve researchers, evaluators, and leadership early to ensure buy-in and relevance.
- Update policies and templates step by step Gradually align institutional guidelines, criteria, and documentation tools with CoARA principles.
- Learn from others Connect with peer institutions, share experiences, and adapt successful models to your own context.

Key challenges in implementing the reform

- Cultural change takes time. Despite strong institutional commitment, active communication, and updated guidelines, adoption of new practices is slow. Established habits and expectations are deeply rooted.
- Finding a balance between quantitative and qualitative methods. In engineering and technology disciplines, traditional dependence on publication metrics remains strong, and changing mindsets requires ongoing dialogue and examples of good practice.
- Ensuring consistent implementation. Building shared understanding among faculty members, evaluators, and leadership takes sustained effort, especially when academic norms vary widely across fields.
- Involving researchers in the movement of change. Is there sufficient communication with the researchers themselves, and are their views heard? Discussions often take place between the organisation's management, administrative staff, and human resources services.
- Will the rest of the world change with us? It is important to develop assessment practices in close cooperation with national and international partners. When uniform practices are followed nationally and internationally, researchers are evaluated with the same criteria regardless of their location.

Case study 2 - TU Braunschweig



Photo: Kristina Rottig / TU Braunschweig

Introduction to TU Braunschweig

Christin Teskey (Support of national collaborative research applications at *Technische Universität Braunschweig*) presented the COARA implementation approach of TU Braunschweig.

TU Braunschweig, founded in 1745, is Germany's oldest institute of technology. Today the institution comprises roughly 16 000 students and 3 800 staff members and is a member of the TU9 alliance of Germany's leading universities of technology. Its strong profile in science and engineering is complemented by substantial capacities in economics, social sciences, humanities and educational sciences, providing a broad interdisciplinary foundation for excellent research. The university is embedded in one of Europe's most research-intensive regions. A central tenet of the university's research agenda is the cultivation of a responsible research culture. TU Braunschweig's large, multidisciplinary community, robust data sharing networks, specialised infrastructure (high-performance computing clusters, labs, industry testbeds), and commitment to interdisciplinary, socially responsible research together create a supportive environment for rigorous, socially relevant science.

In November 2022, TU Braunschweig became a signatory of the Agreement on Reforming Research Assessment (ARRA) and joined the Coalition for Advancing Research Assessment (CoARA). As part of this commitment, the university has pledged to share progress in reviewing and developing criteria, tools, and processes aligned with CoARA's principles. Since then, TU Braunschweig has been actively involved in CoARA structures, including the Working Group on Academic Career Assessment and the German CoARA National Chapter. In 2024, the university published its CoARA Action Plan and launched a dedicated information website.

Why TU Braunschweig signed the Agreement

The decision to sign CoARA was rooted in a strong alignment between the Agreement's objectives and TU Braunschweig's ongoing university development process. Research forms one of four performance dimensions in the university's strategy, and the commitments of CoARA were seen as offering a credible, co-created framework to advance reform in a structured and collaborative manner.

TU Braunschweig valued the initiative's recognition of institutional autonomy and the fact that each university must find its own path towards reform. Equally important was the opportunity to treat CoARA as a reflective process for reviewing the university's existing research assessment activities and for embedding a more responsible approach across the institution.

The decision to sign the agreement built on TU Braunschweig's previous engagement in research integrity and responsible practice. Namely, the university signed the DFG Guidelines for Safeguarding Good Research Practice in 2021, supported by a commission and a published implementation concept. It has also placed emphasis on research integrity, ethical conduct, open science, interdisciplinary collaboration, and outreach activities addressing societal challenges.

Against this background, the CoARA Action Plan was designed to consolidate existing measures, ensure continuous improvement, and enable TU Braunschweig to play a proactive role in shaping responsible research assessment both nationally and internationally.

