

EARTO Response to the EC Consultation on the Revised Framework for State Aid RD&I

03 June 2021

To answer the European Commission's [public consultation](#) on the review of the Communication on the Framework for State aid for Research, Development and Innovation (RD&I), EARTO has analysed the [draft revised RD&I Framework Communication](#), and would like to bring forward the following comments and recommendations:

- 1. EARTO welcomes the proposed continuity with the current provisions: the rules to distinguish economic from non-economic activities are efficient. However, their national/regional interpretation needs to be improved,** to ensure that they do not hamper Europe's innovation capacity. In addition, Research and Technology Organisations (RTOs) should be considered by default as Research and Knowledge Dissemination Organisations (RKDOs), and not as "undertakings" under the RD&I Framework definitions. RTOs should be able to have their 100% full costs covered in national/regional RD&I competitive programmes funded by national public bodies.
- 2. The new concept of "technology infrastructures" (TIs) is welcome. However, the definition and conditions proposed are not aligned with the reality of RD&I ecosystems.** TIs are managed and used by non-profit research organisations mainly in "effective collaboration" with other RKDOs and private companies, including SMEs (mainly non-economic activities with ancillary economic activities). However, the EC proposed definition for TIs rather addresses "Pre-production Demonstration Infrastructures" with mainly economic activities, and should therefore be relabelled as such. In addition, the EC proposal creates a gap between Research Infrastructures (RIs) and TIs, where a continuum is required. TIs should be clearly included into the current definition of Research Infrastructures and mentioned under the scope of section 2.1 of the RD&I Framework.
- 3. The rules of pre-commercial procurements need to be simplified to boost Europe's innovation capacity.** There should be only one single call for tender covering both the RD&I phase and the manufacturing phase. This would first make the administrative process easier, but it would also increase the incentive for RD&I providers (incl. SMEs) to take part in the RD&I phase since they would be assured to get an opportunity to bring their innovation to the market.

More details on EARTO's position on these three key points, along with detailed text changes suggestions, are outlined below to feed into the discussion on this revision.

1. Economic and non-economic activities: the rules are efficient, their national/regional interpretation needs to be improved.

EARTO welcomes the proposed continuity with the provision of the current RD&I Framework. In case of RD&I partnerships between Research and Knowledge Dissemination Organisations (RKDOs) and private companies funded or co-funded by private companies, the distinction made between "effective collaboration" (non-economic activities) and "research on behalf of undertakings" (economic activities) under the RD&I Framework definitions, enables a sound interpretation of the rules. Applying such distinction at the level of an organisation requires a steep learning curve and heavy internal processes to be put in place, which is why ensuring the stability of these rules is crucial.

In addition, EARTO believes that such provisions can indeed be effective and facilitate investments in the field of RD&I, provided that the sound interpretation of those rules is ensured at national level. **EARTO encourages the EC to put mechanisms in place to make sure that Member-States do not impose a risk-adverse implementation of those rules, which could create unwanted barriers, hamper the European innovation capacity and delay RD&I investments in Europe.** In that context, EARTO very much welcomes the [EC JRC Decision Tree](#)¹, and very much encourages the EC to further promote it and Member States to make good use of this key document. This includes the "array of proof" to distinguish between economic and non-economic activities for RKDOs' RD&I partnerships (co-)funded or

¹ State Aid Rules in Research, Development & Innovation - Addressing Knowledge and Awareness Gaps among Research and Knowledge Dissemination Organisations, EC DG JRC, November 2020

sponsored by private companies, in order to ensure the proper application of the EU State Aid rules for RKDOs. The definitions of economic ("research on behalf of undertakings") and non-economic ("effective collaboration") activities under the EU State Aid rules' definitions should be acknowledged by Member States, especially for RD&I partnerships between RKDOs and private companies (co-)funded by private companies. These definitions should also clearly be differentiated from similar but not identical definitions in other national/regional rules, such as taxable and non-taxable activities in taxation law for instance.

Moreover, based on the RD&I Framework, **Research and Technology Organisations (RTOs) should be considered by default as "Research and Knowledge Dissemination Organisations" under the EU State Aid rules' definitions, and not as "undertakings" as it is the case today in several EU Member States.** Indeed, regardless of their legal status (organised under public or private law) or way of financing, RTOs are entities whose primary goal is to independently conduct research and to widely disseminate the results of such research activities, including by way of technology transfer (often being a public mission given to them by their State). **RTOs should therefore be able to have their 100% full costs covered in national/regional RD&I competitive programmes funded by national public bodies** (ministries and public agencies) where each partner is funded by the public body even at high TRL, including the programmes with and those without collaboration with industry. The EU State Aid rules cannot be used as an argument from Member States to justify a funding rate below 100% for RTOs in such national/regional competitive publicly funded RD&I programmes. RTOs are not "undertakings" and should not be treated on par with undertakings regarding costs reimbursement in those programmes.

In general, RTOs are not direct recipients of State Aid, but they have RD&I partnership agreements with industry which can be of an economic nature (even though limited in capacity), alongside with their RD&I partnership agreements that are of a non-economic nature (which represent the vast majority of them). RTOs monitor their economic activities closely to make sure that they do not unlawfully transfer indirect state aid to undertakings. These RD&I partnership agreements with industry, both those considered as "non-economic" and those considered as "economic" under the EU State Aid rules' definitions, are an integral part of RTOs' public mission to turn promising basic research results into technologies with industrial maturity, lowering the risks of private RD&I investments to ensure industry's uptake of innovation, with high impact for society and the economy in Europe. Even though they remain limited in capacity, economic activities are needed for RTOs to be able to fulfil their public mission.

2. Technology Infrastructures: the concept is welcome, but the definition needs to be better aligned with the reality of RD&I ecosystems

The introduction of the concept of "Technology Infrastructures" (TIs) in the draft revised RD&I Framework is welcome, as TIs are an essential part of the RD&I ecosystems. However, the definition and conditions proposed for TIs are not aligned with the reality of RD&I ecosystems:

- TIs' main activities focus on the development of technology, addressing intermediary TRL ranging from the experimental proof of concept stage up to technology validation in real or near real conditions. At such stages, RD&I activities are still characterised by risk and uncertainty, which makes public funding essential to overcome market failure (imperfect and asymmetric information).
- TIs are mostly hosted and managed by non-profit applied research organisations such as RTOs and Technical Universities. They are not independent/stand-alone organisations like some Research Infrastructures can be. They are also not hosted by industry: large & small companies cannot afford to have their own TIs, however they need to access TIs to increase their innovation capacity (market failure).
- TIs are used by RKDOs to develop technology, both within their own individual projects and in "effective collaboration" with other RKDOs and industry, including SMEs, with the aim to lower the risk for industry to invest in RD&I. TIs are also essential for RKDOs to fulfil their public missions, as the knowledge, expertise and technology developed thanks to TIs can be re-applied horizontally in different sectors (knowledge spill-overs).
- TI's activities are mainly non-economic, and economic activities are ancillary and needed to perform the primary non-economic activities. Public support to the creation and upgrade of TIs is essential to address market failure as industry cannot afford their own. Access to TIs provide an incentive for industry to boost their RD&I investments (by lowering the risks) and to strengthen their innovation capacity (which they would otherwise not have been able to do on their own).

As such, the proposed definition for TIs in the draft revised RD&I framework communication rather addresses very high TRL infrastructures which are much closer to market and are mainly used and

operated by industry. These are rather “Pre-production Demonstration Infrastructures”. This misalignment risks to create State Aid rules’ implementation issues, which need to be avoided in order to preserve Europe’s capacity to efficiently invest in RD&I infrastructures. Investment in RD&I infrastructures will be essential for Europe to deliver on the green and digital transition, and to remain competitive at the global level. It is therefore very important to make sure that the RD&I Framework and the EU State Aid rules match the reality of the RD&I ecosystem. For that, clarifying the RD&I infrastructure landscape as much as possible is essential, as laid down in the table below.

	Research & Technology Infrastructures		Pre-production demonstration Infrastructures
	Research Infrastructures (RIs)	Technology Infrastructures (TIs)	
TRL	Low TRL	Intermediary TRL	Very high TRL
Functionality	Fundamental research: from scientific discovery and education to formulation of technology concept	Technology development: from formulation of technology concept to technology validation in the relevant environment	Product or system demonstration: from demonstration in industrial environment to first industrial deployment prior to mass production
Host/ Manager	Often independent special purpose organisations but sometimes also hosted and managed by RKDOs	Mostly hosted and managed by not-for-profit applied research organisations (i.e RTOs and Technical Universities)	Mostly hosted by industry or independent organisations (co-)financed by industry
Access/ Users	Mostly public users (RKDOs), either for individual projects or in collaboration with other public Research Organisations	- Internal/individual technology development projects by RKDOs (RD&I competence/knowledge building) - Collaborative/co-creation projects between RKDOs, and industrial players (incl. SMEs)	Mostly industrial users (including SMEs), supported by RKDOs
Type of activities	Majority of collaborative RD&I (non-economic activities, economic activities are ancillary)		Predominantly RD&I on behalf of undertakings (economic activities are not ancillary)
Public added value / overcoming market failures	- Essential to enable RKDOs to advance scientific research and strengthen Europe’s knowledge base in the public interest	- Enhance RKDO’s own knowledge and skills to develop technologies, to be used horizontally in different sectors (knowledge spill-overs), strengthening Europe’s innovation capacity - Enable industry (incl. SMEs) to access skills, knowledge and facilities (by collaborating with RKDOs) that are essential to identify and develop the technologies they need but too expensive for them to have in-house, thereby lowering the risk of their RD&I investments	- Enable companies to lower the risk and speed-up market introduction of innovative products and services, for instance by ensuring feasibility and regulatory compliance

There is of course a continuum in RD&I ecosystems between these different categories of infrastructures. This should be taken into account to assess the status of a facility with regards to EU State Aid rules.

