



Speech by

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I am delighted to be at The European Institute here in Washington once again in my role as the European Commissioner for Research, Innovation and Science.

It is twenty months since I last addressed your Institute and since then there have been many major developments in research, science and innovation policy in the European Union. I am grateful to have this opportunity today to tell you about some of them.

The European Commission is very aware of the vital importance of the economic, research and innovation relationship between Europe and the United States.

I am keen to strengthen the relationship even more. So I am pleased to be able to present our plans for Horizon 2020, the new European instrument for research and innovation funding, since this will provide many opportunities to strengthen transatlantic cooperation.

International cooperation is a vital part of our research and innovation funding. It makes sense to bring the world's best research and the world's best researchers together, where possible, in order to tackle the common challenges that we face such as sustainable mobility, climate change, energy and food security or our ageing population.

These and other challenges and opportunities are so great that we must think globally and act globally. That is the reason why we emphasise the importance of international cooperation in European policies and funding for research and innovation.

In October 2010 I launched Innovation Union, our new initiative that puts research and innovation at the heart of the European Union's policies to boost growth and jobs.

Innovation Union aims to do three things. First, transform Europe's world class science base into a world-beating one. Second, make coherent use of public sector intervention to stimulate the private sector. Third, remove the remaining bottlenecks to the commercialisation of good ideas.

Innovation Union dedicates an entire chapter to boosting international cooperation, recognising that working better with our international partners means opening access to our R&D programs, while ensuring comparable conditions abroad.

It also means presenting a common EU front where it is necessary to protect our interests.

Our objectives under Innovation Union are supported by the world's largest public program for research, called the 7th Framework program for Research and Technological Development, but better known as FP7.

FP7 is investing more than 55 billion Euro (\$ 70 billion) over seven years until 2013 in areas including agriculture, fisheries and food; health, nanotechnology, biotechnology, information and communication technologies, transport, energy, environment, security and climate change. The next package of calls for proposals under FP7, in summer this year, will release around 10 billion Euro of financing for cooperative research.

The international dimension is embedded throughout FP7 – the program is fully open to researchers and companies from all over the world. The United States has an excellent track record under FP7: there are currently 284 participants from the US in 235 different FP7 projects, receiving a total EU contribution of around 36.7 million Euro.

Of course, our cooperation goes beyond financing participation in research. EU Cooperation in research and innovation with other industrialised countries aims to improve STI performance and industrial competitiveness, to make advances in key enabling technologies and to tackle societal challenges. We are always keen to find ways to make it easier for researchers from the EU and countries like the United States to work together.

The European Union and the United States have a very close relationship, demonstrated by the fact that we have a joint Science and Technology Agreement dating back to 1998, and since revised on a number of occasions.

To give one example of our excellent cooperation, arrangements have been put in place with the National Institutes of Health in the United States, under which our programs are open reciprocally to the participation of researchers from the United States and the EU in specific areas of common interest.

I believe that it is important for European and American scientists to be in close contact in order to give a push in the direction of common approaches and common standards between the US and the EU.

To take another example, the electric cars/smarts grids sector is a rapidly-developing and highly innovative growth area in the US and the EU that promises considerable economic and employment potential. And the uptake of electric vehicles will help promote green technology and reduce emissions. At the same time, the definition of new smart grids will facilitate the development of renewable energy sources as well as the development of recharging systems for new electric cars.

So, in this context the development of a common approach and common standards between the US and EU is very important and is strongly supported by the American and European car industries. We both have ambitious goals in these fields. The Transatlantic Economic Council (TEC) has therefore decided to fast-track developments in this area by working to prevent unnecessary regulatory divergences and promote the interoperability of the infrastructure for electric vehicles.

The European Commission's Joint Research Centre (the JRC), is playing a very active role through its Institute for Energy and Transport, working with the US Departments of Energy and Commerce and American standardisation bodies such as the American National Standards Institute, and by carrying out research to support standardisation and policy-making.

We see it as vital to work jointly on issues such as electric cars and smart grids if we are to fully capitalise on the commercial and societal opportunities offered by these new technologies.

And what of the future?

I am proud to present to you today the European Commission's proposal for Horizon 2020 that was adopted last November.

We have now had seven Framework programs for research. But after extensive consultation with stakeholders both in Europe and internationally, it was clear that we needed a new approach that is in tune with Europe's current and future research needs, focused on tackling a range of challenges faced by society, and designed to deliver the research and innovation we need to boost growth and jobs.

Since FP7 was launched in 2007, the European Union economy has been faced with the most challenging time in its history as we try to restore confidence and fiscal sustainability.

Over the past year and a half, we have achieved progress, including a European strategy for growth – Europe 2020, a substantially reinforced Stability and Growth Pact, and the 'European Semester' through which we coordinate our fiscal and macro-economic policies and implement our agenda for growth on an annual basis.

And it is true that we need fiscal consolidation, but this must be smart fiscal consolidation. We must focus now on the measures that will produce jobs, growth and competitiveness today and tomorrow. Cutting spending in areas such as education, research and development and innovation would be exactly the wrong thing to do.

