

Austrian Position Paper on "HORIZON 2020"

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Introduction

On the day the decision on HORIZON 2020 is taken, it will become the most important cross-border research and innovation programme in the world. It will offer more resources, topics and market opportunities than any other comparable programme in the past. With HORIZON 2020, Austrian science, research and innovation policy will be closely linked to Europe (Europe 2020 Strategy), which is why Austria wishes to position itself more than ever as an active and attractive partner in the European Research and Innovation Area. Austria and Europe are two sides of the same coin. The interaction of national and European measures shall contribute to prosperity, employment and sustainable development. In times of tight budgets, Austria shares the European Commission's approach of fuelling fresh money into the national research and innovation systems through HORIZON 2020.

The Austrian Federal Government attaches great importance to the negotiations on HORIZON 2020. Over the past weeks, numerous interest groups in Austria have followed the invitation of the Federal Ministry of Science and Research to present their views of HORIZON 2020. On the basis of more than 50 opinions from science, industry, society and administration, the most important issues have been identified which Austria would like to raise during the negotiation phase, starting in February 2012, with its partners from the member states, the European Commission and the European Parliament.

The Austrian position paper is based on the conviction that with HORIZON 2020, the European Commission has succeeded in presenting a carefully considered proposal which takes up many considerations already formulated by Austria in its "Reflection Paper on the Succession of the 7th Framework Programme" in December 2010. Thus, an important milestone is being set for the implementation of the European Research Area.

HORIZON 2020 should not only be the largest research and innovation programme in the world, but also the one with the best quality. The following Austrian issues are based on this requirement.

Favouring a Highly Effective HORIZON 2020

Austria welcomes the structure of the programme along the three pillars "Excellent Science", "Industrial Leadership" and "Societal Challenges". Austria also welcomes the approach of planning measures along the entire value chain of knowledge from basic research to introduction on the market. However, this results in new requirements for HORIZON 2020:

Issues	
1	Many issues can only be resolved through the connection of research, education and innovation. Austria welcomes the fact that investments into research and innovation up to the product will be funded. Interaction and permeability between the pillars will have to be guaranteed.
2	Both with regard to budget and to content, the interfaces between HORIZON 2020 and other Community programmes, in particular in the fields of education, innovation and cohesion policy, will have to be defined and laid down more clearly. The objective has to be the principle for these policies to intelligently complement each other, relate to each other and be linked with each other.
3	The member states need the possibility to combine HORIZON 2020 with regional or national initiatives at their discretion , for instance within the framework of Joint Programming, of European Innovation Partnerships, "Smart Specialisation Strategies", or within the framework of strategic consultations in the Programme Committee. For this purpose, HORIZON 2020 will have to provide coordination and incentive mechanisms which prevent the emergence of parallel structures in administration.
4	HORIZON 2020 will be more broadly (entire innovation chain) and more multi-dimensionally (regional, national and EU level) designed than the 7 th Framework Programme. Therefore, particular attention will have to be paid to designing the implementation of the programme as efficiently and effectively as possible.
5	How coherent the programme is depends essentially on how professionally and comprehensively all parts of the programme are monitored concomitantly. This applies not least to numerous horizontal measures, for instance measures in favour of SMEs, socio-economic issues, non-technological innovations, or the gender-equality requirements for HORIZON 2020.
6	Networks beyond classical research projects (e.g. within the framework of the EIT, the EIPs, the SET Plan, FET-Flagships, PPPs and P2Ps) will take on an important role in HORIZON 2020. The activities of these networks will have to remain transparent and comprehensible both for the member states and for the researchers themselves. Austria suggests consultations on a tailor-made Code of Conduct for such networks. In addition, the roles, tasks and instruments within the framework of future European Innovation

Partnerships (EIPs) should be more clearly discernible for all stakeholders outside the EIPs.

- 7 The **Programme Committee** will have to be designed in such a way that it meets **in formations** that allow the relevant specialists from the member states to consult strategically according to the structure of the programme. The European Commission is invited to present a coherent concept on how the harmonisation between the different pillars and measures of HORIZON 2020 will be organised.

