Introduction

It is a great pleasure to be in Copenhagen once again. Now that we are nearing the end of the process culminating in the adoption of Horizon 2020, I am still very much aware of the positive contribution that the Danish Presidency – and Minister Ostergard, in particular – made to laying the foundations for the new framework programme. I was particularly appreciative

of the level of cooperation and positive support
that Minister Martin Ostergaard gave me
during the drafting of my report on the necessary
simplification

of the administrative and financial procedures associated with Horizon 2020.

I should also like to take this opportunity to thank my colleague, Britta Thomson, for having invited me to speak before you at this conference.

Today, I should like to give you an overview of some of the pertinent developments to be found in the final version of Horizon 2020 by comparison with the initial Commission proposal. As the rapporteur for the Specific Programme Implementing Horizon 2020, I have, of course, been directly involved in the design of the new structure.

I have divided my discussion of the relevant aspects to the process of implementing Horizon 2020 into five parts.

Firstly, I should like to consider something of the nature of multi-disciplinarily in Horizon 2020

Then I shall go on to outline some of the main changes that we have made with regard to the third pillar dealing with societal challenges.

In the third section, I shall discuss the question of increased synergy between the structural funds and Horizon 2020.

In the fourth part of my speech, I shall devote some time to the question of widening participation with particular reference to the question of excellence.

Finally, I should like to finish with a brief description of the efforts that have been made to simplify the administrative and financial procedures associated with Horizon 2020.

1) Multi-disciplinarity

Before beginning with my first theme concerning multi-disciplinarily, let me say a few words about Horizon 2020 in general. Horizon 2020 – the new European framework programme for the period from 2014 to 2020 – is the single largest funding instrument of its type in the world. In general terms, the programme aims to build a sustainable economy based on knowledge and innovation across the whole Union.

More specifically, Pillar 3 will address the major concerns shared by all Europeans, across six key 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.

More specifically, with regard to the question of multi-disciplinarity, the pillar devoted to societal challenges has been designed

in such a way as to ensure multi-disciplinarity and questions directly related to the social sciences and the humanities

have been fully integrated into each of the pillars of Horizon 2020

and are present across all the different societal challenges.

In this respect, each of the specific objectives for social science and humanities research will contribute

to the evidence base for policy making at

international, Union, national, regional and local levels.

Hence, the social sciences and humanities have been main-streamed as an essential aspect to the activities required to tackle each of the societal challenges with a view to enhancing their impact.

In addition, there is one societal challenge in particular that is completely devoted to questions related to the social sciences and the humanities. This is the result of the division of the former "Inclusive, innovative and secure societies" challenge into two separate challenges:

Societal Challenge 6: Europe in a changing world – inclusive, innovative and reflective societies

And Societal Challenge 7: Secure societies: protecting freedom and security of Europe and its citizens

The specific objective of societal challenge 6 – 'Europe in a changing world: Inclusive, innovative and reflective societies' – is to support social sciences and humanities research by focusing on inclusive, innovative and reflective societies. In this respect, there are 3 main broad lines of activities:

Inclusive societies,

Innovative societies and

Reflective Societies- cultural heritage and European identity

The aim is to foster a greater understanding of Europe, provide solutions and support inclusive, innovative and

reflective European societies in a context of unprecedented transformations and growing global interdependencies.

More specifically,

the first of the lines, "inclusive societies" includes the following key points:

- (a) mechanisms to promote smart, sustainable and inclusive growth;
- (b) an emphasis on trusted organisations, practices, services and policies that are necessary to build resilient, inclusive, participatory, open and creative societies in Europe, in particular taking into account migration, integration and demographic change;
- (c) an emphasis on Europe's role as a global actor notably regarding human rights and global justice;

(ca) and finally, inclusive societies also seeks to promote sustainable and inclusive environments through innovative spatial and urban planning and design.

Secondly, "innovative societies" aims to

- (a) strengthen the evidence base and support for the Innovation Union and ERA;
- (b) it also aims to explore new forms of innovation, with special emphasis on social innovation and creativity and seeks to understand how all forms of innovation are developed and how they succeed or fail. Innovative societies also foster the innovative, creative and productive potential of all generations;

(c) The third aspect to Innovative societies aims to promote coherent and effective cooperation with third countries.

With regard to the section devoted to "reflective Societies- cultural heritage and European identity" there are three main points The goal is:

- (a) firstly to study European heritage, memory, identity, integration and cultural interaction and translation, including its representations in cultural and scientific collections, archives and museums, to better inform and understand the present by richer interpretations of the past;
- (b) The second aspect is to further research into the history, literature, art, philosophy and religions found across Europe's countries' and regions' and to

determine how these have informed contemporary European diversity;

(c) Thirdly, for reflective societies, the aim is to stimulate research into Europe's role in the world, on the mutual influence and ties between the world regions, and to cultivate a view from outside on European cultures.

2) Changes introduced by MdGC

At this point, I should like to turn to *the second of my main themes*, that of the changes that I have been able to introduce into the third pillar. There are three principal categories of changes in this respect. They are:

- ~ firstly, there is a new activity line for Marine and Maritime cross-cutting issues alongside a new activity line to study "cultural heritage and European identity";
- ~ Secondly, Regarding the Health Societal Challenge considerably more focus was given to children and elderly diseases; neurodegenerative, musculoskeletal and chronic diseases; poverty related diseases as well as to questions of ageing and well-being and personalized medicine;
- ~ Thirdly, several significant changes were made with regard to the question of energy. These included;
- a) an increase of the Energy Budget from 7.2% to 7.7% of the Horizon 2020 budget
- ~b) the earmarking of 70% of the Energy budget devoted to renewable energy, energy efficiency, smart grid and storage. These changes are found alongside an additional 15% for activities for the market uptake of

existing renewable energy and energy efficiency technologies (the former Intelligent Energy Europe Programme);

- c) with regard to energy, the role of gas has been reinforced with more focus on energy security, smart grids and technologies, energy storage, back-up and balancing technologies and CCU.
- d) Finally, with regard to energy, research on fossil fuels, both in terms of electricity production and grid flexibility and on efficiency in terms of the integration of renewables;

3) Synergy

At this point let me turn to the question of creating greater synergies with the structural funds. Indeed, *the third main area* that I believe deserves particular

attention is that of the building of complementarity between Horizon 2020 and various European, national and regional financial instruments. Increasing complexity in the field of scientific research requires critical mass and this need is to be found alongside a rising need for increasingly expensive equipment. This is a sphere in which the European Union can make a real difference.

To further these ends, we require a multi-fund approach and strengthening of the bridges that link Horizon 2020 and other funds - with the structural funds to the fore. In this respect, the structural funds have a complementary role to play with regard to what Horizon 2020 will be able to do. *Upstream* from Horizon 2020, the structural funds can be used for capacity building. *Downstream* from Horizon 2020, the structural funds can help smooth the passage from

conception to market. At the same time, they can also be used to co-finance certain projects.

4) Widening

Turning now to the fourth of the themes that I should like to briefly discuss today – that of the widening of participation – let me begin by saying a few words about the significance of excellence in this context. Excellence – without geographical constraints – is the primary criterion for participation in Horizon 2020.

Against this background, a significant innovation is the creation of the "spreading excellence" concept. This involves teaming and twinning initiatives whose objective is to establish and reinforce partnerships between regional research units, countries and leading

international counterparts. This will enable Europe to foster units of embryonic excellence, such as small research groups and highly innovative start-ups. The spreading of excellence concept will be able to lever support from the Cohesion Funds and this will contribute significantly to the creation of critical mass from existing seeding grounds.

More generally, with regard to how widening excellence will be fostered, three initiatives stand out. These are:

- the teaming of excellent research institutions and low performing RDI regions with the aim of creating new (or of significantly upgrading existing) centres of excellence in low performing RDI Member States and regions.

- the twinning of research institutions in order to significantly strengthen a given field of research in an emerging institution through links with at least two other leading institutions at an international level.
- and finally with regard to widening excellence, we have established 'ERA Chairs' to attract outstanding academics to institutions with a clear potential for research excellence. The goal is to help these institutions fully unlock their potential for research excellence and, in the process, create a level playing field for research and innovation in the European Research Area. In this respect, a number of possible synergies with ERC activities should be explored.

I am optimistic that these measures – designed to widen participation, and the successful implementation of a multi-fund approach – will contribute to maximizing the European potential to produce science and technology of an outstanding nature.

5) Simplification

Turning now to a matter that is close to my heart, I might even say that it has been something of a crusade with me. This is the question of simplification. Horizon 2020 includes the greatest part of the many recommendations that were made in my simplification report.

Indeed, a great deal of criticism had been levelled at the way the European Union handles funding for research. In particular, complaints centred on its bureaucratic complexity and the elaborate requirements for financial data that are imposed on applicants at the outset. Consequently, I proposed a two-pronged approach aimed at rebalancing the evaluation procedure.

First, I set out to simplify the monitoring of the financial aspects of funded projects. Secondly, I looked to reinforce the technical and scientific assessment process. This presupposed a process of peer review and, with it, the application of excellence-based criteria for assessment.

Of course, all financial transactions involve a degree of risk, but excessive concern about controlling this risk through administrative supervision can actually increase the overall cost of the process. It should be possible to tolerate higher levels of risk (thus

streamlining bureaucratic control) while at the same time placing more confidence in participants from the scientific and business community. In this respect, the goal was to strike a balance between trust and control – between risk taking and risk avoidance – in order to ensure the sound financial management of EU research funds.

In addition, my report included, amongst other recommendations:

- A single set of rules for all elements of Horizon 2020.
- an acceptance of the different accounting practices that the participants have already adopted in their respective countries.

• And thirdly, simplification of the time recording system.

Finally, concerning simplification, the new rules should facilitate the recruitment of staff to universities in order to work on Horizon 2020 projects. Hopefully, this will keep young researchers in gainful employment.

Conclusion

This brings me to the end of my speech. Let me say, by way of conclusion, that – as we are now nearing the end of the long and arduous process leading up to the adoption of Horizon 2020 – I am optimistic that we shall be able to ensure a smooth

transition from the previous to the new framework programme. This will reduce uncertainty and enable us to begin on the equally significant task of ensuring that we are able – over the course of the next seven years – to fully implement the different provisions of Horizon 2020. Horizon 2020 is an ambitious programme that I believe will be able to make a real difference to European research, science and innovation. It only remains for us to ensure that we are able to take advantage of what it has to offer.

Thank you very much.