First steps and pilot initiatives

In 2024, the first practical steps were taken. These included aligning the CoARA process with university development goals, conducting surveys and data analysis to establish a baseline, and engaging researchers through dialogue and awareness-raising. This early work helped identify gaps and shared priorities for building a responsible framework.

Pilot initiatives in 2025 are already addressing concrete aspects of research assessment. Internal funding processes are being streamlined, with unified application forms across departments, narrative elements added to CVs, and evaluation criteria published alongside calls. Peer review is becoming mandatory for internal funding above €20,000, supported by detailed evaluator guidelines and templates. At the same time, efforts are being made to promote more responsible use of quantitative indicators in appointment procedures, including disclosing the databases used and educating evaluators on biases. TU Braunschweig is also developing a nuanced ranking approach and improving how diverse research contributions are presented internally and externally.

TU Braunschweig's Action Plan and process framework

TU Braunschweig's CoARA Action Plan sets out a phased and adaptable roadmap, aiming to fully embed responsible research assessment by 2028. The process is structured around annual cycles, with each year's roadmap reviewed and updated in light of progress, exchanges with other universities, and developments within CoARA working groups. This flexibility allows the institution to integrate lessons learned and adapt to new challenges.

The university's overarching objective is to ensure comprehensive evaluation of research and researchers. This includes a commitment to qualitative assessment with peer review at its core, supplemented by responsible use of quantitative indicators. Diverse outputs, practices, and activities are recognised, alongside the influence of varied career paths and personal circumstances.

The process is anchored in four main phases:

- 2024: Setting the scene. This phase focused on aligning the initiative with broader university development processes. Key steps included allocating resources, forming a cross-university core working group, engaging the scientific community in discussions on reform, and mapping the current state of research assessment practices. A gap and a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis was conducted to identify strengths, weaknesses, opportunities, and threats, while at the same time uncovering challenges and embracing opportunities for reform. These early activities established a baseline and laid the foundation for subsequent actions.
- 2025: Iterative experimental phase. During this period, TU Braunschweig is updating and designing new processes, criteria, metrics, and tools within a Responsible Research Assessment (RRA) framework. Pilot initiatives are being tested in selected areas, including tools developed internally or in CoARA working groups. Guidelines for implementation are being drafted, supported by clear explanatory material to make the process as straightforward as possible. The RRA framework and guidelines are made available for community feedback, allowing staff to highlight concerns about potential unintended consequences and ensuring inclusivity in design.
- 2026–2027: Implementation. Following the experimental phase, assessment tools, processes, and metrics that are deemed ready will be formally implemented across the university. Training for evaluators will ensure consistent application and shared understanding, with workshops, guidance documents, and ongoing support mechanisms in place. The framework will undergo formal evaluation at the end of each year, incorporating community feedback to refine approaches and strengthen the reform.
- 2028: Anchoring and "living" the reform. By 2028, the objective is to have a sustainable and embedded framework. Measures will be assessed for effectiveness, and outcomes will be documented and communicated. Achievements will be celebrated to reinforce motivation and strengthen a sense of shared accomplishment. Mechanisms will also be established for continuous monitoring, ensuring that reform becomes a permanent, evolving feature of the institution.

Lessons learned and emerging challenges

TU Braunschweig's experience demonstrates that linking CoARA to existing strategies provides a strong foundation for change. The Action Plan has acted as a practical yet flexible process framework, enabling the university to begin reform quickly while leaving space for adjustments along the way. Many practices aligned with CoARA were already taking place but had not been systematically codified or integrated into a broader, overarching strategy, allowing the Action Plan to add clarity and direction to TU Braunschweig's research assessment journey.

A key lesson has been the importance of focusing on pilot initiatives in strategic areas, which deliver early results and maintain momentum. Making the process easy to follow through 'how-to', templates, and step-by-step guidance has also proven essential for community engagement.

At the same time, challenges remain. Reform requires not only technical change but also cultural change. Raising awareness, ensuring acceptance, and embedding new practices in daily routines are critical but have proven to be resource-intensive tasks. With limited capacity for awareness-raising, progress must be carefully prioritised. Institutional change is a long-term endeavour, requiring patience and sustained commitment.

Despite these challenges, TU Braunschweig's early experiences illustrate the value of combining CoARA's structured framework with its own strategic processes. By embedding reform within broader institutional

development and maintaining a strong focus on inclusivity and transparency, the university is taking concrete steps to make responsible research assessment an integral part of its academic culture.

Case study 3 - Politecnico di Torino



Photo: Politecnico di Torino

Introduction to Politecnico di Torino

Alessandra Cerato (Officer at PoliTO's Strategy, Analysis, Reporting and Quality (STARQ) Area) presented Politecnico di Torino (PoliTO)'s journey and lessons learned in implementing CoARA.

PoliTO is one of Italy's leading technical universities, founded in 1859 and specialising in engineering, architecture, and technology. The university counts around 38,000 students and 3,000 staff members and is widely recognised for its strong international profile and longstanding engagement in open science, research integrity, and gender equality. In recent years, PoliTO has introduced a regulation for research integrity and established an ethics committee, adopted an open access publication policy, and developed a gender equality plan. More recently, after signing the CoARA Agreement, it has launched a policy for research data management in line with open science practices and created the PoliTO Open Science Study Centre.

From the Agreement to CoARA Participation

PoliTO joined CoARA as part of Italy's collective engagement with reforming research assessment. At the national level, ANVUR (the Italian National Agency for the Evaluation of Universities and Research Institutes) has played a central role in implementing CoARA. ANVUR's role has been particularly significant, as it is the national body responsible for evaluating public universities. In 2024, ANVUR also developed its own <u>Action Plan within the CoARA framework</u>. Italian institutions have since established a <u>national chapter</u> (CoARA-Italia), with workstreams on coordination, engagement, awareness-raising, training, and thematic working groups for the Italian research community. A <u>CoARA-Italia website</u> was launched in July 2024 to provide a platform for sharing information.

Within this framework, PoliTO is an active participant. It contributes to coordination and training activities of the Italian National Chapter and is involved in CoARA working groups on Experiments in Assessment (EiA; co-creation and piloting new approaches) and TIER (Towards an Inclusive Evaluation of Research).

Internally, the university has also set up a dedicated CoARA working group that brings together governance, faculty, and administrative staff to monitor and revise its Action Plan, develop the FAIR data lakE for transparent, inclusive, and reproDucible Research Assessment (FEDRA) Project, and present CoARA's objectives to the university community.

The CoARA Action Plan of Politecnico di Torino

PoliTO's CoARA <u>Action Plan</u> was the result of an extensive co-design process lasting around 18 months. The process was participatory in nature, involving representatives from governance, academic staff, and administrative and technical staff. The drafting of the plan was preceded by a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, which served several functions: identifying weaknesses in existing evaluation processes, consolidating strengths such as already established open science policies and training activities, and situating the reform within both national and institutional contexts.

The Action Plan defines four main areas of intervention:

- 1. Revision of evaluation criteria for units and individual researchers (A.1–A.4).
- 2. Training, communication, and awareness-raising on the reform (A.5–A.12).
- 3. National and international collaboration, to align with wider CoARA activities (A.13–A.15).
- 4. Monitoring and development of evaluation support tools, to underpin institutional implementation (A.16–A.19).

These interventions are guided by two overarching strategic objectives: (i) to promote fairer, more inclusive, and transparent research evaluation aligned with CoARA's principles; and (ii) to integrate diversity of contributions, collaboration, and open science outputs into assessment processes.

