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Speech

***“Building” Research Infrastructures for a competitive knowledge
Europe***

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Vice-Chancellor, Sir Keith [O'Nions], honourable Members of Parliament, distinguished guests, ladies and gentlemen,

It is a great pleasure for me to participate today in the opening session of this 3rd European Conference on Research Infrastructures. Following on from the first one held in Strasbourg in 2000, and the second held in Trieste in 2003, the Nottingham Conference will, I am sure, make a further contribution to clarifying the needs and the urgency for developing more efficient Research Infrastructures in Europe.

But, allow me to first put our subject of today into a broader context.

Five years ago, European heads of state and government leaders, meeting in Lisbon, set themselves the ambitious target of becoming the most dynamic and competitive knowledge-based economy in the world by 2010. The "Lisbon strategy" was born, with the creation of an internal market for research, the "European Research Area". Not long after, the Barcelona European Council agreed on the objective of boosting the level of research funding to 3% of GDP by 2010, with two thirds of that coming from the private sector.

But last year - almost halfway through the decade set for these ambitions - most indicators showed that the "Lisbon strategy" was faltering.

That's why, earlier this year, the European Commission presented its proposals to reinvigorate and refocus the Lisbon strategy, and to strengthen Member States' commitment to it, and these proposals were subsequently endorsed by the European Council in March.

This endorsement of the role of R&D and innovation in reinvigorating Lisbon, coupled with the Commission's proposals on FP7 calling for a doubling of the budget for the framework programme, meant that for the first time research was taking on a more prominent political role and was moving centre stage. Even more recently, developments in the Financial Perspectives debate have brought research and innovation to the forefront of discussions at the Hampton Court summit in October, where it was again agreed that more needs to be done for research and innovation in Europe. I know that you will agree with me that this is a very welcome development, but we have some way to go to establish how precisely these words will translate in action.

At the same time more and more voices are calling for increased investment at EU level in research and development. There is growing recognition that innovation is an important driver of economic growth and those who fail to follow the rhythm of innovation will simply fall far behind.

I don't want this fate for the European Union.

So, **what Europe do we want?** What type of society do we want to create for ourselves and for our children?

We want Europe to be competitive and offer an attractive business environment. And we want to allow European citizens to be proud of Europe.

Some of our trading partners are competing with natural resources, which we do not have. