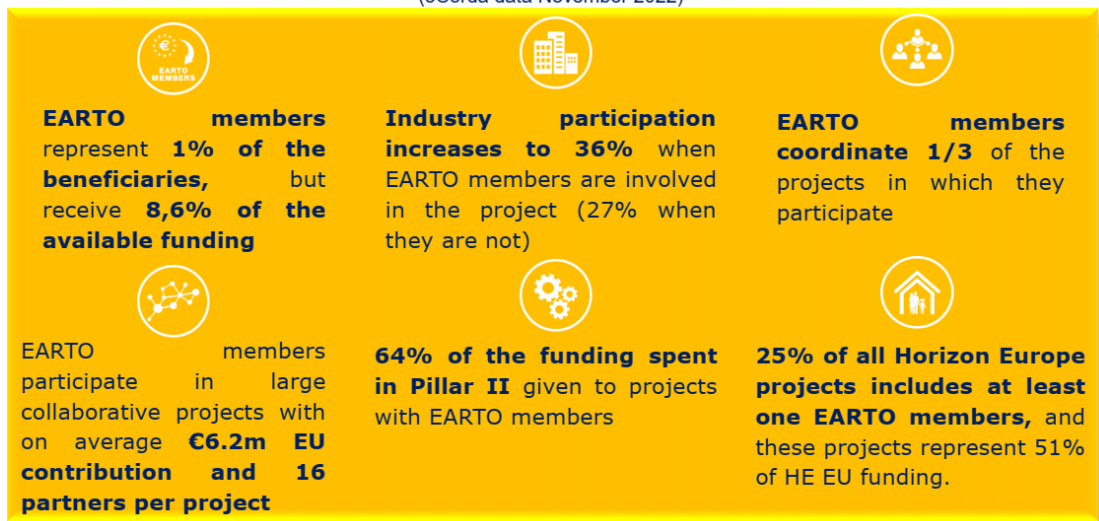**EARTO Answer to the EC Consultation on the past, present and future of the European Research & Innovation Framework Programmes 2014-2027**

10 February 2023

Introduction

RTOs are very pleased with the opportunity offered by the EU Framework Programmes to contribute to the European Research Area by developing pan-European excellent and impactful collaborative applied research. In turn, EARTO Members have been very active participants in EU RD&I Framework Programmes for the last decades. In EARTO last Horizon 2020 analysis as well as in our new analysis for Horizon Europe, the share of EU grants to Research & Technology Organisations (RTOs) is consequently larger than RTOs' share in the total number of FP participants. In both programmes, RTOs have a leading position and driving role in FPs' multi-disciplinary, large and complex collaborative projects. FP projects where RTOs are active have a larger participation from industry than projects without RTOs. Those trends are even more predominant in the current FP than in the last one as shown in the summary below. In Horizon Europe as in H2020, RTOs have a large share of projects for which they are coordinators.

(eCorda data November 2022)

EARTO members represent 1% of the beneficiaries, but receive **8,6% of the available funding**

Industry participation increases to 36% when EARTO members are involved in the project (27% when they are not)

EARTO members coordinate 1/3 of the projects in which they participate

EARTO members participate in large collaborative projects with on average **€6.2m EU contribution and 16 partners per project**

64% of the funding spent in Pillar II given to projects with EARTO members

25% of all Horizon Europe projects includes at least one EARTO members, and these projects represent 51% of HE EU funding.

Chapter 1 – Strategic Issues for Horizon Europe's Mid-Term review

In preparation of the mid-term review, EARTO would like to point out the following issues to be further analysed in the upcoming two years:

The need of proper analysis of the FPs evolution:
EARTO calls on the European Parliament ITRE Committee to launch with the EPRS a new study on the evolution of FPs. Indeed, the European Parliament Research Service's in-depth analysis done in 2017 was of great value for planning the changes needed in the next FP. Today, there is a clear need to properly and independently analyse:
1) The social and economic effect of the FPs' last structure change, from input to impact (i.e. merging ex pillars 2 (industrial competitiveness) and 3 (societal challenges) of Horizon 2020 in a single pillar with a very large scope and number of objectives, new pillars and new instruments),
2) The proportionality between single beneficiary instruments vs multi-beneficiaries (i.e. collaborative projects) and,
3) The proportionality between investment and impact coming from the instruments in the different TRL range. Such a study would also provide valuable inputs to the upcoming EC High Level Group for Horizon Europe Mid-term review/FP10 Preparation.

As a key RD&I stakeholder, we also have been approached by various EC-sponsored consortia running studies aiming to prepare the mid-term review. While we are very glad to provide inputs, we are concerned by the implications of and connections between the various studies as a whole package of preparatory efforts for the mid-term review. We have not seen any EC overview of those studies so far and would be glad to see if all issues of importance are covered by the planned studies while avoiding overlaps.

Instability of the RD&I Budget in the Multi-Financial Framework:
The instability of this budget is three-fold:
1) within the MFF, the EU budget is being re-discussed each year (i.e. we see a regular position from the EU Council to reduce attributions to the EU RD&I budget while the European Parliament is pushing for an increase in the negotiations),
2) within the EU FP budget itself, there has been many changes in budget allocations proposed every year, and
3) within the current EU budget, the pressure to re-allocate the FP budget to new top-down EU policies looking for budget without bringing additional funds (i.e. EU RD&I budget is the main EU fund accessible then as most of the EU budget is re-allocated to MS with the largest share of the EU budget allocated to ESIF & CAP).

Such budget instability is detrimental to RD&I investments by beneficiaries which are largely co-funding EU RD&I programmes like RTOs and Industry and are based on medium to long-term investment strategies. In addition, without such EU RD&I investments, the targets set for the European Research Area will not be reached.

Increasing Distance between the Implementing Agencies & the Policymaking's Services:
EARTO is concerned that the feedback loop that should be organised between the executive agencies managing the implementation of the FP and the DG services managing the policymaking is not ensured. Services are getting further decoupled thereby leading to inadequate policy development and programming development. This implies that the elaboration of future Work Programmes should better consider what is happening in already funded projects and projects should be led with a minimum of flexibility to adapt to change in policies). In turn, there should be improved guidance/directionality during the projects implementation in order to produce the expected impacts and contribute to the policies objectives.

Synergies between EU Funding Programmes having RD&I Components:
Good synergies between the various EU and also national/regional R&I programmes reinforce the potential to bring R&I to effective implementation in our society. Today, with the creation of various new EU programmes in this current MFF period, beneficiaries are now facing a multitude of programmes each with its own rules for participation. There is the need for creating a streamlined pathway from research phase to close to market deployment between the various programmes & instruments developed. A Synergies Mapping Tool would help addressing global challenges with the maximum overall impact, with practical guides to connect and combine the dots along the various programmes and along the TRL trajectory.

Today, beneficiaries are not able to analyse easily what activities take place in which programmes: This does not help synergies between programmes and would be a key issue to circumvent overlaps and gaps between these programmes. Indeed, currently, there is not one participant portal and database (ie. merging current databases eCORDA, SEDIA) for all programmes with RD&I related activities (i.e. HE, Digital Europe, European Defence Programme, Space Programme, EU4Health programme, Innovation Fund, I3) that would allow beneficiaries to analyse their participation in the various programmes. In turn, bringing visibility to the complementarity between the EU programmes and even instruments within a programme would help to further harmonize work and make it more impactful (for e.g. by adding cross-references between programmes in WPs).

New programmes (e.g. Digital Europe, European Defence Programme) allowing for national or other types of co-financing are bringing an added layer of complexity for proposal submission and project implementation. To ease this process, the EC could provide extra guidance, training and support to national funding agencies to facilitate comprehension of the coherence among the various requirements and processes for co-funding (e.g. EC guidance for synergies with FP/ESIF).

Chapter 2 – Analysing the Current FP's Structure & Instruments

When looking at the current Horizon Europe structure and instruments, EARTO would like to point out the following issues per pillar:

Pillar 2 Issues

Balance of TRLs levels to allow Proper Portfolio Management:
The need of economic recovery combined with 1) the new structure with an all-inclusive Pillar 2 with no separate KETs programme, 2) the capping of partnerships' budget in each cluster, and 3) the fact that all topics related to a partnership (incl. low TRL research) must be included within said partnership, have led to an inferior coverage of the lower TRLs for collaborative applied research in Clusters. There is a need to rebalance the TRLs' coverage to allow for the planning of future RD&I portfolios for the next FPs as well as to analyse the impact of the new capping of budgets on partnerships on said TRLs' balance in order to better programme for the next periods (i.e. this should be included in the overall review of the FP as mentioned earlier). This is a key issue for the next Strategic Plan 2025-27. Collaborative projects with low TRLs are essential for cutting-edge research to increase long-term impact on societal challenge.

