

## **Statement of the Austrian Council for Research and Technology Development on the Work Group 5 package of measures: Research, technology, start-ups**

### **Background**

The Cabinet adopted an ambitious research package on 8 November 2016. Its objective is to achieve the goal defined by the Research, Technology and Innovation Strategy (RTI Strategy) of joining Europe's most innovative nations by 2020. In addition to structural reform proposals, the adopted package of measures also includes specific budgetary measures. With specific research funding (the Federal Government intends to invest a total of approx. EUR 700 million by 2021), these will create a leverage effect that will stimulate an additional approx. EUR 500 million in private investment in the research sector. On the whole a "research billion" is to be enabled here.

### **Austrian Council's Appraisal Of/Position on the Adopted Package of Measures**

The Austrian Council essentially welcomes the adopted package of measures for research, technology and start-ups. The Council believes this shows how the Federal Government affords greater importance to the topics of research, innovation and technology as key future-related factors for Austria than it has previously done. This is highly significant in that the key result of the Council's Mid-Term Review was rather sobering with regard to implementation of the RTI Strategy in 2015: In summary, the overriding goal of the Federal Government to join the leading innovation nations by 2020 was defined as not achievable. The reason for this appraisal was the insufficient implementation intensity of recent years. In its previous reports on

scientific and technological capability, the Austria Council has repeatedly pointed out and recommended that the measures of the RTI Strategy be implemented with greater emphasis to achieve the ambitious objectives. It has also urged the qualification of the objectives and specific budgetary provisions for individual measures several times. This was also addressed accordingly in the latest presentation to the Cabinet. All recommendations of the Austrian Council have also been accepted and proposals from its Performance Reports and its White Paper on controlling research, technology and innovation in Austria have also been incorporated. The Council believes this is all entirely positive.

In summary, the Austrian Council believes the adopted package of measures is beneficial and important. It includes the required specification of implementation steps to achieve the innovation leadership targeted by the RTI Strategy. However, it remains to be seen whether or not and when the intended projects will actually follow and whether or not the budgetary coverage required for this will be provided.

## **The Austrian Council's Position On Individual Proposed Measures**

The Austrian Council's position on some measures of the presentation to the Cabinet considered to be especially relevant is as follows:

### **1 Governance and framework conditions**

- **RTI Task Force:** The agreed upgrading of the RTI Task Force for implementation of the RTI Strategy is emphatically welcomed by the Austrian Council. The Council had already recommended this measure in 2013 in its White Paper and more recently as part of the Mid- Term Review in its Performance Report 2015. The Council believes a new policy development phase is required to achieve the goal of becoming an innovation leader. A package of reform steps must be pursued in place of the fragmented individual measures seen to date.

This package must be harmonised with the entire RTI system. This, however, also requires stronger political commitment and a higher degree of political energy. The Austrian Council therefore believes the planned annual sessions of the Task Force at political level, with which the results of operative activity will be discussed and a work programme for the next year will be defined are an important step in this direction.

- Coordination of preparation work for the RTI Strategy 2030, including OECD “Country Review”: The coordination of preparation work for an RTI Strategy 2030 is to be welcomed, but it is also recommended that this be performed in close coordination with the Austrian Council. The Austrian Council believes it must be ensured that the planned Country Review of the OECD actually results in findings that can be applied. A look at existing OECD Country Reviews allows us to conclude that primarily existing material is analysed and the findings will correspond with already existing studies and reports (such as the Austrian Council’s Performance Report).

We would therefore have to consider whether or not a deeper analysis in the form of a system evaluation would be a beneficial addition and enhancement. In this context, the evaluation of research funding in Austria addressed here and the amendment to the Federal Statistics Act are extremely important and therefore also to be welcomed.

- Cost-benefit analysis of a research funding database (in acc. with the Court of Auditors report on research funding in Austria (2016/8):

The Austrian Council already recommended the setting up of an all-Austrian research funding database in 2011. The goal here was extensive and transparently understandable documentation of all research funding by the Federal Government and the states in one standardised, public access database. This should also serve as the basis for meeting special legal reporting obligations (e.g. Report on Austria’s Scientific and Technological Capability, Research and Technology Report, facts documentation, reporting obligations within the framework of “Europa 2020”, etc.) and evaluations. Corresponding data is already recorded today by the respective funding institutions as part of their standardised data collection with all instances of funding. The Austrian Council therefore explicitly welcomes this proposal and will work intensively on the foundations for setting up a research funding database.

- Activate European subsidies: The Austrian Council has repeatedly referred to the problems with the EFRD and therefore welcomes all measures that would simplify and in particular increase legal certainty for research institutions.
- National Foundation for Research, Technology and Innovation: As part of its recommendation work, the Austrian Council has continuously called for the

long-term securing of the allocation of funds of the National Foundation in past years. This should now be secured immediately to guarantee the allocation of EUR 125 million annually originally intended by by the legislators.

- Improvement in the services of Austria Wirtschaftsservice GmbH (aws) and FFG/reduction in the fragmentation of programs: The Austrian Council welcomes the introduction of a transparent search option across all available aws and FFG programs and the planned expansion to funding by regional governments in particular. The targeted reduction in the fragmentation of the Austrian program landscape is especially positive. Coordination with the planned system evaluation appears expedient here, as this should also include conclusions on optimisation options.  
The continuous evaluation of aws and FFG is also considered positive. The results should in any case be taken seriously, published and rapidly implemented regardless of their critical content.