Creating an Excellent Science Base for Europe

Austria supports the first priority of HORIZON 2020, namely "Excellent science", both with regard to its structure and to its content. Enlarging the European Research Council will continue the ERC's success story and will open up new funding opportunities to Austrian top researchers. Funding the mobility and careers of researchers is an important field within the first pillar which should be given even more weight compared to the Commission Proposal. In concrete terms, Austria supports the following issues with regard to the pillar "Excellent Science":

Issues	
8	The European Commission will have to continue to safeguard the autonomy of the ERC comprehensively. Nonetheless the envisaged funding priorities of the ERC should be described explicitly in HORIZON 2020, even if they are applied later with the flexibility required.
9	The advisory role of the member states within the framework of the ERC is not sufficiently defined on the institutional level. The "Scientific Council" has as its task to inform the member states adequately regarding the strategic orientation and the work programmes of the ERC and to consult together with the member states on issues regarding the framework conditions of European funding for excellence.
10	It is important that, given a massive increase in funding in favour of the ERC, implementation also keeps pace. The Executive Agency will accordingly have to be organised efficiently for this task.
11	Austria is critical of the indicator of success for the ERC proposed by the European Commission which concerns the number of ERC-"inspired" policies in the member states.
12	Austria welcomes the reference to support for, and strengthening of, the implementation of the "European Charter for Researchers and Code of Conduct for the Recruitment of Researchers". Their voluntary character should be maintained and observed.

13	Regarding the " Marie Curie " measures, Austria rejects the proposal of increased co-funding activities between HORIZON 2020 and corresponding measures on the regional or national level.
14	The mobility platform EURAXESS should be continued in HORIZON 2020 and should be made adequately visible.
15	Austria supports the funding priority on "Future and Emerging Technologies" (FET) in principle; however, with regard to the proposed " FET Flagships ", it should be clarified how many of these are being planned to be implemented, and what their thematic orientation should be. For Austria, the importance of FET for later implementation of the technologies on the market is essential. For this reason, the transition towards the activities under pillar 2 should be carefully designed.
16	It should only be allowed to expand the ESFRI Roadmap when at least 60% of the existing infrastructure projects are being implemented.
17	Austria is in favour of a better geographic balance of research infrastructures in Europe. For this reason, Austria is in favour of the development of regional partner institutions in particular.
18	Beyond the ESFRI-relevant infrastructures, there are numerous smaller national research infrastructures in Europe which should be better linked with each other by means of HORIZON 2020. Austria explicitly welcomes the fact that research infrastructures will also be funded with a view to the innovation potential of industry.
19	An expedient link between the "Marie Curie Actions" and the research infrastructures could be created in order to enable researchers to use both measures simultaneously. This would correspond better to the "open access" approach. Nonetheless the excellence-oriented selection and access regulations for research infrastructures will also have to apply to "Marie Curie" fellows.

Turning Excellent Research Quickly into Relevant Products and Services

Austria welcomes the integration of research and innovation activities into one joint Framework Programme. While measures under the second priority "Industrial Leadership" address core areas of industry-related research and innovation, it is important for Austria to consider the application-oriented activities in all parts of HORIZON 2020 in addition. From Austria's point of view, HORIZON 2020 will have to contribute to increasing industry participation. Industry should be assigned a decisive role when shaping the content of the second pillar. In this context, Austria supports the proposal to increase funding rates in HORIZON 2020 to up to 100% for all participants, including SMEs. With a view to the second pillar, Austria underlines the following issues:

