

Opinion of the Belgian universities on Horizon 2020 – January 2012

Introduction and key points

To date, Belgian academia participate in 906 projects of the 7th Framework Programme for Research and Technological Development (FP7), which together provide for a budget of EUR 336 million, being 40% of the total Belgian financial return out of FP7 (*source: Flemish dep. EWI, data available up to 19 Oct 2011*). Although the share of FP7 in the total research expenses of the Belgian universities is in general less than 7%, the impact of the European programmes on national, regional and institutional research policy in terms of researchers careers, the scientific excellence principle, academia-industry collaboration, and internationalisation is becoming increasingly important. Consequently, the developments towards FP7's successor, the Horizon 2020 Framework Programme for Research and Innovation for the period 2014-2020, are of the highest relevance.

The Belgian universities, by virtue of the working group 'Horizon 2020' composed of EU policy, liaison and financial officers appointed by VLIR and CRef in fall of 2011, have reviewed the European Commission's proposals for Horizon 2020 – COM (2011) 810¹, see below pages 2-5, and COM (2011) 809², see pages 5-9. These are our **main findings**:

1. Considering the crucial role of Horizon 2020 at the axis of research and innovation and as driving force for the ERA, the budget proposed by the European Commission should be more ambitious: we call for EUR 100 billion instead of EUR 80 billion.
2. The working group welcomes the strong focus on excellence. It is *scientific* excellence that should be the driver of all programs in Horizon 2020 and its selection processes.
3. The envisaged budget increase for ERC and especially for Marie Curie Actions is too moderate. Both programs have a clear European added value, are crucial for the ERA, and should be strengthened considerably.
4. In both the sections on 'Industrial Leadership' and 'Societal Challenges', we advise sufficient opportunity for bottom-up, scientist-driven research, and less prescriptive calls.
5. We welcome the simplification measures and the envisaged harmonisation focus of Horizon 2020. Our expectations are high: Horizon 2020 needs to provide for a series of incremental steps towards more effective and harmonised funding instruments.
6. Although our simulations indicate a slight financial downturn compared to the revenue under FP7, we are pleased with the proposed introduction of a 100/20 reimbursement rate for research activities, as it resembles most university's usual funding and accounting systems. It is imperative that universities are funded at the rate of 100%.
7. We urge the European Commission to implement all necessary measures towards a more trust-based system of regulation, in which institutional usual accounting practices and nationally approved certification are accepted.

¹ [Proposal for a Regulation of the European Parliament and Council laying down the rules for the participation and dissemination in Horizon 2020](#)

² [Proposal for a Regulation of the European Parliament and Council establishing Horizon 2020 - the Framework Programme for Research and Innovation](#)

Opinion on the Horizon 2020 Rules for Participation – COM (2011) 810

The Belgian academia are pleased with the proposal for a simplified funding rate (100/20), and also welcome many of the other measures that aim to increase simplification under Horizon 2020. In particular we welcome the principle for a single set of rules for all components of Horizon 2020 and the broader acceptance of usual accounting practices of participants. Below, we comment on specific articles in the European Commission's proposal for the Rules for Participation, COM (2011) 810¹.

Excellence as main driver

Art. 14: (1) The proposals submitted shall be evaluated on the basis of the following award criteria: (a) excellence, (b) impact, (c) quality and efficiency of the implementation

- We acknowledge that excellence in the context of research and innovation may take many forms: from purely academic scientific excellence, over excellent scientific and technological quality, up to excellent research and entrepreneurship, depending on the kind and the focus of the activity.
- However, the evaluation criterion excellence should be unambiguously defined in the guide for applicants and guide for peer-reviewers. Overall, **excellent science should remain the main driver and main evaluation criterion** of all Horizon 2020 programmes and projects. After all, Horizon 2020 is *primarily* about research, not about investment in companies or capacity.

Reimbursement rate

Art. 22: (4) The Horizon 2020 grant may reach a maximum of 100% of the total eligible costs, without prejudice to the co-financing principle.

