Das Land Steiermark

➔ Economic Affairs and Innovation

Opinion of the Economic Department of the Government of Styria
on the Green Paper of the European Commission “From Challenges to Opportunities: Towards a Common Strategic Framework for EU Research and Innovation Funding”

In the framework of the European consultation process regarding the future of EU research and innovation funding, the Economic Department of the Government of Styria (Department 14 – Economy and Innovation and Styrian Ecomomic Development Agency – SFG as regional point of contact for the Seventh Research Framework Programme) gives the following opinion on selected issues arising from the above-mentioned Green Paper that, in its point of view, are relevant to its work and customers. This opinion focuses thereby on the questions of the European Commission to the Green Paper on a common strategic framework for EU research and innovation funding.

Question 1:
How should the Common Strategic Framework make EU research and innovation funding more attractive and easy to access for participants? What is needed in addition to a single entry point with common IT tools, a one stop shop for support, a streamlined set of funding instruments covering the full innovation chain and further steps towards administrative simplification?

Firstly, all stakeholders must be made aware of the advantages of a common strategy in a manner that all parties concerned from the highest political level to SMEs and the citizen not only understand the EU value added but also perceive a benefit on a personal or organisational level. As long as this is not achieved, all parties concerned will place priority on getting the highest possible benefit for themselves or their organisation in their work before an abstract EU value added of a common strategy.
Only if these advantages become apparent and perceptible to oneself or one’s organisation it is possible to motivate the concerned parties required for the implementation of the strategy to actually implement the necessary measures for the realisation of a common European strategy in their own field of competence.
In parallel to this, it is naturally reasonable to attend to issues of simplified programme mechanics and administration. In this discussion, however, it must be ensured not to lose sight of the big picture of all concerned parties’ benefit entitlement and not to lose oneself in technical details.

Question 2:
How should EU funding best cover the full innovation cycle from research to market uptake?

Firstly, competition law conditions must be created so that projects that serve to bridge the innovation gap between classical R&D and Innovation can also be promoted. As long as the transformation of R&D results into marketable products is not put on a par with the classical R&D in terms of competition law, the incentive to strive for a transition to the market is greatly undermined by the high risk of the required conformity with competition rules.
Instead, particularly research institutions that in most cases are the coordinators of projects focus on new R&D-specific problems. The consequence is that many research results are not introduced into a particular application area and disappear in the proverbial drawer, because the incentive to attend to new problems with public support is much greater than to continue conceptualising an idea up to its marketability or to the finished product. Ideas lie fallow and thus Europe may miss out on ground-breaking innovations that could decisively improve Europe's competitiveness.
In this context, either projects in which innovation transfer is part of the global project or projects the specific content of which is the bridging of the innovation gap could be envisaged. Such a project could for example directly follow a research project – for the purpose of an extension for which an application for extension that does not require a high amount of effort has to be submitted. Also to make special calls for tender for project results and innovation ideas resulting from forerunner projects that were not implemented or to invite bottom-up for the submission of projects with the objective to transfer innovation from project results could be envisaged.

Question 3:
What are the characteristics of EU funding that maximise the benefit of acting at the EU level? Should there be a strong emphasis on leveraging other sources of funding?

Currently, grants result in the highest benefit for promotion recipients. And this will remain so until cash value preserving financial instruments have been developed that can be as easily administered and are as transparent as these above-mentioned lost grants.
Basically, instruments such as credits and liabilities, in particular, however, guarantees (e.g. deficiency guarantees for unrealised business profits or unrealised ROI) and risk capital would be weighty incentives to also activate more private funds and to come closer to the aimed for ratio of 30% public and 70% private funds in R&D&I. The key, however, is simple access. As long as it is - from an administrative point of view - easier to get grants, other financial instruments will remain less interesting to the majority of the organisations and particularly to SMEs.
Furthermore, in this context an EU-wide uniform regulation of the recognition of overhead costs should be implemented that would have to be markedly higher than 20%. An Austria-wide regulation currently exists in the EU Structural Fund area that enormously complicates the accounting of costs particularly of scientific partners, as their overhead costs are usually much higher.

Question 4:
How should EU research and innovation funding best be used to pool Member States resources? How should Joint Programming Initiatives between groups of Member States be supported?

