

EARTO Response to the public consultation on Community innovation policy

EARTO is the European trade association of the research and technology organisations (RTOs), a non-profit organisation founded in 1999. RTOsⁱ are specialised knowledge organisations dedicated to providing R&D, technology and innovation services in response to the major economic and social challenges of our time. EARTO groups over 350 RTOs, with a combined staff of 150,000, an annual turnover of €15 Billion, special equipment and facilities to a value of many € billions and more than 100,000 customers from the public and private sectors annually.

EARTO welcomes the publication of the European Commission Communication *Reviewing Community innovation policy in a changing world* and the opportunity to contribute to the debate on the future of Community innovation policy. We share the belief that research should be understood as a powerful tool to drive innovation, and that as such, it needs to be perceived as a means to an end. We strongly support the decision to adopt a strategic and comprehensive approach towards Community innovation policy, coordinating policies and instruments at all levels, and integrating supply-side mechanisms with demand-side policy, standards and regulations.

The role of RTOs is essential in the context of a renewed innovation policy: RTOs perform "essential functions [in research and innovation systems at national and European level] that other R&D players (enterprises and universities) cannot reliably be expected to perform in sufficient quantity and quality, and with sufficient reliability, stability and accountability. Thus, in a general sense, RTOs are a response to perceived actual or potential market or systemic failures". They build bridges between basic research and industrial applications and are innovative and competitive problem-solvers for all sectors of industry and services.

RTOs are key partners of enterprises, especially SMEs, and provide R&D and technology services which help them grow and become more competitive. They also contribute to the development of industry through strategic high-risk, long-term scientific research and technology development, helping to find practical solutions to major societal challenges. As such, RTOs should be at the heart of a renewed Community innovation policy, one of the main goals of which should be to tackle the Grand Societal Challenges of our time while reinforcing the competitiveness of European companies.

The skills of RTOs and universities are also complementary and their long-term relationships are highly beneficial for both parties, which in turns puts RTOs at the heart of the Knowledge Triangle and the innovation eco-system. RTOs are therefore in a strategic position to provide comments on current and future Community innovation policy, due to their unique innovative role and their place at the heart of the innovation process. This paper outlines our views in response to the Commission's questions from the consultation document.

(1) Do you agree with the Commission's assessment of the main achievements and shortcomings of Community policies in support of innovation?

Improving Framework Conditions

One of the main achievements listed is the adoption of specific measures to improve the framework for SMEs, notably through the Small Business Act. As explained above, EARTO is in a unique position to comment on this given the strong traditional role of RTOs for the SMEs community. While EARTO welcomes the adoption of the Small Business Act, further changes would be needed in order to dramatically improve the general framework for SMEs, especially SMEs with a high-growth potential. Cutting red tape should continue to be priority and more should be done in this sense, starting with the Community's own research and innovation programmes. Extra funding is needed to stimulate innovation in high-growth SMEs.

With regard to the modernisation of EU's state aid rules, while we welcome their adoption as a big step, we need to highlight that the practical implications at implementation level of the new framework remain unclear. While the new rules set clear principles, how these principles should be applied and defined in practice is not so clear. This perception is shared by many Member States and national authorities responsible for the implementation of the new framework. EARTO has participated in the development of a Responsible Partnering Handbook, which contains a clarification note on the modernisation of EU state aid rules and its practical implications for companies, RTOs and universities, which we hope the European Commission could endorse and publicise¹.

<u>Incentives for a quicker and better market uptake of innovative products and services</u>

We share the view that the adoption of rules and standards have been and will be useful in fostering innovation. We particularly welcome the adoption of the SET Plan as a powerful driver for energy-related research and innovation. In this respect, it would be useful to mention that many RTOs support public policy through research and state-of-the-art advice, condition monitoring, certification and development of norms and standards, which makes us well aware of their benefits as innovation engines.

We also believe that demand-side measures are extremely useful in driving innovation. More should be done in this sense, particularly in the field of precommercial procurement. In this respect, EARTO advocates the creation of a European Small Business Innovation Research programme to support technology start-ups and young-growth firms. This proposal will be detailed later on iii.

