

**RTOs International Network (RIN) Joint Statement 2024**  
**– Building Resilient Society: RTOs’ Role in Long-term Cross-Borders Collaboration –**

26 April 2024

EARTO with its 350+ European Research and technology Organisations (RTOs) and its International Members reunited together in RTOs International Network (RIN), namely [A\\*STAR - Agency for Science Technology and Research](#) (Singapore), [AIST - National Institute of Advanced Industrial Science and Technology](#) (Japan), [CSIRO - Commonwealth Scientific and Industrial Research Organisation](#) (Australia), [ELDORADO](#) (Brazil), [ITRI - Industrial Technology Research Institute](#) (Taiwan), [NRC - National Research Council](#) (Canada), [NST - National Research Council of Science and Technology](#) (South Korea), acknowledge the increasing roles for RTOs in building resilient society with innovative technology solutions and international collaboration.

The core of a resilient society lies in its ability to endure, absorb, adapt, and recover from various challenges, including external shocks and stresses, in a timely and effective manner. Resilient development, as outlined by the World Bank, involves achieving development objectives while simultaneously reducing vulnerability over both short and long-term horizons, despite incurring certain costs. This notion resonates with the concept of a resilient society articulated by the Rockefeller Foundation, which emphasizes the importance of maintaining essential functions, structures, and identity while withstanding shocks and stresses.

These societal challenges can range from short-term shocks like extreme weather leading to droughts and water shortages, to long-term stresses such as geomorphological destruction that leads to infrastructure collapses, and an aging population posing threats to social stability due to caregiver and working labor shortages. Moreover, the widespread use of Generative Artificial Intelligence has intensified the need for accurate information in today's society. Establishing such resilience necessitates comprehensive RD&I strategies addressing these challenges, ensuring societal stability and fortitude. In this context, the innovative solutions and technological advancements provided by RTOs play a pivotal role in overcoming these societal hurdles.

RTOs around the globe have embarked on technology strategies and development initiatives aimed at fostering collaborative research efforts and sharing best practices to combat these challenges. As key RD&I stakeholders, many RTOs worldwide have been actively involved in diverse endeavors to surmount these societal challenges. Here are some examples of international collaborations between RTOs that led to key results:

- Collaborative research and long-term investments between AIST and ITRI have resulted in the development of a CO<sub>2</sub> conversion process, enabling the reuse of CO<sub>2</sub> as a novel input for carbon reduction.
- Additionally, ITRI has developed PV modules easy for disassembling and recycling, verified by CEA to withstand severe weather conditions.
- A\*STAR and CSIRO’s partnership on an “Innovations in Food for Precision Health” programme led to insights which could empower consumers to make healthier choices on food and diet.
- NRC and Fraunhofer IFAM, with others, are working towards developing low-cost hydrogen production technology by designing and optimizing a novel alkaline membrane electrolyser for gigawatt scale. Results are expected in 2025
- Collaboration between NRC and AIST is targeting innovations for healthy aging with results expected in 2025 and 2026 on various aspects from digital monitoring of comprehensive geriatric assessment including cognitive capacity to construction guidance for comfortable environmental conditions.
- Furthermore, many RTOs are investing in the development of collaborative robots to enhance labor productivity.



These advancements underscore the potential for future collaboration among RTOs. An integral aspect of this process is the role of RTOs in identifying challenges, fostering collaboration, and transcending conventional boundaries to devise effective solutions. To do so, RTOs collaborate extensively with international partners and leverage programmes such as for example EUREKA Globalstars and Horizon Europe EU RD&I Programme to amplify their impact. These collective efforts are indispensable for governments worldwide in mitigating the impact of RD&I ecosystems, thereby advancing towards a resilient society.

In the concerted efforts to drive innovation and foster collaboration, RTOs are committed to proactively reinforcing their cross-borders collaborations, all aimed at accelerating the innovation process, and enhancing the quality and efficiency of research endeavors, while recognizing the importance of continuous and dedicated RD&I resources to support long-term cross-borders collaboration.

As global challenges arise and technological races accelerate, RTOs must explore new avenues for international collaboration despite its practical complexities. Such international collaboration involves enhancing conditions for innovative technology solutions while striking the right balance between national autonomy and the necessity for cross-borders and cross-disciplines joint efforts in knowledge sharing and technology development. Only with continuous RD&I support for long-term cross-borders collaboration and adequate base funding allocation with autonomy, could RTOs serve as greater catalysts for global innovation. By working together, EARTO and its International Members reunited together in RTOs International Network (RIN), are committed to contributing to overcoming short- and long-term challenges for building a more resilient society.

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***RTOs - Research and Technology Organisations:*** From the lab to your everyday life. RTOs innovate to improve your health and well-being, your safety and security, your mobility and connectivity. RTOs' technologies cover all scientific fields. Their work ranges from basic research to new products and services development. RTOs are non-profit organisations with public missions to support society. To do so, they closely cooperate with industries, large and small, as well as a wide array of public actors.

***EARTO - European Association of Research and Technology Organisations:*** Founded in 1999, EARTO promotes RTOs and represents their interest in Europe. EARTO network counts over 350 RTOs in more than 20 countries. EARTO members represent 150.000 highly-skilled researchers and engineers managing a wide range of innovation infrastructures.

***RIN – RTOs International Network:*** Founded in 2019, administrated by EARTO, RIN regroups the largest RTOs worldwide with its European membership.