Issues	
20	The key technologies proposed are supported in principle. In the field of photonics, Austria suggests taking the development of quantum technologies into consideration. The Technology Platforms mentioned within this pillar should not lead to any duplication of already existing platforms.
21	Austria welcomes support for public procurement which encourages innovation in principle. In addition, the technological developments within this pillar will have to be linked systematically with the priorities under "Societal Challenges", not least from the point of view of social-science issues.
22	Many details regarding the measures envisaged for risk financing are still unclear at the moment and will have to be clarified in the course of the negotiation process. Within the framework of the Interim Evaluation, the issue of adequate funding for these measures will have to be investigated. The minimum entrance requirement for the SME-specific facilities should be kept as low as possible in any case. Funding for classical formations of enterprises which are not based on RTDI projects, and/or expansion capital of enterprises should not be provided from HORIZON 2020 funds. In this context, the interfaces with CoSME will have to be designed in such a way as to create synergies and avoid duplication.
23	Austria attaches great importance to the measures relevant to SMEs in all areas of HORIZON 2020. Austria welcomes the fact that the standards and framework conditions will make participation easier for SMEs. The proposed dedicated SME Instrument for the second and the third pillar of HORIZON 2020 should be designed in such a way as to make considerably more funds available for SMEs in total than in the 7th Framework Programme, without prejudice to national budgets.
24	Austria supports the "3-Phase Model" for SMEs in principle; however, its implementation should be as customer-friendly as possible. Austria suggests extending Phase 2 to the funding of non-technological and social innovations .
25	Research for SME associations should be firmly established in HORIZON 2020 appropriately, since this entails great European added value.
26	The importance of EUREKA and COST should be taken into account by an explicit reference in HORIZON 2020 expressing support for these important cooperation mechanisms. The relevance of EUROSTARS will increase in HORIZON 2020, a fact which Austria welcomes explicitly.
27	The admission of applicants to the SME-specific instrument should depend on the final volume of this instrument. Provided 15% of funds from the second and the third pillar are actually earmarked for SMEs, it could be considered to admit both "midcaps" (up to 1,000 employees) and SME associations as applicants or consortium leaders.
28	The role of the "Enterprise Europe Network" (EEN) in HORIZON 2020 will have to be more clearly defined, in particular with regard to its interaction

with the "National Contact Points" (NCPs). The objective has to be to offer the different services so as to make them as customer-friendly as possible.

HORIZON 2020 as the Driving Force for Overcoming Societal Challenges

The six topics proposed under the third priority "Societal Challenges" deal with research and innovation which should lead to concrete implementation measures in society. Austria supports the interdisciplinary approach that extends over the entire spectrum from research to market. During the negotiations, the individual challenges will be examined in detail. On the political level, Austria puts forward the following issues:

Issues	
29	The objective should be to concentrate the relevant research and innovation measures around a limited number of societal challenges . As a consequence, the topics proposed will have to be examined as to their coherence and – only in well-founded cases – should be restructured. In principle, Austria supports the areas mentioned in the proposal. Austria regards Joint Programming Initiatives (JPIs) as one of the essential implementation instruments of the third pillar. They will have to be funded accordingly under HORIZON 2020, with national participation in the JPIs to be decided by the member states on a case-by-case basis.
30	With regard to the challenge " Inclusive, Innovative and Secure Societies ", this coherence does not exist, from Austria's point of view. It is rather an accumulation of measures that were carried out under separate action lines in the 7 th Framework Programme. Austria cannot follow the inner logic of this challenge and is in favour of restructuring it. Security research issues should be dealt with under a separate societal challenge.
31	In addition to a restructured separate challenge in the field of social sciences and humanities , which also considers the area "cultural heritage", Austria would like to see this scientific field integrated into all societal challenges comprehensibly.
32	Within the societal challenges the connection to education-related research activities of HORIZON 2020 should be made explicit.
33	Austria welcomes the principles of the challenge concerning " Health, Demographic Change and Wellbeing ". Nonetheless, the proposed 16 individual measures should be structured more coherently. Austria will present a proposal for this in due course.
34	As regards the challenges in the field of " Secure, Clean and Efficient Energy ", Austria welcomes the implementation of its repeatedly expressed request to

strengthen and sufficiently emphasise non-nuclear energy research compared to nuclear research. However, Austria is against the funding measures provided in the field of nuclear energy under the SET Plan. From Austria's point of view, the potential of a nuclear-fission-free energy economy could also be investigated within the framework of non-nuclear energy research. In addition, Austria is in favour of continuing the programme "*Intelligent Energy for Europe*" in a suitable manner, independent of HORIZON 2020.