<u>Increasing the overall coherence of the research and innovation system in Europe</u>

EARTO considers that it is absolutely essential to increase the overall coherence of the research and innovation system in Europe. The development of a European Research Area has been a positive factor in this respect, but much more needs to be done. The general governance and coherence of the ERA needs to be improved: there are too many instruments at the moment, not necessarily linked in a strategic and productive fashion. The mobility of researchers needs to be facilitated further and collaboration

¹ A revised version of the Responsible Partnering Initiative is available here: http://www.responsible-partnering.org/library/handbook-11.pdf. There is a specific section on State Aid Rules (section 7).

between different innovative players, such as companies, RTOs and universities, needs to be encouraged. In this respect, the unique role of RTOs in technology transfer and collaboration between the public and private sectors should be recognised. Much could be achieved by creating appropriate instruments to encourage the development of collaborations and strategic research alliances between different national and European players, for instance by encouraging the creation of joint research groups, such as the EERA^{IV}.

EARTO welcomes the Commission's call for increased coordination between national and EU policies and authorities. However, it will be crucial to insure that this is well coordinated and that all players play their part; this will be particularly important with regard to Joint Programming. Coordinated national instruments will not be sufficient to replace Community Funding.

With regard to IP rights, EARTO can only insist on the need to make progress on the Community Patent and unified litigation system agendas. This is an essential condition if we want to turn the EU into a competitive and innovative global player.

EARTO welcomes the introduction of the new public-private partnerships to reinforce collaboration on research and innovation. Achieving the ERA vision and the Lisbon objectives requires the constructive engagement of all key players: enterprises, RTOs, universities and public authorities at all levels. We therefore welcome the general principle behind these new schemes. However, if we take the example of the JTIs, the rules currently in place are not realistic and will discourage many relevant players, namely universities, RTOs and SMEs, from participating. EARTO has already pointed out that the 20% cap on funding of overhead, IP rules currently in place in certain JTIs and a funding rate representing less than 75% of eligible costs for RTOs, SMEs and universities with certain JTIs (such as IMI) are unacceptable. Moreover, the number of research and industrial communities likely to form as JTIs is probably limited: this will most likely only happen in relatively well-structured industry sectors or sub-sectors characterised by a few dominant players. It is therefore unlikely that all industrial research needs will be addressed using these instruments.

Finally, we support the creation of the EIT and believe that all actors must work to ensure its future success.

Stepping up financial support for research and innovation

We welcome the Commission's ongoing efforts to promote the complementary aspect of the different instruments and funding programmes available. More needs to be done in this sense.

EARTO considers that the increased budget for FP7 compared to previous framework programmes is a necessary but not sufficient improvement. Private sector coordination through the ETPs^{vi} has proved useful, but more strategic collaboration is needed, to counter-balance the narrow focus of the ETPs which might lead to the creation of a "shopping list" of research priorities. The ETPs are not necessarily the most appropriate channel if we want to stimulate the development of disruptive technologies.

With regards to SMEs instruments, EARTO considers that the current dedicated calls to support SMEs are useful. However, the 15% criteria for minimal rate of participation from SMEs in FP7 calls should be reassessed, as this is not necessarily an appropriate tool to stimulate SMEs' involvement in FP7 projects.

With regards to regional policy, the reorientation of structural funds towards innovation goals is most welcome by EARTO. However, the current reimbursement rules in place are not helpful for RTOs: the limit of 20% of direct costs of an operation to calculate the flat rate for indirect costs does not represent the real cost of overhead activities for RTOs.

Finally, we consider the level of funding under the CIP to be very low; extra funding is needed if we want this programme to have a real impact on innovation.

Scope for progress

EARTO believes that there is still much scope for progress in several areas not mentioned above. We agree with the Commission on the need to foster a policy and regulatory framework that promotes globally competitive industries and rewards investment in research and innovation. On the research side, this needs to be done by promoting strategic alliances, as mentioned above, and providing incentives for the establishment of longer-range strategic research programmes. It also needs to be done by investing in tomorrow's technologies and by providing appropriate funding for applied research aimed at solving practical problems among firms not necessarily operating in high-tech sectors.

We welcome the recent Communication on key enabling technologies. We believe that it is crucial to use research and innovation funds in a strategic manner, and this is the first step.

With regard to simplification of EU funding instruments, while we welcome this in principle, we want to highlight that recent reforms supposed to simplify EU funding instruments have only managed to add complexity and red tape to the process^{vii}.

(2) Should EU innovation policies have a stronger orientation towards addressing major societal challenges? If so, which ones should be prioritised?

We welcome this orientation of innovation policies towards addressing major societal challenges. EARTO believes that research and innovation policies need to be strategically focused and that we need to encourage applied research. RTOs are well placed in this respect, as explained above. These challenges must be defined clearly and wisely, with sufficient flexibility to cover most strategic research needs. They must be driven firmly with a top-down approach.

(3) Should innovation policy have any specific sector approach? If so, which sectors should be supported and which specific policy measures should be developed?

EARTO is in favour of thematic approaches around Grand Challenges, following the example of the SET Plan. However, the choice of sectors is a political decision.

Questions (4) and (6)viii

The new approach towards policies in support of innovation and the changing conception of innovation mean that the current research policy is no longer sufficient or appropriate. EARTO considers that many of the points raised could be addressed by

setting up a European Strategic Technological and Applied Research Council (ESTARC), as a pendant to the ERC^{ix}.

Such a body could complement existing instruments to encourage the development of strategic research alliances between key innovation and R&D players and support technological development and economic competitiveness. This last function should be performed, inter alia, by investing in tomorrow's technologies, supporting innovation in services and non high-tech sectors and stimulating the growth of innovative start-ups and high-growth SMEs through a European SBIR programme. Strategic Research Alliances could consist in bottom-up networks of R&D actors (small and large companies, RTOs, universities) that would engage in strategic, multidisciplinary, long-term (5 to 7 years) research, focusing on societal challenges, supporting existing ERA initiatives when necessary – as the EERA supports the implementation of the SET Plan. These alliances would fit in well with the new concepts of open innovation and would allow for mutual learning processes, between actors from different sectors and different countries.

Questions (5), (9) and (10)*

EARTO would welcome the adoption of further measures to unleash the full innovative potential of SMEs. Much of this can only be done by improving access to finance to innovative SMEs and entrepreneurs. The European early-stage finance market suffers from important structural deficiencies, the result being that there is a serious lack of very early stage finance for start ups and innovative SMEs. The European VC industry seems to have moved strongly towards private equity and away from risk capital, with a preference for short-term investments in under-valued companies and successful exits within two or three years rather than strategic longer-term investments into promising innovative companies. More risk capital is certainly needed for innovative SMEs and start-ups, such as RTOs spin offs.

This problem of access to finance could be somewhat counterbalanced by a better exploitation of the potential of public procurement to foster innovation. EARTO strongly supports existing policies going in this direction. This could be further improved with the creation of a European Small Business Innovation Research (SBIR) programme, following the model of the successful US scheme. Such programme could be managed by the proposed ESTARC (please see above). ESBIR could target early-stage start-ups, including spin offs from RTOs and universities, and offer support in the successive stages of developments, from start-up to market launch. Following the US model, grants could be awarded in the start-up phase, low-interest loans in the development phase, and no financial support in the market-launch phase, while projects would nevertheless benefit from "labelling" which can serve to attract external funders, such as venture capitalists. Such a European-wide scheme would facilitate broad competition among the best proposals, with a critical mass of proposals and programme management competence that smaller countries and regions would be unable to achieve on their own. *i

More generally, EARTO strongly supports the general principle behind demand-side policies and considers that they are essential in stimulating innovation. We therefore support the implementation of the Lead Markets Initiatives and call on the Commission to extend this initiative to other sectors when relevant.

(11) How could the Community funding programmes for innovation, including FP7, CIP and Structural Funds, be simplified and streamlined?

EARTO considers that there is a clear need for simplification². However, recent reforms in this direction have not been helpful – quite the opposite. Reforms in the ways to calculate costs are not helpful – for instance, our research shows that most RTOs cannot meet the certification criteria for average personnel costs in FP7 projects. This is also the perception among other major players, such as universities, SMEs and large companies.

