
Action Plan for Implementing CoARA Commitments at the National Information Processing Institute

Table of Contents

Introduction.....	2
Current regulations.....	3
Commitments	3
Action Plan.....	4
Challenges and Mitigation.....	7
Expected Outcomes.....	7
References	7

Introduction

The National Information Processing Institute (OPI) gathers and provides access to the latest comprehensive information on Polish science, as well as conducting research on the activities of scientific institutions, higher education units, and organisations that facilitate technology transfer. The institute develops IT systems that support the advancement of science and higher education, creates methodologies, refines technology, organises data collection processes, verifies information with semantic analysis, and visualises aggregated data. OPI's research combines information technology – including artificial intelligence, cognitive science, and human-computer interaction – with sociology, psychology, statistics, economics, and user-oriented design. OPI's products and services are created primarily for the Polish Ministry of Science and Higher Education, and are utilised to assist experts in making decisions. OPI's systems support the operations of two Polish central research funding agencies: the National Science Centre and the National Centre for Research and Development, as well as the Polish Ministry of Economic Development and Technology, businesspeople, and experts.

Following the 2017–2021 scientific activity evaluation of the Polish Ministry of Science and Higher Education, OPI was awarded category A in sociological sciences and category B+ in information technology and telecommunications.

OPI's key areas of research include machine learning algorithms, natural language processing algorithms, sentiment analysis, neural networks, knowledge discovery from text data, human-computer interaction, computer-assisted decision-making systems, artificial intelligence, the sociology of science, and scientometrics. OPI is strongly committed to interdisciplinary work, particularly in information technology and sociology. This interdisciplinary approach enables the institute to address vital social issues using cutting-edge methods, support decision making, and advocate for the social implications of technological advancement.

In October 2024, OPI boasted a workforce of 489, of whom the majority were IT experts. Currently, the institute employs forty-three researchers, including three professors, twenty-two assistant professors, and twenty research and technology experts.

The National Information Processing Institute joined the Coalition for Advancing Research Assessment (CoARA) in 2023 to actively contribute to the development of a more fair, transparent, and responsible research evaluation system. OPI's interdisciplinary expertise, which spans fields such as IT systems, artificial intelligence and machine learning, human-technology interaction, innovation, scientometrics, and sociology of science, positions us to gain from CoARA's goals of quality, diversity, and inclusivity.

By aligning with CoARA's commitments, OPI aims to:

1. **Enhance Research Integrity:** CoARA's principles align with our commitment to promoting rigorous research practices. By adopting CoARA's framework, we can better support high-quality research outputs that contribute to societal progress. By embracing CoARA's commitments, we ensure that our research assessment practices are ethical, inclusive, and reflect our focus on the social implications of technology. However, they must be consistent
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with principles of evaluating the quality of scientific activities in the years 2026–2029 established by the Ministry of Science and Higher Education in Poland.

2. **Encourage a Supportive Research Environment:** We believe that research assessment should focus both on metrics and consider the broader impact of research on society. This approach aligns with our ongoing research in areas like innovation, scientometrics, and sociology of science.

Current regulations

OPI operates under the following regulations¹:

1. The Act on Research Institutes (April 30, 2010).
2. Ministerial Orders governing the creation and status of OPI as a research institute.
3. The Statute approved by the Ministry of Science and Higher Education (August 8, 2024).
4. The Strategy of the National Information Processing Institute – National Research Institute: Prospective Directions of Scientific, Development, and Implementation Activities (December, 2020).

Commitments

To effectively align with the CoARA commitments, OPI has gathered a comprehensive feedback from its scientific community. This feedback is essential for evaluating current criteria and conditions related to research assessment, working environments, and institutional practices.

In 2024, OPI conducted two anonymous surveys to identify key challenges and areas for improvement:

1. **Research-Focused Survey**

The first survey targeted all research-engaged staff, focusing on evaluating various aspects of their employment and research experience. It included open-ended questions that allowed participants to freely highlight any problematic areas or concerns related to their work environment.

2. **General Workforce Survey**

The second survey encompassed all employees, with a particular focus on assessing the **Monitoring of Working Conditions, Safety, and Equal Treatment** across the Institute. This survey aimed to gather insights on workplace well-being and inclusivity from a broader perspective.

The results from these surveys highlighted key areas for improvement, which have been incorporated into the action plan. The first of the surveys served as a foundation for reviewing and

¹ Agreement on Reforming Research Assessment

https://coara.eu/app/uploads/2022/09/2022_07_19_rra_agreement_final.pdf

prioritizing the CoARA commitments. The full list of CoARA commitments (2023) is provided below, with our prioritized commitments highlighted in bold.

- 1. Recognise the diversity of contributions to, and careers in, research in accordance with the needs and nature of the research.**
2. Base research assessment primarily on qualitative evaluation for which peer review is central, supported by responsible use of quantitative indicators.
3. Abandon inappropriate uses in research assessment of journal- and publication-based metrics, in particular inappropriate uses of Journal Impact Factor (JIF) and h-index.
4. Avoid the use of rankings of research organisations in research assessment.
5. Commit resources to reforming research assessment as is needed to achieve the organisational changes committed to.
- 6. Review and develop research assessment criteria, tools, and processes.**
- 7. Raise awareness of research assessment reform and provide transparent communication, guidance, and training on assessment criteria and processes as well as their use.**
8. Exchange practices and experiences to enable mutual learning within and beyond the Coalition.
9. Communicate progress made on adherence to the principles and implementation of the Commitments.
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.

