

**Commissioner Geoghegan-Quinn
Represented by John Bell, Head of Cabinet
Conference on '*Research in Italy: state of play
and perspectives*', Roma, 19 March 2013**

Minister Profumo,

Raffaele,

Ladies and gentlemen,

I would like to thank you, Minister Profumo and Dr Liberali, for inviting me to speak to you today.

Unfortunately, Commissioner Geoghegan-Quinn was unable to attend this conference. She has asked me to convey her best wishes and strong support for your work.

I am delighted to be here today and to discuss with you Horizon 2020, the EU's new programme for research and innovation, and I am keen to hear about Italy's plans to capitalise on the opportunities that it offers.

In June 2010, Europe's leaders endorsed the Europe 2020 strategy, our roadmap to get the European economy back on track. At its heart is the conviction that we need research and innovation to get Europe out of the current economic crisis and to build long-term sustainable growth.

The European Union must become an Innovation Union, and for that we need excellent research.

That is what Horizon 2020 is all about. It represents a radical change from the Framework Programmes because for the first time, it brings together all EU funding for research and innovation under one roof.

Horizon 2020 will make it easier to participate in EU-funded research and innovation actions, it will increase scientific and economic impact and it will give the taxpayer better value for money – vital now more than ever.

We are living through one of the most difficult periods the European Union has ever faced.

Fiscal consolidation and structural reform are necessary but they are not enough to secure Europe's global competitiveness. We have learned from experience that counter-cyclical investments in R&D can speed up the return to growth. In the US in the 80's – and in Finland and South Korea in the 90's – massive investments in R&D were instrumental in leading these economies out of crisis.

Just as there is a correlation between a person's skills level and their employability; so we can see a clear link between a country's research and innovation intensity and its employment rate.

In October 2012, the Member States that had invested less than 1.5% of GDP in research and innovation during 2011 had, on average, more than double the unemployment rates of the countries that had invested more than 2.5%.

For Italy, there is good news and bad news. Between 2000 and 2011, Italian research intensity increased from 1.04% to 1.25%. This is a welcome, but modest improvement. Clearly, the first priority for Italy must be to improve this figure. In fact, Italy set a target of 1.53% in the context of Europe 2020, but this is well below the EU average and far below the overall Europe 2020 target of 3% for the EU.

I would like to congratulate Minister Profumo for the reforms that have already been introduced, particularly in the higher education sector and for the competitive award of public money for research.

We are pleased to see positive progress, and the planned measures to reform the public research system seem to be on the right track. In particular, the work carried out by ANVUR (the Agency for the Evaluation of Research and Universities) in this respect will allow a ranking at the level of university departments and research centres so that public funding can be allocated in a more competitive way and according to performance.

Public support measures and framework conditions for R&D are in place, and a new governmental structure has been created to coordinate national R&D activities and links with R&D stakeholders to address that challenge.

Since 2011, the previous government indeed incorporated the objectives and priorities of Europe 2020 into their main policies, with specific roles for R&D, innovation and human resources. And following the launch of the Cohesion Action Plan in November 2011 to improve the use of structural funds to create growth and jobs, resources are concentrated on key areas such as education, broadband, employment and transport networks.

Prioritising investment in R&D now in support of excellence will help ensure jobs and growth in the future. Horizon 2020 is the Union's response to this need to invest in our future economy.

From 2014, Horizon 2020, will provide even more opportunities for Italian researchers to collaborate with colleagues across Europe, and indeed the world.

I think that our proposals for Horizon 2020 strike the right balance between fundamental and applied research.

Horizon 2020 is structured around three distinct, but mutually reinforcing pillars.

The first pillar, 'Excellence in the science base', will support frontier or basic research, including a significant boost to the extremely successful European Research Council, which in six years has already become a gold standard for research.

The second pillar, 'Creating industrial leadership and competitive frameworks', will support business research and innovation, including investment in Key Enabling Technologies and support for innovation in SMEs.

The third pillar, 'Tackling societal challenges', will focus on tackling the major challenges in our society: health, demographic change and well-being; food security and the bio-based economy; secure, clean and efficient energy; smart, green and integrated transport; resource efficiency and climate action, including raw materials; and inclusive, innovative and secure societies.

I am sure that you are already familiar with that basic structure. So, I want to tell you a little more about the ethos behind Horizon 2020, how it will support both research and innovation.

Horizon 2020 means simplification. Since we want our scientists and innovators to spend more time in the lab or workshop, and less time filling in forms, we are slashing red-tape to make it easier to access financing.

The programme has a simpler structure with simpler rules. And we have set the goal of reducing the average time to grant by 100 days so that successful applicants can get working more quickly.

While excellence remains the main criterion for funding, Horizon 2020 takes an inclusive approach and actively encourages new participants, wherever they come from. Talent will be nurtured to grow into excellence, so that excellent researchers and innovators from all across Europe can and do participate.

We are integrating research and innovation by providing seamless and coherent funding from idea to market, including by providing more support for innovation and actions close to the market, leading to a direct economic stimulus.

This means more funding for testing, prototyping, demonstration and pilot type activities, for business-driven R&D, promoting entrepreneurship and risk-taking, and shaping demand for innovative products and services through standard-setting and public procurement.

Horizon 2020 will help to bridge the gap between research and the market by, for example, helping innovative enterprise to turn their technological breakthroughs into viable products with real commercial potential.

And, while tackling societal challenges under the third pillar, there is at the same time a strong focus on creating business opportunities out of our response to the major issues that concern people in Europe.

To make life easier for SMEs in particular, there will be a single comprehensive programme adapted to their needs, inspired by the successful SBIR programme in the US.

I think that the SME programme and the new financing instruments will be particularly interesting for Italy, where 95% of firms are small or micro enterprises. Italy scores above the EU average for innovative SMEs, who introduce marketing, organisational and product or process innovation. I understand that there is a recent

trend in Italy of greater attention to measures specifically targeted towards SMEs and young companies.

Horizon 2020 will also introduce new financing instruments aimed at innovative, high-growth companies. Finance for riskier projects has all but dried up in Europe, so we need to fill that gap.

The Risk Sharing Finance Facility, or RSFF, has generated extra lending worth 15 times what we put into it. That is a very smart use of public money, so we want to build on it.

Overall framework conditions promoting private investment in research and innovation are improving in Italy, thanks to protection of IPR and new measures for starting up innovative businesses, but the venture capital market could still be developed further.

I would like to talk now about the bigger picture, about Horizon 2020's place among other key initiatives on the European research and innovation landscape.

In a context of global economic competition, the exit to the crisis for Europe requires that we remain the main destination of business investments in the world - both keeping European multinationals investing in Europe and attracting more Foreign Direct Investment.

This requires, in particular, that we protect and enhance public investments in R&D and accelerate pro-growth policy reforms at the EU and national level.

Up to 2011, a majority of the 27 EU Member States managed to maintain or increase their public R&D investment, despite pressures on budgets. But, worryingly, in 2011, fewer countries managed to do so, and overall public spending on R&D decreased for the first time since the crisis.

It is encouraging, though, that at the Summit in February, Member States highlighted the particular contribution of Horizon 2020 to the Europe 2020 strategy. Despite the fact that the levels agreed by the Heads of State and Government are below what the Commission considers desirable, the deal can still be an important catalyst for growth and jobs.

This political agreement opens the way for the Council to negotiate with the Parliament to obtain its consent, and to keep preparations

on track for the launch of the new programmes in 2014.

As regards Horizon 2020, a successful outcome of this process is crucial as we must offer solid, long term perspectives to researchers and investors worldwide that will convince them that working and investing in Europe now is the right choice.

Debate about the EU's next budget, including for Horizon 2020, has dominated the headlines in the media.

Commissioner Geoghegan-Quinn has been determined from the outset that a bigger role and bigger budget for Horizon 2020 should be accompanied by reform of how we invest this money at European level – hence the drive for simplification and a focus on the entire value chain from initial research to innovative products.

However, we all know that even greater impact can be made with additional reforms at national level.

Last year in the Competitive Council Member States underlined that realising the European Research Area will give an additional boost to the performance of national science systems.

The aim of ERA is unambiguous: increasing competition and cooperation amongst Member States' research systems, whilst promoting the free circulation of researchers and scientific knowledge.

In its conclusions of 11 December, the Council invited Member States to identify the national reforms and actions needed to achieve ERA. The Member States should present these reforms and their subsequent implementation when reporting on national ERA measures, including where appropriate in the National Reform Programmes starting from the 2013 European Semester.

Moreover, the Council requested the Member States to cooperate with national research stakeholder organisations into implementing the necessary measures and to contribute actively to the monitoring and evaluation of progress towards achieving ERA.

So I find today's conference particularly useful as regards coordination and synergies between national policy and structured debate with research stakeholders.

The Commission Communication on ERA of 17 July last year

outlines a series of actions to be taken by Member States, research stakeholder organisations and the European Commission.