In order to pool the resources of the Member States, the instruments "ERA-Net" and "ERA-Net plus" should be extended and intensified. These instruments have a great potential to pool the regional priorities of individual regions Europe-wide. Managing the launching of common calls for tender within the instruments, particularly of the "ERA-Net plus" activities, requires an as simple and uniform as possible structure (same rules for all project participants, coordinated provisioning) so that the access e.g. for SMEs does not represent an obstacle due to the different funding pots.
Clear and binding strategic guidelines on European level can facilitate programme planning on national and regional level and shift the focus to pan-European RTI.

Question 5:
What should be the balance between smaller, targeted projects and larger, strategic ones?

There should be a balanced proportion between smaller targeted projects and larger strategic ones. It must be considered that in the former, primarily short and medium-term growth of know-how should be induced in form of solutions to problems and that the latter rather deal with medium to long-term strategic coordination.

A higher involvement of SMEs in strategic projects is desirable, as early access to upcoming topics and key technologies can mean growth of know-how and thus also competitive advantages. But here, the role of the SMEs must be more clearly defined, as SMEs generally are more interested in short to medium-term implementations and do not act in forward-looking strategic dimensions the way major enterprises do.

Question 6:
How could the Commission ensure the balance between a unique set of rules allowing for radical simplification and the necessity to keep a certain degree of flexibility and diversity to achieve objectives of different instruments, and respond to the needs of different beneficiaries, in particular SMEs?

A radical simplification of the rules is to be welcomed in principle. Particularly for SMEs, the at times very complex EU framework of rules represents an additional obstacle. Here, in direct comparison with (non-)university research institutions and major enterprises, small and medium enterprises do not have the possibility to draw on "institutional know-how" and have to allow for a markedly steeper learning curve. Furthermore, there are usually less free personnel capacities in SMEs. The recently realised simplifications, in particular the implementation of fixed personnel cost rates and the fact that people without salaries such as e.g. SME owners can now assert their costs are an important step in the right direction. In this context, please also refer to the above explanations regarding overhead costs in Issue 3.

But the Commission is also required "not to reinvent the wheel", abandon all the rules and develop completely new ones in the conception of the next framework programme. It would be reasonable to critically evaluate all existing rules regarding their feasibility and to further simplify and optimise them and synchronise between instruments based on these results. Also a certain risk should be possible that is imminent to such projects.

Question 7:
What should be the measures of success for EU research and innovation funding? Which performance indicators could be used?

The question as to the success of EU funding for RTI can be discussed both at project as well as at programme level. It appears reasonable to in future place a stronger focus on output and, in particular, on outcome instead of on input-driven controlling and assessment instruments. This is of particular relevance if the focus of the future European strategy is to be on innovation – that is R&D results successfully implemented on the market – because it is above all the success of an innovation that determines its outcome and impact. But in this context also the regions are required to develop alternative contributions to an impact assessment of projects in the Framework Programme that go beyond "banal benchmarking" of monetary backflows.
At macro level, other indicators in addition to the classical performance indicators such as additionality, patent applications, publications, reaching of the relevant target groups etc. are to be developed.
Also at micro level, a rethinking process should be initiated and a stronger focus placed on project impacts.

Question 8:
How should EU research and innovation funding relate to regional and national funding? How should this funding complement funds from the future Cohesion policy, designed to help the less developed regions of the EU, and the rural development programmes?

EU research and innovation funding must be organised in a flexible manner so that regional priorities and development strategies can be taken into account in the framework of a European “regional development scheme“ (competence map). An adequate offer of "bottom-up" instruments is to be provided to this end. In addition, more and more new incentives should be created with EU co-financing so that regional and national funds can be used for cooperative cross-border projects. Thus a contribution can be made to accelerate internationalisation of regional actors, particularly SMEs. In addition, funds for regional innovation transfer of international research results are to be earmarked, made available and granted in accordance with Europe-wide strategic objectives and targets.

Question 9:
How should a stronger focus on societal challenges affect the balance between curiosity-driven research and agenda-driven activities?

To overcome societal challenges, the transition of research results to marketable products and services is of particular importance. To this end, additional new incentives must be created. These are to be implemented “systematically” and in instruments with a clear thematic structure.

The generation of new research results that contribute to the overcoming of societal challenges in the long run, however, requires a shift towards more flexibility and possibilities for curiosity-driven research. Furthermore, researchers should never be limited by thematically narrow targets, as particularly highly interdisciplinary approaches are in demand and valuable.

Question 10:
Should there be more room for bottom-up activities?

Bottom-up activities, particularly calls with open content, allow applicants to develop their own ideas and visions aided by public, e.g. European funds. These calls are very important to SMEs and small private research institutions. Such organisations mostly deal with niche topics and special fields that very often are overlooked in thematic calls for tender because they seldom appear on the radar of large industry and policy makers.
This is one of the main reasons why the contributions for a future Europe are so important because they mostly offer “out of the box” solutions to challenges and show alternative approaches to the industrial-scientific mainstream.
Therefore, bottom-up activities are to be expanded and in doing so it must be ensured that the project types particularly benefit the SMEs and small research institutions, i.e. smaller consortiums, smaller project sizes and, if necessary, also shorter project terms.
In the assessment of such projects it must be considered that often alternative approaches are proposed that are not consistent with the mainstream. Therefore, the evaluators must be prepared and instructed to that effect so that particularly such alternative approaches also get the chance to be developed.

Question 11:
How should EU research and innovation funding best support policy making and forward-looking activities?

Researchers can develop scenarios of the future and propose approaches to societal challenges detached from the developments of day-to-day and power politics. The funding of such inputs allows creating the prerequisites for important decision bases for policy makers.

Question 12:
How should the role of the Commission's Joint Research Centre (JRC) be improved in supporting policy making and addressing societal challenges?

A supranational research institution that offers scientific services in societally relevant areas outside of a national perspective is to be welcomed in principle (that e.g. finds compromises for conflicting national proposals). But the question of whether there is not the risk that the independence of the consulting provided by JRC with its political background could not be doubted due to institutionalisation and a direct relationship through the funding by the EU remains unanswered. Would not public calls for tender be more purposeful?
Furthermore there is the question of whether historical reasons alone justify that JRC carries out activities within the framework of EURATOM and whether a clear separation would not be the better approach. It will also have to be clarified how the synergy with the upcoming grand challenges should be organised to counteract the risk of duplication in research.

Question 13:
How could EU research and innovation activities attract greater interest and involvement of citizens and civil society?

Emotions and personal benefit or the fear of losing advantages are the key to an active involvement of citizens in every kind of political activity. A research and innovation communication oriented on these elements is a first step towards acquiring the interest of a wide public for these topics.
Banal sounding questions such as “How can I profit from this as citizen/father/mother…? or “Which positive/negative impact do activities have in this area or the renunciation of such activities on my personal living conditions” must be asked and answered in a clear manner in order to lay a foundation stone for an active involvement of everybody.
Only after the basic interest for questions of research and innovation has been awoken is it reasonable to present best practice examples (such as for example a road show “Innovation made in Europe“ showing the results of European innovation that make people’s lives better/easier/safer), as without such a basic interest the wide public would not take any notice of such events.

Question 14:
How should EU funding best take account of the broad nature of innovation, including non technological innovation, eco-innovation and social innovation?

This broad base of innovation is already explained in detail in the documents on the Innovation Union and adequate reasons have been provided for why it is necessary and reasonable to enlarge the concept of innovation.
What is required now is to bring in the funding and financial instruments to allow also promoting projects within this framework based on this broad concept of innovation. To avoid becoming too arbitrary regarding the possible projects, well resourced thematic calls can be issued along the issues of the grand challenges that explicitly call for solution proposals consistent with this broad base for innovation and explicitly refer to non-technical and social innovations.

In addition, there must be the possibility to apply for funding for bottom-up projects in the non-technological field, particularly in the field of social innovations – perhaps regarding yearly changing priorities with very widely formulated topics. This is the only way it can also be ensured that as many good ideas as possible in all important thematic fields required for a sustainable development of Europe get the chance to receive public funding.

Question 15:
How should industrial participation in EU research and innovation programmes be strengthened? How should Joint Technology Initiatives (such as those launched in the current Framework Programme) or different forms of 'public-private partnerships' be supported? What should be the role of European Technology Platforms?

The basic idea of bringing together stakeholders from R&D-relevant areas from different organisations in order to develop and implement long-term research strategies in key areas of particular importance to the EU is to be welcomed in principle. The Joint Technology Initiatives, however, still are of highly experimental nature. The interim evaluations show that on principle there is a participation of the major stakeholders. The participation of NGOs and GOs as well as SMEs (in sectors in which many SMEs are active), however, can by all means still be expanded. The conceptual design and development of SRA (Strategic Research Agendas) was completed satisfactorily; the main criticism concerns shortcomings in the implementation and the improvement of innovation-promoting measures. Also a critical look at the SET-Plan confirms: the interests of the large industry that considerably contributed to the development of the SET-Plan were accommodated with its implementation by the research agenda energy, but the concerns of the under-represented SMEs and NGOs were not integrated.
Therefore, we agree with the recommendations to review and refocus the strategies within the technology initiatives, to implement better monitoring processes, to ensure that also the voice of small stakeholders with less financial potential is heard and to strengthen the coordination activities.