Action Plan

Key actions are organized into phases and span across five years, focusing on diagnostics, policy development, consultation, training and monitoring.

Diagnosis and Assessment (2024):

1. Conduct an anonymous survey to identify factors that facilitate or hinder the scientific activities of research and technical staff.
2. Analyse the results of the diagnostic survey to identify key challenges and areas for improvement.

Guideline Development (2024–2025):

1. Draft guidelines focused on two main areas:
 - Employment policy for research and technical staff.
 - Periodic assessment processes for research and technical staff.
2. Publish the developed guidelines to ensure transparency.

Consultations and Feedback (2025–2028):

1. Engage in consultations with various stakeholders, including:
 - Academic discipline supervisors;
 - OPI Management;
 - OPI Scientific Council;
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2. These consultations will be conducted annually to gather feedback on survey results and refine policies.
3. Systematic consideration of the principles of evaluation of the quality of scientific activity in the years 2026–2029 established by the Ministry of Science and Higher Education in Poland as the overarching rules for the evaluation of scientific quality.

Training and Capacity Building (2025–2028):

1. Organise training sessions for managers, leaders, and department heads to promote best practices.
2. Facilitate workshops to share effective methodologies and practices among staff.
3. Host annual seminars focusing on best practices in conducting scientific research.

Implementation and Monitoring (2025–2028):

1. Implement the newly developed guidelines and begin monitoring their effectiveness.
2. Conduct periodic assessments, including surveys on employment policy and staff evaluations, to ensure continuous improvement.
3. Regular updates will be made based on feedback from ongoing consultations.

A table below presents details of the main activities.

Detailed Action Plan 2024–2028

2024	2025	2026	2027	2028
Preparation of an Action Plan	Consultation of the Action Plan with scientific, research and technical personnel, and the Scientific Council Development and publication of the final Action Plan	Monitoring	Monitoring	Monitoring

Diagnosis identifying factors facilitating and hindering scientific activities of scientific and research and technical employees of OPI (in the form of an anonymous survey).		Employment policy survey	Periodic assessment questionnaire	Employment policy survey
Analysis of diagnostic results.		Analysis of employment policy survey	Analysis of periodic assessment questionnaire	Analysis of employment policy survey
Preparation of working guidelines on: 1. employment policies for scientific and research and technical employees 2. periodic assessment of scientific and research and technical employees	Publication of the guidelines on employment policies and periodic assessment	Consultation of survey results with supervisors of scientific disciplines	Consultation of survey results with supervisors of scientific disciplines	Consultation of survey results with supervisors of scientific disciplines
Consultation with supervisors of scientific disciplines	Implementation of the Action Plan	Consultation of the results of the survey with the Directors of OPI	Consultation of the results of the survey with the Directors of OPI	Consultation of the results of the survey with the Directors of OPI
Consultations with the Directors of OPI		Consultation of the survey results with the Scientific Council of OPI	Consultation of the survey results with the Scientific Council of OPI	Consultation of the survey results with the Scientific Council of OPI
		Action Plan update.	Action Plan update.	Action Plan update.
		Training of managers, leaders, and	Training of managers, leaders, and	Training of managers, leaders, and

		HR. Sharing of good practices.	HR. Sharing of good practices.	HR. Sharing of good practices.
	Seminars on good practices in conducting scientific research	Seminars on good practices in conducting scientific research	Seminars on good practices in conducting scientific research	Seminars on good practices in conducting scientific research

Challenges and Mitigation

Implementation of this Action Plan will not be effective without ensuring compliance with existing legal regulations and maintaining consistency with the criteria currently used—and those planned to be introduced—for evaluating research-performing organisations in Poland. Therefore, OPI will closely monitor discussions at the national level regarding potential reforms of the central assessment of research institutions in Poland.

Mitigation Strategy:

1. Establish a task force to actively participate in national consultations and discussions about assessment reforms.
2. Collaborate with legal experts to ensure that all proposed changes align with existing laws and regulatory frameworks.
3. Implement periodic reviews of the internal assessment criteria to stay aligned with evolving national standards.

Expected Outcomes

By implementing this action plan, OPI aims to:

1. Improve employment policies and research assessment practices.
2. Enhance communication and engagement with stakeholders.
3. Create a supportive research environment that values inclusivity and ethical research.

This approach will contribute to a more responsible and impactful research ecosystem, aligning OPI with global best practices as envisioned by CoARA.

References

1. Agreement on Reforming Research Assessment
https://coara.eu/app/uploads/2022/09/2022_07_19_rra_agreement_final.pdf
2. The Act on Research Institutes (April 30, 2010) -
<https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20100960618/U/D20100618Lj.pdf>

3. Ministerial Orders governing the creation and status of OPI as a research institute (October 23, 2013) -
<https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20130001452/O/D20131452.pdf>
 4. The Statute approved by the Ministry of Science and Higher Education (August 8, 2024) -
<https://e-dziennik.nauka.gov.pl/wp-content/uploads/2024/08/Dziennik-Urzedowy-Min.-Nauk.-2024-poz.-70.pdf>
 5. The Strategy of the National Information Processing Institute – National Research Institute: Prospective Directions of Scientific, Development, and Implementation Activities (December, 2020)
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