CoARA Commitments	Actions	Timeframe	Indicators	Responsibility	Other Vice Rectors involved	Other Structures involved	Politointransition
10. Evaluate practices, criteria and tools based on solid evidence and the state-of-the-art in research on research, and make data openly available for evidence gathering and research.	A.17 Enhancement of the Research Registry with a focus on interoperability and the inclusion and promotion of open science products (datasets, software, etc.).	2025-2027	Presentation of a project within the CoARA Boost framework. Analysis report of the current architecture and project for necessary updates.	WG POIITO COARA	Vice Rector for Scientific and Technological Innovation		Strengthening research facilities Enhancing research support Promoting internationally recognized research Care and enhancement of staff Actions: [57] International promotion of research results through science communication strategies that reach diverse audiences, tailored to the specific field of reference. [86] Promoting the dissemination of qualitative—quantitative approaches, scientific data analysis and processing methodologies, and models for future scenario assessment to public administrations and regional bodies. [134] Gender impact analysis of the University's decisions and the current mechanisms and regulations governing its operations.
	A.18 Implementation of a monitoring system for publications and Open Access products, as well as Open Science activities (OS Dashboard), also using open databases.	2027		STARQ Area - Quality, Assessment, and Enhancement of Research and Knowledge Division	Open Science Study Center	PoliTO WG on Open Access Open Access Commission ARIA Department – University Libraries Division PoliTO Strategies Study Center	
	A.19 Preparation of an institutional report on Open Science.	2025 - 2027 annual		Open Science Study Center		PoliTO WG on Open Access Open Access Commission	

The CoARA Action Plan of Politecnico di Torino: A strategic, participatory journey

The FEDRA Project - CoARA Boost Funding

FEDRA (FAIR data lake for transparent, inclusive, and reproDucible Research Assessment) is one of the initiatives linked to PoliTO's engagement in CoARA and received funding under the <u>first CoARA Boost Call</u>.

The project develops a proof-of-concept institutional FAIR data lake integrating multiple internal data sources, with the aim of supporting self-assessment, generating transparent and reproducible indicators, and strengthening open science practices, including analyses of potential gender bias.

Planned activities include reviewing the research registry, integrating data for the data-lake prototype, incorporating open science outputs, and conducting a pilot study on possible distortions in existing bibliometric criteria. The project aligns with CoARA's principles through its focus on responsible use of indicators and recognition of diverse research contributions.

Towards implementation and cultural change

In practice, PoliTO's implementation of CoARA commitments builds on existing institutional strengths. Open science has been embedded in evaluation practices for several years, and training and awareness-raising activities are already well established. The participatory drafting of the Action Plan has helped foster internal ownership, while the connection to the Italian National Chapter ensures alignment with national developments.

Looking ahead, the challenge lies in consolidating these efforts and ensuring cultural as well as procedural change. Awareness-raising across the university community, training for evaluators, and the creation of practical tools such as the FEDRA data lake will be crucial in embedding responsible research assessment as a "living" practice. By combining its internal policies with active participation in national and international CoARA structures, PoliTo wants to position itself as a leading institution in Italy for advancing responsible research assessment.

Case study 4 - University of Strathclyde

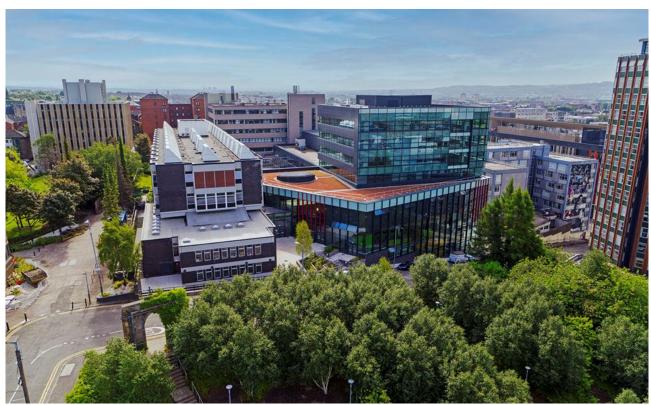


Photo: University of Strathclyde

Introduction to the University of Strathclyde

This presentation was given by Grace Murkett (Research Policy Officer at University of Strathclyde) and Devon McHugh (Research Policy Manager at University of Strathclyde) and focused on Strathclyde's journey of reforming research assessment.