- 35** The *SET-Plan* will have to be **implemented** in such a way as to provide all member states with balanced opportunities for participating to their advantage. In this instance, Austria expects the European Commission to make concrete proposals how to promote fair and open access for all, and how to prevent closed clubs.
- 36** Austria explicitly welcomes the proposals in the field of **climate change and sustainable development** and states that they must not be diluted. It will have to be described comprehensibly how the target quotas of 60% of the budget in favour of sustainable development, and 35% for climate-related expenditure will be implemented.
- 37** As a horizontal measure, Austria proposes considering the creation of EU-wide **IP assessment standards** for scientific organisations, as well as an EU-wide harmonised monitoring system with regard to income from IPR. In addition, "**Knowledge Transfer Professionals**" should be trained according to uniform standards.
- 38** As one measure for implementation-oriented research, Austria proposes supporting the setting-up of enterprises on the basis of public research results ("**exploitation spin-offs**"). In general, the step from scientific research to application should be funded both for universities and research institutions (e.g. by "proof of concept").
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In Favour of Simple, Efficient and Effective Rules for Participation

Participants in the different EU programmes have been demanding the simplification of rules for participation and implementation rules for years. HORIZON 2020 is now setting a good example and is simplifying the conditions for participation, without, however, abandoning the control mechanisms required. Austria attaches great importance to an efficient and effective implementation of EU programmes, which is why Austria presents some issues for further improving the rules for participation below.

Issues	
39	Austria supports the proposals regarding the <i>simplification of the rules for participation</i> in principle. However, they can only be applied insofar as the EU Financial Regulation shares this spirit of simplification. The <i>selection criteria</i> (excellence, impact, efficiency) will have to be weighted differently within the different pillars according to the differing objectives. Austria is in favour of <i>continuity of the instruments</i> of the Framework Programme, with very large projects being the exception, not the rule, in HORIZON 2020.
40	Especially in the light of the simplifications proposed, the remaining <i>control mechanisms</i> will have to be particularly effective in order to guarantee the effective and efficient use of funds. The European Commission should make this connection visible in the negotiations.
41	In a joint effort, the European Commission and the member states should press for applying the <i>simplified rules for participation</i> and efficient documentation – as far as this is expedient – also to RTI projects for instance <i>in the field of cohesion policy</i> .
42	Austria welcomes the increased <i>funding rate of up to 100%</i> of direct costs of research projects as an important message to industry. However, calls in future will have to be target-oriented to such an extent as not to increase even further the over-subscription of programmes which is high already.
43	The <i>funding rate of up to 70%</i> of direct costs for projects close to market should be specified in such a way as to make it impossible for this to become an obstacle for the participation of science partners in such projects.
44	As far as the proposed <i>20% funding of indirect costs</i> is concerned, Austria suggests providing non-profit oriented organisations with the option to account for the actually incurred indirect costs.
45	In the field of <i>Intellectual Property Rights</i> , Austria recalls the high relevance of the “IP Recommendation” (“Recommendation of the European Commission on the management of intellectual property in knowledge transfer activities and Code of Practice for universities and other public research organizations”).
46	Austria proposes formulating <i>minimum requirements for a consortium agreement</i> , as in the 7 th Framework Programme.

The Joint Research Centre Serving HORIZON 2020

For many years, the Joint Research Centre (JRC) has been carrying out important research for supporting the various European Union policies. Its expertise is acknowledged by Austria. Its orientation towards the objectives of HORIZON 2020 is welcomed explicitly. For the negotiations Austria proposes several key points for the JRC:

Issues	
47	If the regulations concerning the budget review following the Interim Evaluation apply, Austria is in favour of all areas, including the JRC , to be eligible for a reallocation of funds.
48	The JRC should explain conclusively how it will use its orientation towards the objectives of HORIZON 2020 for adapting its internal procedures and structures , rather than regarding the proposed increase in capacity merely as additional budget.
49	In the field of nuclear energy, it is essential for Austria that the JRC continues the ongoing reorientation of the EURATOM Programme consistently and focuses research on the best possible protection of citizens in Europe, on nuclear security, risk assessment, radiation protection and on activities in the field of non-proliferation and safety.

European Institute of Innovation and Technology (EIT)

Austria's opinion regarding the EIT is positive as far as the EIT's potential for building up new knowledge-based fields of business in Europe is concerned. With regard to implementation so far, however, Austria takes a critical view of this development which has been impaired by non-transparent selection processes of the "Knowledge and Innovation Communities" (KICs) as well as lack of harmonisation with complementary initiatives in Europe. For HORIZON 2020 Austria expects a marked improvement of the performance of the EIT.