Moreover, in the current FP's implementation, EARTO members noted discrepancies between the type of action (RIA, IA, CSA) called in the work programme versus the TRL level called for in the call text of the said action demonstrating a seemingly poor use of the TRLs as a programming tool (i.e. this is a recurrent concern that already led to EARTO paper explaining the TRL ladder).

Balance between Smaller vs Large Collaborative Projects:
The size in terms of funding & partners participating as well as the complexity of the projects have both increased in the transition from Horizon 2020 to Horizon Europe. Clear feedback is: this has not lead to efficiency. It has led to a more complex coordination of the projects and increased administrative burden. The risk is that collaborative research become cooperative research with duplication of activities among projects from the same calls/area (e.g. mapping, impact assessment frameworks, gap analysis, state of art). This trend of imbalance towards too large projects that devour too many resources during proposal preparation and project execution needs to be tackled in the next Strategic Programme. A better balance between large projects with a broad value-chain prospective and small projects with a narrower technology development angle should be found.

A possible solution could be to restore the possibility of smaller research-industry collaborative applied projects of 3 years duration for faster targeted developments which allowed consortia to work in a more focused way on specific thematic areas led by the industrial partners or in anticipation of scientific and technological needs. The STREP projects could then lead to larger and more complex collaborative projects and demonstration projects such as the current RIAs and IAs.

Launching New Pilots on Technology Infrastructures (TIs):
As highlighted in our joint Paper, EARTO would like to stress the importance of ERA Action 12 launched by the Members States and the European Commission under the European Research Area's framework. EARTO is very much looking forward to the launch of new pilots by the upcoming Advisory Group on Technology Infrastructures following the model developed by the Pilot on TIs on aeronautics. Calls like INNOSUP and OITBs Calls as well as the new TEFs Calls under Digital Europe have already initiated further efforts in other industrial sectors. The next step is now to coordinate the development of such pilots within the different clusters and partnerships within Horizon Europe.

Evaluation of the EU Partnerships:
In some clusters, a better balance between co-funded and co-programmed partnerships should be aimed for. Moreover, in the partnerships that require co-funding, the known problem of the organisations in Member States that do not participate in the co-funding is still present in the current FP. One added layer in the current FP is that with the new Single Basic Act (SBA) developed for the Joint Undertakings, every JU still has their own funding mechanisms and rules for participation.

Evaluation of the EU Missions:
Considering the large delay incurred in launching those missions, and looking at their first calls, it is unclear at this stage whether the EU missions will be able to deliver impact. Indeed, their first calls seem to be:
1) Financing the implementation of already existing solutions by regions and cities which could very well be financed by the structural funds (i.e. with no RD&I component),
2) Or looking at the coordination of efforts that could be better done by already existing instruments avoiding unnecessary duplication of instruments, such as the EU partnerships (by e.g. by supporting different partnership's coordination via financing well-though CSAs providing stakeholders with the proper means to organise such coordination' efforts).

EARTO advises forgoing the start of any new mission under the next Strategic Plan 2025-27 and taking the time to remodel the current missions' governance to clarify the expected role and impact of this instrument. EARTO has already provided recommendations on those missions that we believe are unfortunately still applicable today. EARTO members have a broad experience in mission-oriented policies at the national and regional levels that is largely underused for the implementation of the EU Missions. This could be brought forward to improve EU portfolio management focused on a particular thematic transformative innovation policy.

Pillar 3 Issues

Evaluation of the European Innovation Council:
EARTO members voice their disappointment in the current running of the EIC Pathfinder and Transition programs, a much-awaited instrument for RTOs, especially as an instrument to create or develop deep-tech start-ups. EARTO and other RD&I Stakeholders' Joint Statement noted various issues in the new Model Grant Agreement's Intellectual Property Provisions that we anticipate will affect the low participation of RTOs and their spin-offs into the EIC which is already not so high as seen in our first analysis. It should be noted that our analysis does not show the results so far of the EIC Accelerator (i.e. data not yet available in eCORDA due to the various delays incurred in this programme).

Members who applied to the EIC Pathfinder & Transitions also noted the difficulty:
- Striking the right balance between "radically new technology" and "sufficient evidence" for translating the proposed innovations to future market translation.
- Showing the link to previous EU funds for the transition which seems to be limiting RTOs applications: here the links between the EIC instruments and the RD&I done under Pillar 2 clusters should be further developed. The EIC Transition could be opened to the results of EU projects completed for more than 24 months, as this can provide a sufficient timeframe needed between the end of a EU project and the opportunity to valorise them. This may require an increase of the EIC Transition budget to allow for more applications.

EARTO also hopes that the EIC Accelerator will remain a tool to support investment in high risk/high potential start-ups and not act as a standard financial investor.

Evaluation of the European Innovation Ecosystems:
The EIE is currently a programme that aims to create more connected, inclusive, and efficient innovation ecosystems and support the scaling of companies through best practices. It neglects the role of research and technology infrastructures to support and orchestrate research and innovation ecosystems. The aim of EIE could preferably be to increase the integration of projects' results funded under the Pillar 2 clusters. It could then focus on having the key target to localise the applications in regional ecosystems.

Pillar 1 Issues

Mobility of Researchers:
Pillar 1 has various instruments aiming at the mobility of researchers across the different member states and cross sectors. EARTO has already pointed out in its last position paper various issues linked to EU regulations impairing such mobility. EARTO calls on the EU DG R&I services to take stock of such issues and take the lead in discussing with the other EU services in charge of those regulations to look at practical solutions. The aim is to avoid that the researchers' mobility instruments (such as Marie-Curie grants) would not be effectively implemented by RD&I actors by employment regulations hinder their participation.

Research Infrastructures:
In the Research Infrastructures programme, the European Commission, via the INFRASERV calls, is strongly encouraging communities to group together, resulting in an excess of partners in these projects. Fragmented funding of partners is the outcome in this case, limiting the leveraging effect of targeted research. In order to reduce burden to a certain extent, the EC could provide every financial option (cascade grants, generous subcontracting options, purchase of services) for projects to choose themselves their best-suited option and be able to reduce the administrative burden.

Furthermore, the infrastructure networks that were launched under Horizon 2020 no longer have the means to ensure their sustainability as networks. Additionally, the removal of integrative activities represents a threat for European competitiveness. In addition to supporting access to infrastructures for researchers, it also allowed for diverse research activities aimed at improving the performance of research infrastructures. As such, we recommend that integrative activities are maintained.

Evaluation of the Widening Activities:
The innovation gap within the EU has not vanished, so ensuring that proper funding instruments are in place to support widening countries is still needed. Strengthening the support of activities that contribute to a successful participation in the current programme, including COST, has been an important and positive change in Horizon Europe, however it is far from sufficient. More than just strengthening the participation in the current programme, the EC should look at improving its support to Widening countries' RD&I capabilities. EARTO recommends a further look at funding schemes aiming to help the capacity-building of the research institutions based in widening countries, especially in view of further developing those countries' applied research capabilities.

Among the Widening measures, the Hop On instrument needs attention and reconsideration of its conditions. Although this instrument is based on an inclusive approach, there are some obstacles to its practical implementation. EARTO Members on both side of the consortia trying to use the Hop On described serious hurdles in finding ways to include a new "Widening" participation after the proposal's approval. Matching a well-developed structure with a potential new participant may require the elaboration of a user-friendly networking system, that may include platforms, events, tools and/or a database.

Chapter 3 – FPs' Simplification: A Non-evidence for Beneficiaries

As noted in our preliminary answer in last July's consultation, there are several issues regarding Horizon Europe's current implementation that should (still) be solved quickly.

Annotated Model Grant Agreement (AGA):
It is simply not acceptable that beneficiaries are still missing the complete non-draft version of the Annotated Model Grant Agreement while they are signing grant and consortium agreements. We understand the need of a coordination of efforts between various EU programmes, however this should not impact beneficiaries of the largest programme directly managed by the EC that is Horizon Europe. Apart from applicants and beneficiaries lack of this important guidance document also impedes the Research Enquiry Service and audits as well as beneficiaries' legal certainty in implementing projects.

Use of the lump-sums (LS):
The extension of lump-sum funding under Horizon Europe was not based on an evaluation that covered the whole lifecycle of the projects. While we understand this would be a simplification for the EC services, EARTO believes that the broader use of lump-sum funding is premature, especially for large collaborative research projects (especially, as our members experience a lack of genuine collaboration among partners in large projects working with LS due to too many WPs and isolated task responsibilities to minimize risks). EARTO along with EUA and CESAER already called (i) for caution on the interpretation of the interim analysis, and (ii) to await the final and thorough evaluation of the pilot.