The University of Strathclyde is committed to fostering research of the highest quality, underpinned by integrity, inclusiveness and a positive research culture.

In line with sector-wide reflections on the limitations of conventional research assessment, such as the San Francisco Declaration on Research Assessment (<u>DORA</u>, 2013), <u>the Leiden Manifesto</u> (2015) and the UK's Research and Innovation (UKRI) <u>Metric Tide report</u> (2016), Strathclyde recognises the need for responsible research assessment practices that support sustainable research quality and diverse research careers.

In the view of Strathclyde, previous research assessment practices have created somewhat distorted incentives and unsustainable pressures on researchers, while evolving academic expectations – including open scholarship, research integrity and equality, diversity and inclusion – have further highlighted the need for reform. As a socially progressive and values-led institution, Strathclyde seeks to ensure that research assessment reflects the plural characteristics of high-quality research and aligns with Strathclyde's values to be bold, innovative, collaborative, ambitious and people-oriented.

Existing university initiatives, such as the revised Research Code of Practice and the Guide to Good Research Practice, provided an institutional foundation for embedding best practice in research assessment.

Joining CoARA and early reflections

Strathclyde signed the Agreement on Reforming Research Assessment (ARRA) and was a founding member of the Coalition for Advancing Research Assessment (CoARA) in November 2022. This step marked a formal commitment to recognise the diversity of research outputs, practices and activities and to ensure that assessment processes are fair, transparent and aligned with institutional values.

Early steps included securing senior leadership support and establishing the internal governance structures necessary to develop a five-year action plan covering 2024–2028, aligned with preparations for the Research Excellence Framework (REF 2029). This CoARA action plan provided a helpful framework for bringing together different strands of activity and commitments related to recognition in research (e.g. the EU HR in Excellence Award, DORA) to support strategic and coordinated action.

Implementing reform has highlighted several challenges common across universities. For example, reforms must tackle cultural factors, such as informal perceptions of quality, as well as policy and procedure in order to create lasting change. Recognising the complex network of actors involved in research assessment and the multiple processes where this occurs, Strathclyde's action plan seeks to embed a coordinated approach to reforms by engaging key stakeholders.

Scope and institutional vision

Strathclyde's approach to responsible research assessment encompasses all processes where research assessment occurs, including evaluations of research units, projects, individuals and teams, whether for funding, career progression, recognition or strategic decision-making.

The university adopts a broad understanding of who is considered a researcher or member of a research team, recognising the contributions of technical, professional and teaching staff engaged in research activities. Lessons learned through reforming in-scope processes are also intended to inform wider evaluations, including institutional performance reviews, to mitigate trickle-down effects.

Strathclyde's vision is to embed responsible research assessment practices that support sustainable and diversified research quality, strengthen research culture and promote integrity. To achieve this, Strathclyde is establishing an institutional Responsible Research Assessment Framework, overseen by a dedicated working group with representatives from all teams responsible for research assessment processes. This framework brings together policies, guidance and infrastructure, while promoting transparency and providing a coherent approach to reform across the institution.

Training and development are key features of the working group's plans, supporting colleagues to build literacy and competency in responsible research assessment. The working group reports directly to Senior Leaders to maintain high profile and enable integration with wider institutional action, including research culture and REF preparation.

Action plan and implementation

Strathclyde's five-year action plan operationalises its CoARA commitments, which include recognising the diversity of research contributions and careers, basing assessment primarily on qualitative peer review supported by responsible indicators, avoiding inappropriate use of journal-based metrics such as the Journal Impact Factor and h-index, and eschewing institutional rankings as part of assessment.