- **The simplified reimbursement model, which has proven to be very successful for the ERC grants, will facilitate the financial sustainability of university participation in Horizon 2020.**
- But, we request for clarification concerning “*without prejudice to the co-financing principle*” and “*maximum of 100%*”. If universities are to be reimbursed at lower rates, the attractiveness of the proposed reimbursement system for Horizon 2020 evaporates immediately.

Art. 22: (5) The Horizon 2020 grant shall be limited to a maximum of 70% of the total eligible costs for the following actions: (a) actions primarily consisting of activities such as prototyping, (...); (b) programme co-fund actions.

- We acknowledge the proposal that research, which is performed by private companies and primarily exists of close-to-the-market activities, shall be reimbursed at a maximum rate of 70%.
- However, the terms “*primarily consisting of...*” is unclear. Considering the scenario of a single funding percentage for a given project, projects with mixed activities – say both applied research and prototyping – will become less attractive for research organisations and universities if the lower reimbursement rate applies to the entire project instead of its individual activities. It is imperative that universities are reimbursed at 100%, for reasons of sustainability.

Indirect costs

Art. 24: Indirect eligible costs shall be determined by applying a flat rate of 20% of the total direct eligible costs.

- Although a reimbursement of 100% of direct costs together with the 20% flat rate overhead calculation would cause the Belgian universities to lose between 0.5 and 3% reimbursement as compared to FP7 (with the biggest downturn in projects coordinated, where losses in individual projects can be as high as 7%), we acknowledge that **the 100/20 reimbursement system implies a true simplification for the participants** as compared to the FP7 rules, not only for the administrators handling the budget, but also, very importantly, for the research community. This system resembles our university's usual funding practices the most and should be maintained.
- Next to this, we welcome the Explanatory Memorandum on page 3 of COM (2011) 810 stating that *"for indirect costs, the calculation is radically simplified; the reimbursement foresees a flat rate based on total direct eligible costs of participants with a possibility to declare costs actually incurred which is limited to non-profit legal entities"*. We advise to keep the possibility of declaring full costs as an option in the Rules for Participation.

Annual productive hours

Art. 25: (1) Eligible personnel costs shall only cover the actual hours worked by the persons directly carrying out work under the action. The evidence regarding the actual hours worked shall be provided by the participant, normally through a time recording system. (2) For persons working exclusively for the action, no time recording is required. In such cases, the participant shall sign a declaration confirming that the person concerned has worked exclusively for the action.

- **The reduction of time recording is broadly welcomed by the scientific community in general and by academic researchers in particular.**
- **However, we strongly call for a complete removal of the requirement for timesheets**, as suggested in the EC's Communication on Simplification, since this remains to be perceived as particularly burdensome and often misconceived for scientists who frequently work beyond and outside of official hours. A signed declaration of staff members stating the percentage of the time they work for a project should be sufficient.

Art. 25: (3) The grant agreement shall contain the minimum requirements for the time recording system as well as the number of annual productive hours to be used for the calculation of hourly rates.

- We feel that the shift of the requirements to what is laid down in the grant agreement will allow a more flexible approach, which is welcomed.
- However, we call for certainty and guidelines and plea to use the beneficiary's usual accounting practice on the annual productive hours in setting up these guidelines.

Certificate on the financial statements

Art. 28: (...) The certificate shall only be submitted when that amount is equal to or greater than EUR 325 000 at the time of claiming the payment of the balance of the grant.

- It was said earlier that flat rates are not to be counted in the establishment of the threshold and this should largely compensate for the reduction of the threshold from EUR 375 000 to EUR 325 000 in accordance with the financial regulation. It is not clear, however, in this final COM (2011) 810 if the threshold of EUR 325 000 only comprises direct costs.

Intellectual Property Rights

Art. 40 (1), 40 (2), 41 (2), 47, regarding the rules for intellectual property, exploitation and dissemination.

- We are concerned by the potential implications of the approach announced in the Explanatory Memorandum (page 3 in COM (2011) 810) stating that *“the enlarged scope and new forms of funding as well as the need for flexibility in this area of the rules has been taken into account by the possibility to lay down addition or specific provisions where appropriate.”*
- We recall that the huge diversity of EU funding schemes under FP7 and beyond with differing financial rules and rules for intellectual property rights created an impenetrable maze for researchers and administrators alike, both in industry and academia. **We favour a maximum of uniformisation and harmonisation of the IP regulation, across these different section of the programmes under Horizon 2020.**
- Furthermore, we call for IP regulations that allow for balanced industry-academia collaboration, with universities as partners for industry, and not as merely depending on industry as cofunding entities. As such we strongly oppose to the IP regulation that was put in place in the Joint Technology Initiatives under the current FP7.