In the current implementation of lump-sums, EARTO welcomes the EC new approach to finance also not finalised work packages at the end of the project. However, beneficiaries and projects' coordinators need sufficient written guidance regarding the necessary circumstances and how the EC will assess the percentage of fulfillment. Moreover, we would like to ask the EC to clearly attribute the payment of a work package with percentages to the different beneficiaries involved (i.e. not leaving it up to the consortium to distribute the funding among them). In this manner, the coordinator would have clear specification concerning the amount a single beneficiary would receive for a specific work package. This would avoid disputes among consortia members. In addition, EARTO would like to ask either for a simplified proposal procedure for lump-sums or for much higher success rates to align costs versus benefits in proposal making. Experiences show that presently, lump-sum proposals are too burdensome in the pre-award phase (e.g. increase length of the proposals).

Furthermore, the Lump-sum dashboard currently instructs experts' evaluators to request specific justification regarding personnel costs in proposals in case the 80 percentile is reached or exceeded. The amounts of the EC dashboard are currently checked by different stakeholders. EARTO already gathered its members' first feedback that is far from positive: the average median amount is much too low (e.g. already demonstrated by German, Dutch or Belgium research performing organisations). Therefore, the EC should quickly modify its instructions to experts' evaluators and update the amounts of the dashboard to the average employers' gross personnel costs. Against the background of very high inflation, reference-values become out-dated rather quickly and should therefore be adapted regularly. The Dashboard data clearly need to be quality assured along a defined process in order to prevent reference data to become outdated or wrong and therefore would lead to unfair and unequal treatment of beneficiaries.
Please see EARTO newly published paper on lump-sums for more details.

Increasing number of requirements in proposal:
There is an accumulation of requirements, each FP adding to the requirements and rarely removing any which increases the burden in project proposal preparation. Those requirements ranging from Gender Equality Plan (GEP), Data Management Plan (DMP), Ethics, Do Not Harm Principle, Open Science, etc. and all have justifications of their own. However, it should be recognised that they are increasing costs of proposal preparation and as such, overheads of EU projects. For FP10, there should be a proper evaluation of the requirements having a real effect/impact on proposals' quality and projects' implementation: Those which do not meet this criterion should be abandoned and any new additional requirements should be properly assessed before being added.

Technical shortcomings of the Funding and Tenders Portal:
There have been more problems related to IT related functioning within Horizon Europe calls than in the last calls of Horizon 2020. It seems that, even now, previous issues are still not remedied. Here proper collection of users' feedback by the EC IT services could easily identify those issues to allow finding and quickly implementing IT solutions. Messages via the Portal should be tailored to beneficiaries' needs. The LEAR of an organization should also have a better view (reading access) of all current proposals and projects involving its organization with easy-to-use and downloadable database for a better monitoring of its organization participation to the programme. Moreover, the validation service should directly implement exceptions to the financial capacity assessment based on state guarantees and refrain from sending erroneous messages to beneficiaries.

Quality of the Evaluation:
The quality of Evaluation Summary Reports (ESRs) has been a recurrent issue over the last FPs. The issue is even more predominant in this FP with a lack of consistency and quality of the ESRs received by applicants. The fact that evaluation and related consensus meetings are held online may not help with improving the quality of the evaluations and their subsequent ESRs.

The EC has launched a new blind evaluation pilot. It is doubtful that such a system, which has already been tested in other programmes (e.g. COST) and has not shown its value, would be appropriate for the complexity of projects' proposal making for collaborative projects under FPs (see above Increasing number of aspects required in proposal).

Quality of the support from Agencies:
The level of support that coordinators receive from the agencies during the post-award phase (from the Grant Agreement Preparation phase on) needs to be streamlined between the different Executive agencies. There are, presently, tremendous differences in skills and availability of the support provided by agencies rending project implementation, even for experienced coordinators, a difficult and daunting task. This is especially true for the projects with special features such as cascade grants or trans-national access due to the lack of knowledge in the agencies.

EARTO remains ready to provide additional input on each topic mentioned above: our experts are available for further discussion with EU institutions to ensure the successful implementation of Horizon Europe and a proper preparation of FP10.

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