Issues	
50	If the regulations concerning the budget review following the Interim Evaluation apply, Austria is in favour of all areas, including the EIT , to be eligible for a reallocation of funds.
51	Coordination of both content and structure is required between the priorities of the EIT and those of the third pillar "Societal Challenges", as well as those of the "Joint Programming Initiatives".
52	Austria will closely examine the set of indicators proposed by the European Commission according to which it will be possible to measure the performance of the EIT in future. This applies in particular to the "Knowledge and Innovation Communities" (KICs).
53	In the negotiations, it will be decisive for Austria to ensure the opportunities for participation of players from all member states in the measures of the EIT. The EIT must not become a "closed club" for just a small number of

organisations.

Fresh Money as the Driving Force for Science and Industry

Austria's performance in European RTI cooperation has been successful for many years by now. The EU Framework Programmes are regarded as an important building block and driving force for progress and prosperity in Austria. For this reason, and in line with the requirements of the EU Heads of State and Government, Austria is in favour of strengthening research and innovation as investments into the future ("sustainable growth-friendly expenditure").

Issues	
54	In principle, Austria welcomes a budget increase compared with the 7 th Framework Programme. However, in view of the overall EU budget, there is a need to stabilise both payments and commitments on the current level. As a result, on the basis of the overall EU budget as proposed by the European Commission, all headings and programmes could be affected by reduction.
55	Austria proposes to take into consideration whether a " performance indicator " for an important increase of industry participation in the entire programme would be expedient.
56	Austria is against prejudice of the Financial Framework after 2020 . For this reason, Austria rejects the proposal for budgeting technical and administrative costs in anticipation of the period after the expiry of HORIZON 2020 (TFEU and EURATOM).
57	When funding large-scale projects under HORIZON 2020, the issue of the long-term coverage of follow-up costs, current construction costs, any possible liabilities as well as ownership rights after completion of the project will always have to be considered already when planning the project. This applies for instance to the instrument of "large-scale projects". In general, heading 1 should not become overloaded by large projects. By way of example, also projects like SSA should be continued in the context of ESA. From Austria's point of view, there is a need for clarification in principle in this context with regard to the danger of distortion of competition by direct intervention on the market within the framework of HORIZON 2020.
58	Austria welcomes the proposed adaptation of the budget of HORIZON 2020 in the light of the Interim Evaluation as a mechanism enabling flexibility towards changing priorities. However, there will have to be an opinion-forming process for this purpose which includes the stakeholders from science and industry as well as the member states and the European

	Parliament.
59	For Austria it is important to avoid double funding which could emerge as a consequence of the closer link between Community programmes (e.g. HORIZON 2020, Structural Funds) and between national and European funding streams (e.g. PPP, P2P). The European Commission should describe conclusively how double funding will be prevented.
60	On the basis of the "Austrian Reflection Paper" of December 2010, Austria proposes to reallocate budget funds from pillar 3 ("Societal Challenges") towards pillar 2 ("Industrial Leadership") and – to a lesser extent - towards pillar 1 ("Excellent Science", in particular "Marie Curie Actions").
61	Austria is not able to follow the logic of the envisaged multiplication of funds for the EIT. From Austria's point of view, the earmarking of budget funds for the EIT in pillars 2 and 3 will have to be challenged.

Continuing the Reorientation of Nuclear Research

With the ongoing reorientation of nuclear research in the EURATOM Research Programme 2012 – 2013, the European Union has drawn its first lessons from the nuclear catastrophe of Fukushima. This path is the only right one for Austria and will also have to be continued in future, entirely in keeping with political and parliamentary decisions in Austria.