Art. 43: (4) For the purpose of access rights, fair and reasonable conditions may be royalty-free conditions.

- This creates some ambiguity since it considers that free access is included in the notion of *“fair and reasonable conditions”*. This is not the case in FP7, where the distinction between *“fair and reasonable”* and *“royalty free”* is clearly made. Articles 44 and 45, on the other hand, clearly indicate the distinction between both aspects, which is most welcomed.
- We thus believe that point 4 of article 43 should be simply suppressed. Free access can be envisaged in some particular cases, and this could be negotiated at the beginning of the project. This aspect should not appear in the general principles.

Art. 47: Specific provisions

- According to this article, for certain programmes (security, research infrastructures, ERC, etc...), specific provisions are to be put in place regarding access rights and, in some cases, ownership. This generates vagueness, and as such concern. These specific provisions need to be taken up with the relevant stakeholders (e.g. universities) well in advance.

- It all comes down to determine under which conditions “*specific rules*” will/can/may be appropriate. We believe that, **regardless of the ultimate aims of a specific action, comparable activities should be governed by the same principles**. What needs to be avoided is that one research department, participating under different kinds of actions under Horizon 2020 schemes (e.g. a Collaboration project, an Innovative Medicines Initiative-project, and an EIT-KIC) would have to follow different ownership/access rights rules in each instance for the same kind of research activity.
- In essence, we strongly hope that where model grant agreements are drafted for these specific schemes, universities will be able to contribute to the discussion as to when specific provisions are appropriate.

Opinion on the Regulation establishing Horizon 2020 & Budget breakdown – COM (2011) 809

Scientific excellence

The Belgian academia are pleased to see that the drive for ‘excellence’ is a hallmark in all of the Horizon 2020 proposals, without any geographical or other preconditions. Scientific excellence is to be a driving force on several distinct levels: from the transparent formulation of topics and evaluation criteria in top-down research funding schemes by top scientists and entrepreneurs to the appointment of evaluation panels, the selection of excellent research proposals and the collaboration between funding agencies and balanced, equal-basis industry-academia partnerships.

Total budget (Annex II in COM (2011) 809)

The 45% increase in investment in Horizon 2020 up to EUR 80 billion, as well as the 70% increase for the ErasmusForAll programme up to EUR 19 billion, are welcomed by the Belgian universities. However, it is not the grand revolutionary allocation hinted at by the European Commission in the past, and it may not be sufficient to match the objective of making Horizon 2020 the most important instrument to activate the ERA. **We therefore fully support the proposed amendment from the European Parliament to at least double EU funding for science and innovation in Horizon 2020 to EUR 100 Billion for the period 2014 to 2020.**

We are pleased that support for and strengthening of the European Research Council (ERC) and the Marie Curie Actions (MCA) is indicated as a clear goal in the Horizon 2020 proposal. We also strongly support the extension of the Future and Emerging Technologies (FET) programme to other themes. But, unfortunately, the budgetary proposals do not properly reflect these ambitions. We therefore emphasize that priority should be the budget increase for the Excellent Science section.

Priority 1: Excellent Science (Annex I, part I, in COM (2011) 809)

A strong correlation exists between investment in basic research and innovation capability. Excellent science across all fields brings global benefits and is the bedrock upon which future innovations (both

technological and societal) is built. It takes courage to invest in science with a longer-term perspective, contrasting the short-term window in which society and policy makers operate today. We therefore acknowledge the large budget that is allocated to the Excellent Science priority, but at the same time advocate an even stronger investment in basic and frontier science in Horizon 2020.