## **2 Expedite Innovation Basis**

- Increase in the allocation of the FWF science fund/reinforcing of institutional excellent research/funding human potential:  
The announced increase in funds for competitive funding of basic research by the FWF from currently EUR 184 million p.a. to EUR 290 million by 2021 is expressly welcomed by the Austrian Council, but Austria is indeed far behind the innovation leader average in allocating competitive research funds. A swift increase in funds is one of the most urgent measures required to support excellent researchers in Austria and to maintain Austria as an attractive research location. This is also supported with the announced funding of non-university excellent research and by the planned measures to fund human potential and the R&D infrastructure available in Austria.
- Innovation-promoting public sector procurement: The Austrian Council has already emphasised the importance of demand-side mechanisms to fund innovation and in particular public sector procurement in its recommendation of September 2016. Of the measures planned by the Federal Government in this area the Austrian Council believes the introduction of a procurement training course and the targeted improvement of the data situation must in particular be singled out. These points were also key stipulations of the Austrian Council's recommendation in this respect.

### 3 Support Digital Transformation

- **Broadband/5G strategy:**  
We are poised at the beginning of the 4th industrial revolution – triggered by the digital revolution and the technological development boost it has initiated. The Cabinet therefore believes that innovation leadership can only be achieved on the basis of appropriate foundations in the area of digitalisation and the Internet. The Austrian Council expressly welcomes measures in this respect, such as the ongoing “digital offensive” for broadband expansion or the 5G strategy currently being prepared, which are announced in the presentation to the Cabinet.
- **Endowed chair for the digitalisation of production systems:**  
Basically an increase in the number of professors, especially with research focus on the digitalisation of production systems, is very welcome, but sustainable securing of funding is considered essential. As these are temporary professorships and the term is 5 years, the consequences will this have for the universities?

### 4 Broader Access To Innovations

- **Open-theme innovation workshop:**  
With respect to the planned setting up of “living labs” and open-theme innovation workshops, the Austrian Council welcomes the explicit consideration and support to date of less innovation-active players.
- **Impact Innovation Program:**  
The early consideration of customers and customer requirements in the innovation process, especially in combination with social innovation aspects, must also be positively emphasised.

### 5 High-Risk Research

- **Frontrunners and Early Stage/1000 Ideas Program:**  
The increased funding of especially risky projects has long been an issue for the Austrian Council and it is also reflected in its various recommendations. While with the Frontrunner Line we can assume fewer high-risk projects, there are definitely more with the new Early Stage Initiative or the planned 1000 Ideas Program of the FWF. The Austrian Council therefore supports the appropriate initiatives and recently referred to their relevance for the domestic RTI system.

## **6 Boost the science-economy interface & start-ups**

- **Research investment fund – Uni-Spin-off Fund:**  
For several years now the Austrian Council has highlighted the insufficient interaction between public sector-funded R&D and private equity capital. It therefore welcomes the planned initiatives in this direction to leverage private early-phase capital for uni spinoffs and start-ups.
- **Creation of an Austrian private equity growth fund:**  
The Austrian Council considers the tender of a “cornerstone investment” to create a private equity growth fund for scaling and internationalising start-ups to be especially positive. There is still an insufficiently covered funding gap in Austria here in particular. The intention to shape the tender so that the capital actually benefits Austrian companies and in particular is also administered in Austria to create more dynamic for the Austrian financial market in this area is also very welcome.
- **Prototype funding for knowledge transfer:**  
The Austrian Council already referred in its recommendation on knowledge transfer in November 2011 to the lack of appropriate Proof-of-Prototype funding to support the commercialisation of research results. This is also demonstrated in the requirements with PRIZE. The Austrian Council very much welcomes the fact that fresh money will be provided here to continue this initiative. Stronger link between economy and science/ COMET competence centres programme: The Austrian Council believes the intensification of the BRIDGE programme is a beneficial measure. The planned expansion of the funding spectrum to include social innovations is also positive. The Austrian Council also welcomes the realignment of the important COMET programme and the intended additional Call for C1 centres by 2018.

### **What Is Missing / Criticism**

- **No secured funding:**  
The presentation to the Cabinet forecasts that a total of EUR 700 million will be invested by the public sector by 2021. Specific research funding with higher leverage effect will also stimulate an additional EUR 500 million from private funding sources. At first glance this looks very promising. However, on closer consideration the package of measures is revealed to be pure dreams of the future, as the majority of

these funds will only be fixed for the years 2018 to 2021 with the next funding framework. Only 16.4 of the EUR 700 million are earmarked for 2017. And the chosen formulation of the presentation to the Cabinet goes even more drastically to the heart of the funding, because, as stated here: “As part of the work for the Federal Institute for Risk Assessment 2018 to 2021 the financial coverage of the measures mentioned above will be negotiated and checked.”

- No focus on universities:  
Approx. 80 per cent of basic research in Austria is done at the universities. International comparisons (with Germany and Switzerland in particular) illustrate that the Austrian universities are dramatically under-funded. As basic research is the foundation for all innovation, neglecting the universities is a massive problem. This factor – which was correctly recognised in Chapter 3 “Facilitate insight, accelerate excellence” – unfortunately is not taken into account with the presentation to the Cabinet. The budget for the 2019-2021 performance agreement period of the universities must already be defined by the end of 2017. The requirement for a first step towards implementing the study place funding at the universities alone is some EUR 500 million per year. All measures to increase the university budget must therefore also be included in the coming BFRG.
- No attention paid to the science-society dialogue:  
Chapter 5 “Provide steering, set framework”, in which the RTI Strategy deals with essential aspects of the structures and priorities at meta level (e.g. Grand Challenges or international positioning). The society-science dialogue, which has an important function with the general public’s attitude to research, is dealt with in this section with specific stipulations. In this respect specific references are missing in the illustration of the measures in the presentation to the Cabinet. References to RRI or Open Access, for example, would have been expedient. This is problematic because the Austrian general public is defined in all international comparisons and surveys as not very science-minded and above-average technology-unfriendly.