

Introduction

It is a source of real gratification for me that we have, at long last, concluded the Committee stage for the new framework programme Horizon 2020. It is particularly gratifying that H2020 has received quasi-unanimous vote of confidence. This illustrates that the Parliament is committed to questions of research and innovation and that the Parliament understands the importance of these issues for the future of Europe.

As you will know, I have been the rapporteur for the Specific Programme Implementing H2020. In the course of my work on Horizon 2020 I believe that the Parliament has been instrumental in refining and deepening the Commission proposal and ensuring that we have a set of specific, measurable and realistic goals for the new programme.

Amongst the new elements that Parliament has been responsible for including in H2020 are the following

Main features of Horizon 2020

Excellence and Spreading Excellence

Excellence – without geographical constraints – is the primary criterion for participation in Horizon 2020. The report also introduces measures aimed at increasing participation by small research groups and SMEs in order to foster their potential and to further promote excellence in Europe. This "spreading excellence" concept was introduced in Pillar 1 - Scientific Excellence - with a dedicated budget.

Stated in other words, these measures basically involve "twinning" and "teaming."

Synergies

Promoting scientific excellence, industrial competitiveness and tackling societal challenges cannot be achieved with the resources of a single programme. Consequently, Horizon 2020 should be articulated with and complemented by the structural funds. On the one hand, upstream from H2020, this should enable the business community to develop projects in the priority areas of Horizon 2020 through funding for equipment and human resources. On the other hand, downstream from H2020, the structural funds will enable the promotion of research undertaken under Horizon 2020, allowing for widespread economic and societal benefits. Such synergies will strengthen the impact of the significant investments that both programmes represent.

Innovation Cycle

The problem experienced by Europe is not lack of scientific quality but weakness in terms of transfer to and uptake by the market. Horizon 2020 aims to cover the whole cycle – one that is often long and expensive – from research to the market. This covers fundamental research, technological development, demonstration and finally the removal of entry barriers to innovative products and processes in the market. Achieving this goal requires narrower and more precise definition of innovation and

the processes associated with innovation. Such clarification should apply to both the concepts involved and to the determination of the amounts to be allocated specifically to innovation.

Industry Participation

In recent years, industry participation in European science and innovation has been falling. Horizon 2020 aims to counter this, notably by encouraging the active involvement of small and medium-sized European companies something that is essential to improving the competitiveness of the economy. The specific character of the sectors in which SMEs operate alongside the type of activity that they represent will be taken into consideration whilst access to incentive programmes will be simplified. The report that was voted on today includes innovation vouchers for SMEs, reinforces the instrument dedicated to SMEs and encompasses areas of particular importance for the industry such as issues of standardisation and procurement.

Governance

Another measure suggested in this report is the creation of a platform made up of scientists who will participate in establishing the main priorities for research. This platform will also allow for scientific coordination between the various pillars of

Horizon 2020 and the initiatives of Member States in these areas.

Horizon 2020 is more than a funding mechanism and should be seen as an opportunity to better structure research in Europe, forging links with national and regional research programmes.

Youth employment

Youth employment is a problem that Europe has to face head on. As a result, Horizon 2020 sets out to create the necessary conditions that will enable an increase in levels of employment amongst young scientists.

Main changes introduced by the European Parliament in Horizon 2020

Pillar 1 – excellent science:

This pillar aims to support the EU's position as a world leader in the fields of science, innovation and research. The pillar has four sub-programmes: the European Research Council, Future and Emerging Technologies, Marie Skłodowska Curie actions and Research Infrastructures. In so far as the main developments following the negotiations are concerned, there is one main development and this is the creation of Return Grants within the Marie Skłodowska Curie Actions. The goal here is to foster the reintegration of researchers after international experience, mainly with regard to less innovation performing regions.

Pillar 2

As for the second pillar: this pillar is devoted to helping secure industrial leadership in innovation, key technologies and to facilitating access to capital and support for SMEs. This pillar is divided into three sub-programmes: Enabling and Industrial Technologies, Financial instruments and, thirdly, specific support for SMEs. With regard to the main developments, these are:

~ firstly, SMEs will benefit from at least 20% of the combined budget for Leadership in Enabling and Industrial Technologies and Societal challenges.