Question 16:
***How and what types of Small and Medium-sized Enterprises (SME) should be supported at EU level; how should this complement national and regional level schemes? What kind of measures should be taken to decisively facilitate the participation of SMEs in EU research and innovation programmes*?**

The two key target groups within the small and medium enterprises, namely those with their own research capacities and those that have to purchase research in order to resolve technical problems, should be included in the Framework Programme as before. SMEs should have opportunities for the participation both in classical cooperation projects as research or exploitation partners and in the thematically open instrument “Research for SME associations”, specifically in the programme Capacities that should definitely be retained in this form.

Particularly for SMEs, a radical simplification of the rules (see also question 6) would result in a significant facilitation in the access to the Framework Programme. All in all, also an increase of the overall SME participation is to be expected from this.

National and regional measures should have a complementary effect and contribute to allowing so-called emerging companies the initial entry into RTI and should address relevant regional/national issues and priorities. Ideally, such aid should continue to be supported also by non-monetary services such as broad awareness-raising measures, information events, trainings and workshops as well as personalised advice and support in all matters regarding the application procedure and processing in the Framework Programme at regional and national level. In this context, the respective close-meshed support network in Austria with an efficient division of labour and balanced mixture of regional and national components can serve as best practice example for all of Europe.
The idea to merge the regional points of contact for the Framework Programme with the regional points of contact of the Enterprise Europe Network (EEN) is welcome. This is a development that has already been implemented in some Austrian provinces such as e.g. Styria and shown positive effects benefitting the customers.

Question 17:
How should open, light and fast implementation schemes (e.g. building on the current FET actions and CIP eco-innovation market replication projects) be designed to allow flexible exploration and commercialisation of novel ideas, in particular by SMEs?

These instruments must create the possibility to support smart, small and short-term projects. They must be characterised by clear, simple and easily manageable programme mechanics. In order to reduce the complexity of the entire funding landscape, certainly no new structures (access point, helplines) should be developed, but rather existing structures strengthened and enhanced (regional points of contact, EEN points of contact in the provinces).
Also the time to contact should be further shortened to allow flexible reactions to substantial changes in the market. Furthermore, additional exceptions to competitive law should facilitate the funding of innovation transfer. And these instruments should also increasingly initiate follow-up projects to classical research projects.

Question 18:
How should EU level financial instruments (equity and debt based) be used more extensively?

The objective must be that valuable and, from an economic point of view, important research and development projects are not doomed to failure for lack of financing. There is always a risk of failure if, on the one hand, insufficient equity is available and no investor is found to fully finance the project and, on the other hand, no provider of debt capital is willing to assume the financial risk.

That is exactly the area where EU financial instruments must step in, be it through guarantees for equity and debt or through equity surrogates (e.g. participations) or direct grants or loans. All these instruments must focus on the full funding of the project.

An extensive utilisation of these instruments can be ensured with:

- as simple and unbureaucratic programmes as possible

- a network of advisory and support bodies that make the available instruments known and provide assistance in the application procedure as well as
- a quick and comprehensible decision to grant the aid

Question 19:
Should new approaches to supporting research and innovation be introduced, in particular through public procurement, including through rules on pre-commercial procurement, and/or inducement prizes?

The realisation of a sustainable success of innovations particularly in politically and socially desirable areas that, however, due to their higher costs or non-existent lobbies have no or little chance of market success when entering the market (such as e.g. alternative energies, alternative products to synthetics, consumer and industrial products environmentally friendly and safely produced in Europe) requires public assistance. Within the framework of a Europe-wide innovation policy, the contributions that can be made by an innovation-friendly public procurement are, therefore, an important element.
But to this end, a clearly defined set of objectives must be prepared beforehand that stipulates in which areas such a procedure is politically desirable. Top priority of such endeavours must be economic and ecological sustainability.
As in times of shrinking government budgets, a general rule to procure sustainable but expensive products and/or services is not realistic, Europe-wide priorities must be developed and coordinated with the Member States. In this process it must be ensured that these priorities are adhered to at all levels, including the regional level.

Question 20:
How should intellectual property rules governing EU funding strike the right balance between competitiveness aspects and the need for access to and dissemination of scientific results?