Horizon 2020 is our response. It is designed to help deliver jobs, prosperity and a better quality of life.

Horizon 2020 should therefore be seen as an economic policy measure. With a proposed budget of 80 billion Euro (around \$ 1021 billion) at constant 2011 prices, it represents a serious and much-needed investment in growth and jobs across Europe. Prioritising investment in research and innovation now is the recipe for ensuring growth and jobs in the future.

Horizon 2020 complements the approach being taken in most Member States to increase investment in research and innovation as the routes to future growth.

According to recent statistics, 23 out of the 27 Member States of the European Union registered increased public and private R&D investment between 2007 and 2010.

We need to complement this spending in Member States with investment at European level in the research that is best done at European level, where we can combine forces and achieve better value for money with economies of cost and scale. By doing so, we can avoid duplication and by pooling resources we get better added value for our spending.

We also need to work at a European level because the challenges faced by our society – such as climate change, energy and food security, the ageing population – are too big to be solved by one

European country acting alone. Indeed, these challenges require international cooperation with partners such as the United States. That is why, as part of the public consultation process of last year, we also held a special event in Brussels last May to get the views of our international partners, including those from the US.

So let me describe our proposals.

Horizon 2020 is structured around three objectives or pillars.

Under the First Pillar, we aim to raise the level of excellence in Europe's science base and ensure a steady stream of world-class research to secure our long-term competitiveness.

This Pillar will support the best ideas, develop talent within Europe, provide world-class research infrastructures, and make Europe an attractive location for the world's best researchers. The proposed budget is 24.6 billion Euro, (over \$30 billion).

The Second Pillar on 'Industrial Leadership' aims to make Europe a more attractive location to invest in research and innovation, by promoting activities where businesses set the agenda.

This Pillar will provide major investment in key industrial technologies – including enabling technologies such as nano, biotech, advanced manufacturing and advanced materials.

It will maximise the growth potential of European companies by providing them with adequate levels of finance, and help innovative SMEs to grow into world-beating companies. The proposed budget is 17.918 billion Euro (\$23 billion).

Under the Third Pillar on 'Societal Challenges', we reflect the priorities of the Europe 2020 strategy and address people's major concerns. A challenge-based approach will bring together resources and knowledge across different fields, technologies and disciplines. The proposed budget is 31.7nearly 32 billion Euro (almost \$ 41 billion).

There isn't time today to describe all the components and features of Horizon 2020, but I would just like to highlight a few points.

Firstly, we have listened and responded to calls for a dramatic simplification of how we finance research and innovation at the European level.

Horizon 2020 means more research and less bureaucracy - we are slashing red-tape to make it easier to access financing. We want our scientists and innovators to spend more time in the laboratory or workshop and less time filling in forms.

Horizon 2020 has a much simpler structure, based on the three pillars that I already mentioned. This will make it easier for participants to identify where funding opportunities exist.

We are also making the rules and procedures much simpler, with the same participation rules across all activities, including evaluation criteria, intellectual property rights and cost eligibility rules.

The funding rules will be much simpler. We are moving from several different funding rates for different beneficiaries and different activities to just two. And we want successful applicants to get to work more quickly: Horizon 2020 aims to reduce the average time to grant by 100 days.

Secondly – and this a real 'innovation' in itself – Horizon 2020 will provide support for the market take-up of innovation, including by the public sector, through more proof-of-concept, piloting, and demonstration of good ideas; by exploiting the potential of research infrastructures; through the setting of technical standards; through pre-commercial procurement and, through strengthened loan and equity financing.

New approaches such as inducement prizes, that reward the achievement of specific goals, will encourage a wider range of innovators to participate.

The European Innovation Partnerships - the pilot is concerned with active and healthy ageing - will be tasked with tackling technical, legal and operational barriers to innovation in Europe.

Thirdly, although Horizon 2020 marks a clear break with the past, we have been careful to keep and further improve the best parts of the current program. For example, the European Research Council (the ERC) is a widely acknowledged success story. It supports world class blue-sky research, fertilising the ideas for tomorrow's innovation. We propose a very substantial increase of the ERC's budget to 13.2 billion Euro (nearly \$17 billion), under Horizon 2020's first pillar.

I should also mention that a number of new measures will encourage the participation of SMEs. In fact, a special strand to boost Innovation in SMEs has been inspired by the US's Small Business Innovation Research (SBIR) program.

Our proposal for Horizon 2020 will now be put forward for discussion with the 27 Member States of the EU and with the European Parliament. I am committed to working with them to ensure that we get the most effective funding program for research and innovation for Europe.

Because, even in these difficult economic times – in fact because of them - we need to invest in the future.

In an ever-more inter-connected world, scientific breakthroughs or the innovative applications of new technologies rarely come about by working in isolation.

Horizon 2020 will offer European and American scientists, researchers and innovators many opportunities to work together, to make the discoveries and breakthroughs that will improve our economies and our day to day lives. We are counting on you to be a part of this.

Thank you.