In light of this, the introduction of the concept of “Technology Infrastructures” under the definition and conditions proposed by the EC in the draft RD&I Framework and the proposed split between RIs and TIs would create State Aid rules’ implementation and compliance issues, as it is not aligned with the reality of RD&I ecosystems:

- Based on such EC proposal, RIs would be treated as mainly non-economic in nature, whereas TIs would be treated as mainly economic in nature with corresponding allowed aid intensity and conditions. **However, TIs’ activities are mainly non-economic in nature and this needs to be made clear in the RD&I Framework** (economic activities are ancillary).
- **The EC proposal creates a gap between RIs and TIs where a continuum is required: in many cases RIs and TIs are operated in the same facility by the same research**

organisation. Collaboration between the different types of infrastructures and between the organisations managing them is essential to ensure the well-functioning of RD&I ecosystems.

- The differentiation as to basic requirements between TIs and RIs is not clear in the EC proposal, and would in any case be difficult to implement as there are in practice necessary overlaps, which would inevitably create state aid compliance issues.

The RD&I Framework should not differentiate infrastructures as to their status but as to their type of activities (not ancillary economic activities VS non-economic activities with ancillary economic activities). This entails that:

- **The definition proposed for TIs addresses infrastructures mainly used by industry, and whose activities are mainly economic in nature: this is the case for “Pre-production demonstration infrastructures” and not for TIs (mainly non-economic activities with ancillary economic activities). The proposed definition needs to be relabelled as such.**
- **TIs should be clearly included into the current definition of Research Infrastructures and mentioned under the scope of section 2.1 of the RD&I Framework, since TIs are managed and used by non-profit research organisations mainly in “effective collaboration” with other RKDOs and private companies, including SMEs (i.e. mainly non-economic activities with ancillary economic activities), and there is a continuum between RIs and TIs in RD&I ecosystems.**

EARTO therefore strongly recommends the EC to:

- (1) **Replace the wording “research infrastructure” by “research and technology infrastructure” throughout the whole RD&I Framework Communication , and especially under section 2.1 “Research and knowledge dissemination organisations, and research and technology infrastructures as recipients of State aid”** including for instance clauses 19., 21., 22., 23., 24., 26.; 27.; 28., 30., 31., 32., but also clauses 14c., 79., 95. and Annex II.

- (2) **Amend the current definition (17gg) to explicitly state that it also addresses technology infrastructures, as follows:**

17 (gg) ‘research and technology infrastructures’ means facilities, equipment, resources and related services that are used by the scientific community and Research Organisations, among others in collaboration with industrial players, including SMEs, to conduct research and develop and test technology in their respective fields, from fundamental research to technology validation in relevant environment. They and covers scientific equipment or set of instruments, knowledge-based resources such as collections, archives or structured scientific information, enabling information and communication and other technology-based infrastructures such as grid, computing, software and communication, or any other entity of a unique nature essential to conduct research and development. Such infrastructures may be independent or hosted by Research Organisations, and they can be ‘single-sited’ or ‘distributed’ (an organised network of resources). These infrastructures are essential to strengthen Europe’s knowledge base and to enable industry to access the skills and facilities needed to foster their innovation capacity;

- (3) **Replace the term “technology infrastructure” by “pre-production demonstration infrastructure” throughout the whole RD&I Framework Communication, including for instance clauses 14d., 79., 95., and Annex II.**

- (4) **Amend the proposed definition (17II) as follows:**

17 (II) ‘technology pre-production demonstration infrastructures’ means facilities, equipment, capabilities and related support services required to develop, test, demonstrate, upscale and evaluate the implementation of technology to advance through industrial research and experimental development activities as from validation in a laboratory to a validation representative of the operational in relevant environment, and the users of which are mainly industrial players, including SMEs, which seek support to develop and integrate innovative technologies into develop new products, systems, processes and services, whilst ensuring feasibility and regulatory compliance.

3. Pre-commercial Procurements: rules need to be simplified to boost EU’s innovation capacity

To enhance Europe's innovation capacity, the rules for public procurement of RD&I need to be simplified. The separation of EU public procurement of RD&I into two distinct phases with two distinct calls for tenders: 1) the research and development phase and 2) the one for the deployment of commercial volumes of end products makes it particularly difficult to use such procurement scheme for innovation, especially by SMEs. This explains why public procurements for RD&I remain underused in Europe compared to other parts of the world, as demonstrated in the [EC commissioned ENIRI study](#)². Many RTOs are both public purchasers and RD&I providers, and this is therefore a key concern to them.

EARTO would strongly recommend having only one call for tender covering those two phases³. This would make the administrative process easier for both public innovation purchasers and for the respondents. It would also increase the incentive for RD&I providers (incl. SMEs) to take part in the RD&I phase since they would be assured to get an opportunity to recover part of their RD&I investment in the commercialisation phase by bringing their innovation to the market. It would also provide additional incentives for RTOs to take part in the RD&I phase in partnership with companies, as this one-phase process would be more aligned with their IPR policies. In line with their public mission to boost the socio-economic impact of RD&I investments, RTOs would then be able to:

- keep ownership of the foreground IP created (e.g. when the foreground IP created in the PCP is new or an improvement of an RTO's background IP);
- possibly grant an exclusive sectorial license on such IP to the industrial company they partner with, acting as their RD&I provider;
- develop the IP in other industrial sectors, through exclusive IP licensing to other industrial companies in other sectors, thereby strengthening Europe's innovation capacity.

We recognise of course that this is not only a State Aid issue. However, **EARTO recommends to amend the definition of "pre-commercial procurement" in the RD&I Framework (17bb) as follows:**

17 (bb) 'pre-commercial procurement' means the public procurement of research and development services where the contracting authority or contracting entity does not reserve all the results and benefits of the contract exclusively for itself for use in the conduct of its own affairs, but shares them with the providers under market conditions. The contract, the object of which falls within one or several categories of research and development defined in this framework, must be of limited duration and may include the development of prototypes or limited volumes of first products or services in the form of a test series. ~~The purchase of commercial volumes of products or services must not be an object of the same contract;~~

In addition, EARTO would also recommend amending the clause (35d) imposing on the participating providers to either waive the IPRs to the public purchaser or concede non-exclusive licences to all third parties that would request it. This would enable RD&I providers such as RTOs to own the IP created, making it possible for them to fulfil their public mission by acting as horizontal multipliers of RD&I investments made through public procurements in a wide variety of sectors. This is already being applied today in some European Member States with options for this kind of procurement where the service provider owns the IP without being obliged to give access to third parties. **EARTO strongly encourages the EC to adopt this approach at EU level as well, and to amend clause (35d) as follows:**

35 (d) ~~one of the following conditions~~ **are** fulfilled:

- all results which do not give rise to IPR may be widely disseminated, for example through publication, teaching or contribution to standardisation bodies, ~~and in a way that allows other undertakings to reproduce them, and any IPR are fully allocated to the public purchaser, or~~
- any service provider to which results giving rise to IPR are allocated is required to grant the public purchaser ~~unlimited~~ access to those results free of charge **limited to the own internal needs of the purchaser as set out e.g. in the invitation to tender, and to grant access to third parties, for example by way of nonexclusive licenses, under market conditions. A financial compensation linked and proportional to the effective exploitation of the IPR could be paid by the service provider to the purchaser.**

² [EC Commissioned study, ENIRI](#) - "State aid support schemes for RDI in the EU's international competitors in the fields of Science, Research and Innovation" (p.622-625)

³ See also EARTO position papers on this topic : [EARTO Answer to the EC Consultation on the RD&I Framework](#), 2014; [EARTO paper on how to boost PCP in H2020](#), 2016; [EARTO Answer to the EC Consultation on Public Procurement of RD&I](#), 2017; and [EARTO Recommendations for EU RD&I Policy Post 2020](#) (chapter 4), 2019

EARTO remains at the disposal of the EU Institutions to further discuss these recommendations and support the EC in its work to revise the European State Aid RD&I rules.

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 collaborate 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 technology infrastructures.*

Read more on EARTO's previous papers linked to this topic:

- [EARTO Report on State Aid on R&D&I: The Right Way](#), 2021
- [EARTO Recommendations for EU RD&I Policy Post 2020](#) (chapter 4), 2019
- [EARTO Note on EU State Aid Rules for R&I](#), 2018
- [EARTO Answer to the EC Consultation on Public Procurement of RD&I](#), 2017
- [EARTO paper on how to boost PCP in H2020](#), 2016
- [EARTO Answer to the EC Consultation on the RD&I Framework](#), 2014