EARTO Response to the EC Consultation on a European Strategy on Research and Technology Infrastructures

16 May 2025

EARTO very much welcomes the European Commission's (EC) initiative to develop a new European Strategy on Research and Technology Infrastructures (RTIs) and underlines the crucial role of Technology Infrastructures (TIs) and the continuum between RTIs in strengthening the EU's competitiveness and sustainable growth. In this context, supported by EARTO experts, the EC Expert Group on TIs' final report "Towards a European Policy for Technology Infrastructures: Building Bridges to Competitiveness", alongside its analytical report on user needs for Technology Infrastructures, published in February 2025, provides key recommendations for the development of a European Strategy on TIs.

To respond to the EC's public consultation on a European Strategy on Research and Technology Infrastructures, EARTO would like to highlight the key role of Research and Technology Organisations (RTOs) in managing and advancing our European TIs' ecosystem. Consequently, EARTO offers its members' expertise to further define as well as implement this new EU strategy.

RTOs at the heart of Europe's Research & Technology Infrastructures' Ecosystem

Research and Technology Infrastructures are the backbone of dynamic RD&I ecosystems and stable innovation-driven value chains. Especially, Technology Infrastructures as physical or virtual user environments, are essential for industry to undertake a system-level testing of entire products, services, or processes in controlled and safe conditions, and validate them to end-user clients and investors. Industry depends on the availability and accessibility of technology infrastructures for upscaling, prototyping and validating new solutions before they can enter the market.

Industry may own some production facilities: those are typically designed to produce at a large scale. It is therefore only possible to develop existing solutions incrementally, and are rarely suitable for the development, maturation and testing of new technologies and new production processes. When developing the readiness of a manufacturing process for a new technology alongside the product itself, it is necessary to enable scaling of production from single demonstrators to small series before industrial adoption and investment decisions are taken. This often requires dedicated technology infrastructures, which typically exceed the investment capabilities and operational skills needed by even large industrial stakeholders. Today, funding dedicated to demonstrators targeting green and digital transitions in Europe is often insufficient for such projects.

RTOs have long taken the role of supporting industrial value chains by housing those complex large-scale Technology Infrastructures, including multi-use research (prototype) and small-scale manufacturing (test & validation) facilities that would not be granted when in the hands of, for instance, a technology supplier. Depending on the context, a single Technology Infrastructure offer a wide range of activities to industrial users: from investigating completely new technology to piloting, but also spin-off incubation, testing changes in existing products, and validating emerging concepts and production processes, either with single industry partners (large and small) or together with a consortium of several players. This is essential to manage both the costs and the risks of RD&I investment, making it more accessible to industries of all sizes, especially for SMEs and start-ups and spin-offs

Key Aspects of the Future EU Strategy on RTIs

EARTO would like to emphasise the following key aspects of the future EU strategy on RTIs:

1. The need for TIs to be treated separately than the RIs

First, EARTO understands that the future EU strategy on RTIs will be developed by creating two key pillars: one for RIs based on the European Strategy Forum on Research Infrastructures (ESFRI) and one for TIs, creating a new pan-European coordination of investments mechanism. EARTO very much welcomes this approach. The financing of those infrastructures and linked business models has quite some variations that explain this split, even if it is very welcome to look at synergies and further leverages between the two.

2. Focus the work first on developing Investment Roadmaps on key industrial sectors and critical technologies identified in the EU Competitiveness Compass

Secondly, the priority for TIs is clearly on developing gap analyses for key industrial sectors and critical technologies in Europe. Those pan-EU investments' roadmaps on TIs will be key to mobilising, pooling and prioritising investments to ensure Europe's technological sovereignty is key in our current geopolitical context along the key technologies identified in the EU Competitiveness Compass.

3. Develop new Pilots using existing EU Instruments such as EU RD&I Public-Private Partnerships

To prepare further EU investments in TIs under the next EU MFF, EARTO strongly supports the development of further pilots within the last phase of Horizon Europe, using what has been done in aeronautics as well as with the microelectronics pilot lines. The use of key EU industrial RD&I public-private partnerships that already combine industrial value chains with all key RD&I actors in one sector, as well as have already the right Member States (incl. EEA countries)' experts/Ministries involved in the discussion via their Mirror Groups would clearly facilitate the establishment of pertinent investments' roadmaps on TIs.

Learnings from those new pilots should then be taken into account to develop the future EU governance framework for TIs under the next MFF, adapting to the new MFF environment being under definition now.

4. Focus the TIs pillar's activities on alleviating barriers and on adding speed to joint EU-Member States investments

Among others, while EARTO do not see the need for an adjustment of the current EU State-Aid rules (SARs) to boost pan-EU investments in TIs, EARTO members noted various key challenges and bottlenecks experienced in their compliance with SARs for their existing infrastructures that should be tackled. Especially, the interpretation of SARs by Member States (incl. EEA countries) needs to be harmonised to prevent over-implementation of SARs and/or mismatch between the national grant conditions and the SARs. In addition, the JRC State Aid Decision Tree would need to be updated to reflect the best practices in applying the SAR on TIs.

Finally, the EC could carefully analyse the SAR regimes associated with access to TIs when developing future EU instruments for TIs' co-funding (e.g. risk of exceeding the 20% threshold for ancillary economic activities, indirect State aid to industrial users, etc.). TIs' EU funding instruments need to be designed in close collaboration with Member States to avoid that Member States (incl. EEA countries) implement additional funding rules that finally restrict TIs' owners/managers (including RTOs)' access to such national investments.

EARTO Further Inputs

EARTO would like to recall its long-standing support for the development of such an EU strategy on RTIs by pointing out its past position papers as follows:

- EARTO Policy Recommendations 2024-2029: No EU Tech, No EU Competitiveness - European RD&I: A Catalyst for Europe's Prosperity (5 September 2024)
- EARTO Case Studies on Technology Infrastructures (11 May 2022)
- Joint JRC - EARTO report - Towards the Implementation of an EU Strategy for Technology Infrastructures (17 January 2022)
- JRC - EARTO Press Release - Recommendations for the Implementation of an EU Strategy on Technology Infrastructures (17 January 2022)
- EARTO Response to the EC Consultation on the Revised Framework for State Aid RD&I (3 June 2021)
- EARTO Paper on Setting-up a European Strategy for Technology Infrastructures (31 July 2020)
- EARTO Recommendations for European Policy Post-2020 (4 December 2019)

EARTO remains committed to supporting the European Commission and Member States (incl. EEA countries) in shaping and contributing to the successful implementation of this new EU RTIs Strategy and looks forward to the publication of the upcoming EU communication on this subject.

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