We grouped these actions according to five priorities:

1. More effective national research systems – ensuring that funding is allocated on a competitive basis to the best and most productive researchers and research teams;
2. Optimal transnational co-operation and competition – removing barriers that prevent joint actions from getting off the ground, raising quality through Europe-wide open competition, and using key research infrastructures on a pan-European basis;
3. An open labour market for researchers – ensuring that researchers can move freely across the continent. It is vital to ensure that research grants and pensions are more portable and to recruit in an open, transparent and merit-based way;
4. Gender equality and mainstreaming in research – to end the scandalous waste of female talent; and
5. Better circulation, access to and transfer of scientific knowledge, including via open access to scientific publications. Indeed, open access will be the default setting for the publication of the results of projects financed by Horizon 2020.

In all these fields, research stakeholders have a vital role to play.

I know that Italy is doing a lot to improve links between research and innovation, with several policy initiatives to promote public/private collaborations, IPR regulation and transfer offices within universities, support for spin-offs and making it easier to collaborate transnationally. A key issue here and in other Member States, however, is the low mobility of researchers between public and private institutions

And since I see that Prof Fulvio Esposito, the chairman of the ERA Steering Group for Human Resources and Mobility is here, I would like to mention one activity which may be of particular interest to

you in the field of an open labour market for researchers.

In the Commission's view, universities should become 'innovation centres' for their region. They should train and retrain the workforce in dialogue with industry.

Training researchers in Europe just to be researchers in academia is no longer enough. Knowledge transfer should be given more recognition as part of an academic career from the start, researchers should be better attuned to the innovation potential of their findings, and academics should be trained in entrepreneurial skills.

With this in mind, the Commission has worked with experts from industry and academia to prepare seven *Principles for Innovative Doctoral Training*, to foster excellence and a critical mind set, and provide young researchers with transferable skills and exposure to industry and other employment sectors.

A growing number of doctoral graduates end up outside academia and we must prepare them for careers as innovators in the public and the private sector.

The Marie Skłodowska-Curie Actions will support 'European industrial Doctorates' with extra funding from the European Parliament. This year Commission-designated experts will visit a number of doctoral schools in order to learn how to upscale the use of these principles.

Let me stress out that the often repeated tenet that we must achieve ERA to realise Europe's full research potential has today a ring of urgency.

Fiscal discipline may stabilise the economy, but the sustainable health and the wealth of Europe require action for growth. The Commissioner is convinced that realising ERA is one of the biggest contributions we can make to Europe's growth agenda. The leaders of our Member States in the European Council have stated reiterated three times in two years that ERA *must* be completed by the end of 2014.

The ERA Communication provides the right framework and guidelines for the most urgent actions, but this is only the beginning. We need to start working now, together, Member States and stakeholders, supported by the European Commission.

I would now like to say a few words about the challenges and opportunities for Italy in research and innovation.

A total of 2.6 billion Euro has been awarded to participants in Italy since the start of the 7th Framework Programme in 2007.

It should be noted, however, that Italy's success – the proportion of applications to FP7 that are funded after the competitive process – stands at 18.2%, which is a few points below the EU average of 21.0%.

This funding has a significant impact on Italian research. Universities, Research Centres as well as private companies with research activities rely on FP7.

The top players are mainly universities and research centres, while the SME participation of 16,2% is close to the EU average 19,9%.

Italian applicants have been particularly successful in the areas of Information and Communication Technologies, Transport, Nano-sciences, biotechnology, research infrastructures and the Marie Curie Actions.

I would like to say a few words about the opportunities that Horizon 2020 will provide for two of those areas, ICT and Transport.

As I already mentioned, the second pillar of Horizon 2020 focuses on building leadership in enabling and industrial technologies, with dedicated support for ICT, nanotechnologies, advanced materials, biotechnology, and advanced manufacturing.

Reflecting the high priority we give to the Digital Agenda, Horizon 2020 will also fund e-infrastructures for science, key enabling technologies such as micro and nano electronics photonics and emerging technologies.

But most importantly, the role of ICT is fundamental in tackling societal challenges such as health, social inclusion, climate change or transport.

Speaking of which, Transport is a sector in which Italy is strong. Transport research under Horizon 2020 will have four strands, under the third pillar on societal challenges -

- Resource efficient transport that respects the environment

- Better mobility, less congestion, more safety and security
- Global leadership for the European transport industry – keeping transport competitive, and,
- Socio-economic research and forward looking activities for policy making.

These are just some of the options that would be open to Italian researchers and innovators under Horizon 2020. I have no doubt that you have already identified many others. I look forward to hearing the debate.

Before I close, on behalf of Commissioner Geoghegan-Quinn, I would just like to thank Minister Profumo for his much appreciated work to support research and innovation policy at European level. The contacts between Italy and the European Commission are excellent – I think that Raffaele can testify to that!

I wish you an excellent conference and good luck in your preparations for Horizon 2020.

Thank you.