A good legal system for the protection of intellectual property is the basis of an innovative economic region and a must for pursuing the Europe 2020 strategy. Only thus can it be ensured that companies and research institutions bear the costs and risks of research and development and thus contribute to achieving the objective of increasing research work to 3 % of the GDP by 2020. Particularly for the Europe 2020 strategy and in order to open up the entire European Economic Area to all organisations active in the field of innovation, the creation of a single EU patent incl. the related advantages (cost and time savings) becomes ever more important and should at all costs be strived for.
A well-thought protection system also serves as fruitful basis for the exploitation of intellectual property and can guarantee the competitiveness of the economic region through fairness. This allows firstly to create additional incentives to make available new research results and secondly to save costs for duplication in research amounting to several million Euros.

If the development of rights for the efficient economic exploitation of research results is not possible, the EU is required to ensure the dissemination of scientific results and make these available to society.

Question 21:
How should the role of the European Research Council be strengthened in supporting world class excellence?

This can only be about the cooperation between the Member States and the topic of where certain Europe-wide competences are pooled. These are highly political decisions that are difficult to influence at regional level (see the decision on the European Institutes of Technology - EIT and EU competence centres - KIC). See also the answer to question 22.

Question 22:
How should EU support assist Member States in building up excellence?

To assist Member States in building up excellence firstly requires identifying researchers and research fields in the respective Member States that already belong to or are on the way to becoming the best in their sector, using a highly restrictive approach. Then an excellence schedule should be developed within the framework of a pan-European strategy that has the objective to create European centres of excellence in the key technologies of the future by 2020. The number of the centres of excellence should be limited to avoid inflationary augmentation of topics and locations and allow a concentrated and sustainable development and operation. It must be clearly communicated that not all universities/research institutions will be able to participate but only those with a proven potential for excellence.
This excellence schedule must be coordinated with the national and regional research strategies to ensure that (potential) centres of excellence are supported and promoted by and at all levels to achieve this objective, namely to belong to the global leaders.
Within the framework of the excellence scheme, efforts should be made to pool Europe's best brains in their respective field in the centres of excellence to have a critical mass of excellent researchers at one location and thus to achieve also international relevance.

Question 23:
How should the role of Marie Curie Actions be strengthened in promoting researcher mobility and developing attractive careers?

On the one hand, more open rules for the financing of these Actions must be developed that ensure that there is no discrimination of researchers from individual countries due to regional or national particularities (e.g. collective agreements of researchers).
On the other hand, the exchange between institutions of science and economy must be systematically strengthened. Cooperative research projects between research institutions and companies can be supplemented by a mobility element allowing the exchange of research personnel within the framework of the project.
Finally, also the questions revolving around intellectual property rights must be clarified that arise in connection with such Actions, with a focus on the question of which solution is more useful for an immediate exploitation of such rights.

Question 24:
What actions should be taken at EU level to further strengthen the role of women in science and innovation?

These certainly include awareness raising actions that could be propagated more strongly e.g. with respective research awards. It could also be considered to make more investments in information for schools on the part of the EU.

Question 25:
How should research infrastructures (including EU-wide e-Infrastructures) be supported at EU level?

Research infrastructures can form the future backbone of the centres of excellence to be strived for. Therefore, they are a priori desirable. The development of large multinational research infrastructures, however, has been doomed to failure up to now because these were not assessed by the Member States on the basis of their strategic necessity but on the basis of the criterion whether they (should be) are located in their own country or not. As long as short-term national interests at political level are given priority of European interests, the discussion about such infrastructures is futile, because it is not realistic to assume that there can be such a major institution in every country.

Question 26:
How should international cooperation with non-EU countries be supported e.g. in terms of priority areas of strategic interest, instruments, reciprocity (including on IPR aspects) or cooperation with Member States?

The international cooperation with non-EU countries currently is completely underdeveloped (see interim evaluation FP7). To change this, more dialogue platforms should be initiated at first (e.g. BILAT-USA project). There, fundamental prerequisites – for example the protection and assertion of intellectual property rights – must be clarified. In addition, cooperation should be strengthened in the area of mobility of researchers, as this often initiates a stimulating knowledge transfer process. These mobility programmes should also increasingly address companies.

Question 27:
Which key issues and obstacles concerning the ERA should EU funding instruments seek to overcome, and which should be addressed by other (e.g. legislative) measures?

The effect of the promotional measures described above can certainly also be strengthened with fiscal allowances (keyword: research allowance/research bonus). Perhaps it would be reasonable to establish Europe-wide regulations also in this area in order to facilitate excellence.