Complementing these core commitments are practical actions to develop assessment criteria, tools and processes, provide guidance and training, facilitate mutual learning with other CoARA members, communicate progress, and evaluate reform outcomes using robust evidence.

Implementation encompasses a gap analysis of current practices, design and revision of priority procedures, development of guidance and training materials, and transparent internal and external communication.

The Strathclyde REF Code of Practice serves as a practical example for embedding responsible research assessment, and ongoing engagement with the research community ensures reforms are informed by those affected, while iterative review allows adaptation in response to feedback and sector developments.

REF 2029 preparations are currently a key focus, ensuring the university meets national requirements and adheres to its values.

Formal evaluation at the end of the five-year period will assess the impact of reforms and inform future guidance.

Lessons learned and strategic reflections

Strathclyde's experience implementing CoARA commitments offers several key lessons for universities seeking to reform research assessment. Securing leadership buy-in early is essential, as it provides the authority and resources necessary to drive meaningful change.

Equally important has been the recognition that embedding responsible research assessment involves navigating a complex organisational landscape, where multiple teams and processes intersect.

In this regard, Strathclyde's experience shows that cultural change is as crucial as procedural change: policies alone will not achieve lasting reform. Resource constraints mean universities must prioritise, focusing on areas where interventions can have the greatest impact. Considering technological universities specifically, CoARA can be a valuable tool for broadening the concept of research quality and amending research assessment processes to align more with our own institutional missions and strategies.

Universities' research assessment practices can benefit from reflecting on the following issues:

- Articulate clearly the diverse research practices that are valued.
- Be transparent about how these practices are assessed in evaluation processes.
- Share experiences and lessons learned with like-minded institutions.
- Engage with organisations that have not yet adopted CoARA principles to encourage broader sectorwide progress.

Through these insights, Strathclyde contributes to the wider goal of promoting fairer, more inclusive, and transparent research assessment, supporting high-quality research in all its forms, and strengthening research culture across the sector.

Conclusion

The experiences of Aalto, PoliTo, TU Braunschweig, and Strathclyde illustrate both the opportunities and complexities involved in reforming research assessment in line with CoARA principles. Across these diverse institutions, a few key themes emerge.

Securing senior leadership buy-in early is essential for providing the authority, visibility, and resources needed for meaningful change. Embedding responsible research assessment goes beyond policy updates and requires sustained cultural change, broad engagement, and alignment with institutional values and priorities. Dedicated interdisciplinary working groups can support this by coordinating reforms, gathering feedback, and fostering shared understanding across staff.

A recurring challenge is balancing global standards and commitments with local and national frameworks. Institutions must navigate existing national evaluation systems and funding models, which often rely on traditional metrics, while simultaneously promoting more inclusive, qualitative, and diversified approaches to research assessment. Pilot initiatives, prioritisation of high-impact reforms, and iterative monitoring help address these tensions while building momentum for long-term broader adoption.

The case studies highlight that responsible research assessment is most successful when integrated into existing institutional frameworks, such as strategic plans, quality assurance processes, and staff development programmes, rather than treated as a standalone initiative. Transparent communication, internal and external engagement, and continuous evaluation are critical for sustaining reform, identifying unintended consequences, and sharing lessons with the wider sector.

While the report outlines several strategic challenges linked to institutional leadership and governance, future analyses could be strengthened by incorporating practical examples of obstacles, setbacks, or resistance encountered by research managers during implementation. Highlighting such experiences would offer additional depth and insight.

Collectively, these experiences underscore that CoARA's principles are both actionable and adaptable: they provide a shared framework for promoting research integrity, recognising diverse contributions, and strengthening research culture, while allowing each institution to tailor reforms to its specific context.

By learning from these examples and collectively reflecting on own experiences, universities of science and technology across Europe can advance more equitable, transparent, and sustainable research assessment, supporting high-quality research and inclusive academic environments.

For these reasons, our association will continue to support and work closely with its Members in the elaboration, advancement and implementation of best practices for reforming research assessment.



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