~ Secondly, the Parliament has insisted on and achieved a dedicated budget and a single management structure for the SME instrument. The SME instrument will be allocated 7% of the *combined budget* for

Leadership in Enabling and Industrial Technologies – part of pillar II – on the one hand,

and Societal challenges – a part of pillar III – on the other hand.

~ Finally concerning the second pillar, a simple and rapid scheme of “Innovation Vouchers” will fund research and innovation activities within Phase 2 of the SME instrument. This will promote the creation of start-ups and enhance research and innovation activities in existing SMEs.

The Third Pillar

The third pillar involves the major societal challenges that all Europeans are currently confronted with. There are six themes:

health, demographic change and well-being;
food security, sustainable agriculture, marine and maritime research and the
bio-economy;
secure, clean and efficient energy;
smart, green and integrated transport;
climate action, resource efficiency and raw materials;
and inclusive, innovative and secure societies.

Let me give you the main developments following the negotiations in list form:

- Firstly, a new activity line for Marine and Maritime cross-cutting issues;
- Secondly, a new activity line to study “cultural heritage and European identity”;
- Thirdly, “Social Sciences and Humanities” and “Security” have been separated out to become two distinct Societal Challenges;
- In the fourth place, regarding the “Health” Societal Challenge, more focus has been given to diseases amongst children and the elderly and to neurodegenerative, musculoskeletal and chronic diseases alongside; poverty related diseases. Particular attention has also been given to the ageing process and to questions of life long well-being and personalised medicine;
- In the fifth place, there has been an increase in the Energy Budget – from 7.2% to 7.7% of the Horizon 2020 budget
- Point six is that 70% of the Energy budget has also been earmarked for renewable energy and for questions of energy efficiency, smart grid and storage and an additional 15% has been devoted to activities related to the market uptake of existing renewable energy and energy efficiency technologies (This is the former Intelligent Energy Europe Programme);
- Point seven is that the role of gas has been given greater predominance with more focus on energy security and new technologies with disruptive effects alongside greater emphasis on smart grids and technologies, energy storage,

back-up and balancing technologies and CCU.

- Finally, the eighth novelty is increased emphasis on research into fossil fuels, both in terms of electricity production and grid flexibility alongside the search for greater efficiency with regard to the integration of renewables;

General Considerations

I should now like to turn to four general issues. These involve

~ Firstly, the setting up of an independent activity line for “widening participation” and will receive a dedicated budget of 1.06% of the total H2020 budget. This activity includes a number of actions that were already included in the Commission proposal under Societal Challenge 6 but also includes new activities such as teaming and twinning actions between research institutions.

~ Secondly, Science with and for Society is the object of an independent activity line and will receive a dedicated budget of 0.6% of the total H2020 budget

~ Thirdly, an effort has been made to promote synergies between Horizon 2020 and other funding instruments such as the Structural Funds and the European Development Fund. A specific measure that has been floated is to attribute a Seal of Excellence to excellent projects that had hitherto failed to find funding as a result of budgetary constraints. It is expected that the Seal of Excellence will enable consortia to find other sources of public or private funds with more ease.

~ Finally, in this section, the setting up of a number of Scientific Panels has been foreseen. These panels will firstly be implemented in the Health sector but, with time, will contribute science-lead input to the societal challenges in general. The

panels will actively help define research and innovation priorities. The goal is also to encourage EU-wide scientific participation.

By the same token, the programme will also help to counter the brain drain from Europe.

Conclusion

Although we still have to vote on H2020 in the plenary session in Strasbourg in October, I am optimistic that everything will be up and running for the beginning of 2014. If this is the case, there will be a smooth and direct transition from the former to the new programme. It has been a long and arduous process but one that has been very rewarding from very many points of view. I have particularly appreciated being able to build up fruitful professional relations with a wide variety of people from the European Institutions and from civil society