Issues	
62	The reorientation introduced in the EURATOM Research Programme 2012 – 2013 towards the exclusive use of funds in favour of safety aspects and the best possible protection of citizens in Europe will have to be continued rigorously in HORIZON 2020. Austria will closely examine the European Commission's proposal with regard to this aspect in the negotiations.
63	In applying the Austrian decision of the Council of Ministers of 22 March 2011, Austria regards the following measures as essential preconditions for the Austrian position on the EURATOM Research Programme 2014-2018: <ul style="list-style-type: none"> - the findings from the symposium on the use and limitations of nuclear fission energy in a low-emission economy, which are to be expected for 2013; - the preparatory activities provided for the symposium within the framework of a study commissioned by the European Commission; - an opinion of the "European Group for Ethics in the Natural Sciences and the New Technologies"; as well as - the results from the Monitoring Report of the European

	Commission envisaged for early 2013 concerning the implementation of the current programme.
64	In no event will Austria be able to agree to this programme as long as a contribution of nuclear energy to long-term, safe and efficient reduction of CO₂ emissions is mentioned in the programme. Nuclear energy is neither sustainable nor carbon-free, and from Austria's point of view, it cannot be a cornerstone of pan-European climate and energy policy either.
65	The regulations proposed regarding the association of third countries will have to be amended by such important aspects as the non-proliferation of nuclear material or the observance of international conventions.
66	Austria is against prejudice of the Financial Framework after 2020 . For this reason, Austria rejects the proposal for budgeting technical and administrative costs in anticipation of the period after the expiry of HORIZON 2020 (TFEU and EURATOM).
67	As up to the present, Austria continues to be in favour of radiation protection, medical applications, risk research, activities related to the Non-Proliferation Agreement, as well as research on the pan-European coordination of emergency planning. In general, Austria advocates concentrating the funds on safety aspects , in particular for existing reactors.
68	Austria rejects the proposed unlimited adaptation of budget funds to new requirements by the European Commission for the duration of the programme.
69	The deliberations of pertinent industry by way of technology platforms should be designed in such a way as to be transparent and comprehensible for the member states. In addition, attention will have to be paid to the fact that initiatives for Joint Programming should exclusively concern safety aspects.

HORIZONTAL TOPICS

The different priorities of HORIZON 2020 require connective principles and objectives. Austria emphasises in particular issues regarding ethics, international cooperation, gender roles, as well as the completion of the European Research Area. In this context, Austria is in favour of the following issues:

Issues	
70	Research funding by public funds requires compliance with high ethical

standards. In particular with regard to funding research involving human stem cells, Austria takes the view that adult stem cells have to be given absolute priority over the funding of research involving **embryonic stem cells**. In addition, with a view to ECJ rulings made in the meantime concerning the issue of the patentability of embryonic stem cell procedures, it will have to be questioned whether funding such procedures should not be dispensed with in principle. Regarding the regulation mechanisms for approving projects, Austria assumes that these will have the same standards as up to now in any case.

- 71** **Animal testing** should be reduced to an inevitable minimum in HORIZON 2020, and should ideally be completely replaced by alternative methods.
- 72** The **application of ethical standards** is important in all parts of HORIZON 2020. The interaction between European and national procedures examining the ethical dimension of research and innovation projects should be intensified from Austria's point of view.
- 73** The orientation of the content of **international cooperation** is assessed positively by Austria in principle. However, it would be important to know the amount of **resources** the European Commission intends to make available for international cooperation. The principle of reciprocity shall ensure increasingly that Europe benefits from these international relations.
- 74** In the field of **intellectual property**, clear regulations should be set up which should be applied to cooperation between the EU and **third countries** for mutual benefit.
- 75** Austria is not able to follow the logic of embedding international cooperation into the sixth Societal Challenge. Austria suggests considering the creation of a **separate area for horizontal issues** of HORIZON 2020, into which international cooperation can be integrated. Other elements would be for instance the issue of knowledge transfer, the measures for reducing the RTI disparities in Europe, or the measures for supporting the European Research Area.
- 76** Austria welcomes the objective included in the European Commission's proposal according to which HORIZON 2020 shall effectively promote **gender equality**, provided this objective is implemented comprehensibly.
- 77** **Implementing the European Research Area** is an overarching objective of the EU treaties to which Austria attaches great importance. However, a joint area always has to leave enough space for the particular cultural characteristics of a national science system, which is why culture-relevant funding areas are of specific importance in alignment with the future EU-programme Creative Europe (2012-2014). In the negotiations, Austria will strive to ensure the **coherence** between the proposals on HORIZON 2020 and the measures envisaged for completing the European Research Area ("ERA Framework").
- 78** In the light of the strategic reorientation of the Programme Committees,

the *tasks of the ERA groups*, e.g. SFIC, GPC, will have to be redefined from Austria's point of view.