There is also a strong need to link the different instruments in a better way, by providing better governance for the ERA – there are too many uncoordinated instruments at the moment.

The general diversity in funding rules between different programmes is also not helpful and has only managed to create confusion. The different programmes are like a labyrinth for researchers; for instance, each JTI has a different funding and IP regime. EARTO would strongly support the adoption of FP7 rules in all programmes.

Audits would also need to be streamlined; at present, there are unacceptable disparities in the way they are conducted and in the way rules are applied across programmes and themes. EARTO would also like to point that changing rules or applying rules retrospectively while in the middle of a programme or evaluation is not helpful and creates additional problems. A good balance between the need to control the use of public funds and greater flexibility also needs to be found if we want to preserve the attractive aspect of the various programmes. The current "climate of distrust" is not helpful. Finally, there is a more general problem of unreliability of funding: the numerous checks and rules, all interpreted in different ways, makes Community schemes less reliable as a source of finance. This is particularly important for RTOs given their funding model: the ability to rely on a certain level of reliable core funding is essential if RTOs are to pursue their mission, i.e. to conduct strategic innovation, research and technology activities which will bring practical solutions to the Grand Challenges of our time.

Concluding remarks

EARTO acknowledges the progress which already took place in research and innovation policy but insists on the need to transform the current system and instruments more radically in order to truly enable innovation and long-term sustainable growth and meet successfully the Grand Societal Challenges. This can only be achieved by truly integrating existing instruments and by driving innovation through strategic policies to improve the existing framework, remove extra burden for innovative players and encourage strategic alliances and joint thinking between all relevant actors (enterprises, RTOs, universities and public actors at all levels). This will also be done by truly simplifying existing instruments and by pooling and coordinating resources efficiently. The potential of demand-side policies and public procurement should be fully exploited. Our response to these challenges is presented in the ESTARC paper attached to our response to this consultation.

ⁱ EARTO defines RTOs as organisations which as their predominant activity provide research and development, technology and innovation services to enterprises, governments and other clients.

This argument is further developed in an appendix to the EURAB report *Research and Technology Organisations (RTOs) and ERA*, DG Research, European Commission, 2005

iii Please see our reply to questions 5, 9 and 10

² Please see the presentation given to the ITRE Committee of the European Parliament on 10 November for a more detailed answer to question 11: http://www.earto.eu/publications/

http://www.earto.eu/fileadmin/content/03 Publications/2008 04 01 IMI IPRStatement.pdf

http://www.earto.eu/fileadmin/content/01 Seminars Conferences/AC 2009/ChrisHUII PROPOSAL FOR A EUROPEAN STRATEGIC TECHNOLOGICAL AND APPLIED RESEARCH COUNCIL ESTARC.pdf

^{iv} European Energy Research Alliance – its key objective is to accelerate the development of new energy technologies by conceiving and implementing joint research programmes in support of the SET Plan. http://www.eera-set.eu/

^v Please see the EARTO declaration on funding models of the JTIs: http://www.earto.eu/fileadmin/content/04 Newsletter/Board 20 overheads final 2008.pdf and the EARTO statement concerning the IP policy of IMI:

vi European Technology Platforms

Our view will be explained in greater detail in our response to question 11.

⁽⁴⁾ Do existing instruments to support innovation need to be adjusted to reflect the changing nature of innovation and integrate new innovation patterns (services innovation, open innovation, user-driven innovation etc...)? and (6) What are the implications for research policy of the changes needed to policies in support of innovation (e.g. the goal of addressing major societal changes, etc ...)?

For a more detailed presentation of ESTARC, please see the EARTO Proposal for a European Strategic Technological and Applied Research Council (ESTARC):

x (5) What are the most important remaining obstacles for the EU to unleash its full creative and innovative potential, in particular through innovative SMEs? - (9) What could the EU do to provide adequate access to finance to SMEs and entrepreneurs? And (10) Could the EU contribute to exploit the innovation potential in public services? For a detailed presentation of the ESBIR scheme, please see the EARTO Proposal for a European Strategic Technological and Applied Research Council (ESTARC):