More specifically, the proposed budgets for ERC and the MCA did not increase with sufficient pace compared to other sections of Horizon 2020. Both programmes currently face very low success rates, less than 15% for ERC and even less than 10% for sections of the Marie Curie programme. There is, however, enormous talent throughout Europe, and an untapped potential of high quality projects with a truly European added value. The proposed funding levels for both programmes in Horizon 2020 should be compared with funding levels in the last year of FP7, whose budget increased year on year. For example, although ERC seems the biggest winner in Horizon 2020 budget – with a budget increase of over 70% as compared to FP7 – the ERC's budget is planned to be EUR 1.8 billion in 2013 – when ERC finally reaches its full speed – while the proposed EUR 13.3 billion under Horizon 2020 represents on average EUR 1.9 billion per year, but in fact drops to EUR 1.6 billion in 2014.

Our biggest concern, however, is the proposed investment in Marie Curie Actions (MCA), which drops from almost EUR 1 billion in 2013 to EUR 0.7 billion in 2014, and reaches the levels of 2013 again only in 2019. We therefore call for an optimisation of the budget breakdown for the research, innovation, and education programmes managed by DG Education and Culture – MCA, European Institute of Innovation and Technology (EIT), ErasmusForAll (EFA). We believe that priority is to be given to the Marie Curie Actions. **It is simply unacceptable that MCA – as the most successful programme among these with a long and proven track record, and one of the most successful European Commission programmes in terms of output in general – will face budget cuts in practice**, while (1) the EIT has not yet proven to be successful and efficient, and (2) there is overlap between MCA, EFA and EIT, both in terms of policy objectives and in terms of proposed actions.

We are pleased that the European Commission proposes to extend the much appreciated Future and Emerging Technologies (FET) scheme, limited to ICT and Energy in FP7, to all scientific domains in Horizon 2020. The science-driven approach in the proposed small- and large-scale collaborative research projects and programmes will prove to be an optimal way for both research institutes and private sector to work together in a collaborative mode, on equal terms. The bottom-up principle of the FET scheme should be extended to other Horizon 2020 priorities, as far as possible (see below).

Priority 2: Industrial Leadership (*Annex I, part II in COM (2011) 809*)

We acknowledge that the major component of the Industrial Leadership priority consists of the Key Enabling Technologies, and that significant investments will be done in ICT, which appears as a cross-cutting action in both the Industrial Leadership and Societal Challenges priorities. We welcome the proposed integration of the current Competitiveness and Innovation Programme (CIP) into this priority. **Programmes under this heading should have a strong focus on leveraging private sector investment in research and innovation, and should be further elaborated in a way to foster the realization of this objective.**

It is clear that activities under the Industrial Leadership section are to be based primarily on the initiative of industry and business. However, we strongly suggest that the research community, including academia, are invited to participate in the elaboration of the research and innovation agendas in this priority.

Priority 3: Societal Challenges (Annex I, part III in COM (2011) 809)

We acknowledge the division into six areas of Grand Challenges society is currently facing, comprising continuity with the 10 themes in FP7's Cooperation specific programme. We welcome the intention of the European Commission to not prescribe specific research topics, but to use a more bottom-up approach, and at the same time to be more flexible and open to different types of interdisciplinary projects.

Bottom-up and science-driven activities should get the pole position in the Societal Challenges priority. Research can only fulfill its key role if given enough space and funding to identify and tackle current and future, yet unknown societal challenges through cutting-edge and innovative bottom-up research performed with maximum academic freedom.

Although we do acknowledge that research should lay the foundations of technological developments perceived as beneficial in the public's daily lives, **we strongly oppose a too narrow focus on innovation and short-term impact-creation in this section of Horizon 2020.** The proposed sentence that *"activities shall cover the full cycle from research to market, with a new focus on innovation-related activities, such as piloting, demonstration, end-user driven innovation,..."* leaves us with some concern in this respect. All the activities in this priority will take a *"challenge-based approach, focusing on policy priorities without predetermining the precise choice of technologies or solutions that should be developed"*. We are convinced of the fact that academic scientists have a major role to play in the way these programmes are developed. We therefore advocate a transparent topic selection process, and the strong involvement of expert scientists instead of lobbyists, while maintaining a bottom-up approach as flexible and non-prescriptive as possible.

We believe that the positioning of the Socio-Economic Sciences and Humanities needs permanent attention in the section Grand Challenges, and this beyond the challenge 'Inclusive, innovative and secure societies'. Especially the Humanities are threatened to play only a very minor role in Horizon 2020, despite recent strong statements from the Commissioner for Research and Innovation. All of the Grand Challenges tackled require input of social sciences and where relevant of the Humanities in order to deliver on the societal agenda. We therefore propose to **define creative incentives to reinforce the participation of Social and Humanities scientists across all themes, towards different types of interdisciplinary projects.**

European Institute for Innovation and Technology (EIT) (Annex I, part V in COM (2011) 809)

We observe a strong overlap between the objectives of the EIT's Knowledge and Innovation Communities (KIC) and the Knowledge Alliances in the ErasmusForAll proposal (2014-2020): both are large-scale partnerships between higher education / training institutions and businesses. As stated

above, we suggest a revision and optimisation of the programmes managed by Directorate General Education and Culture. This could result in more budget being made available for the Marie Curie Actions.

Joint Programming Initiatives – public-public partnerships (Art. 20 in COM (2011) 809)

Joint Programming is welcomed as it is expected to complement Horizon 2020 by minimising duplication without decreasing competition for scientific excellence. It is clear that Joint Programming Initiatives will have to be aligned with the Grand Challenges under Horizon 2020, and vice versa. The definition of a research agenda in both cases will require a transparent involvement of relevant stakeholders with the contribution of top researchers.

We furthermore advise for a clear role for the European Commission (and Horizon 2020) in the Joint Programming process, whereby the European Commission should act as a gatekeeper in order to establish efficient and harmonised governance, and a transparent, harmonised and international evaluation process striving for excellence.

Joint Technology Initiatives – public-private partnerships (Art. 19 in COM (2011) 809)

As stated before, we fear that the statement *“the enlarged scope and new forms of funding as well as the need for flexibility in this area of the rules has been taken into account by the possibility to lay down additional or specific provisions where appropriate”* will open the door to new forms of diversity of funding schemes and rules for participation, e.g. when being implemented on the Joint Technology Initiatives. This threatens and even contradicts the genuine will to harmonise and simplify the next framework programme.

The European Commission could ensure that researchers from (often the small) Member States that are not participating in individual Joint Technology Initiatives (JTI) or Joint Programming Initiatives (JPI) could participate by means of providing a provisional top-up funding from the Industrial Leadership or Societal Challenges to the JTI/JPI calls.

Link with the Structural Funds – Stairway to Excellence

We applaud the increased role of the Structural Funds for (research & innovation) capacity building in Europe and hope this will contribute significantly to the building of stairways to excellence. Clear linking of objectives and coordination of activities under the Structural Funds and Horizon 2020 is of major importance. In this respect it is vital to stress again that the horizontal driver throughout Horizon 2020 is excellence. If an initiative comparable to the FP7 Regions of Knowledge is to be included again in Horizon 2020, this should be closely connected to and largely funded by the Cohesion Fund. The smart specialisation exercise of the European regions might be a framework to work from.

By no means should the principle of scientific excellence be neglected in Horizon 2020, in all its levels. By all means should the excellence of the EU's science base be reinforced and extended, in order to consolidate the European Research Area and to make EU's research and innovation system more competitive on a global scale.

Control and audit

Universities are very commonly controlled and frequently audited by a multitude of governmental agencies and auditors. This means that in general their accounting practices are consistent with the general requirements on EU funding as these are laid down in the Financial Regulation, the implementing rules and the rules for participation of the different programmes. A high-trust approach would build upon this system instead of adding another layer of control and auditing.

Therefore, we are pleased to see the policy objectives behind Article 23 stating that *“the control system shall ensure an appropriate balance between trust and control, taking into account administrative and other costs of controls at all levels, so the objectives of Horizon 2020 can be achieved and the most excellent researchers and the most innovative enterprises can be attracted to it”* and that *“audits of expenditure (...) shall be carried out (...) in order to minimize the administrative burden of the participants”*. **We strongly hope that Horizon 2020 will continuously, effectively and completely implement this trust-based philosophy in all control and audit procedures.**

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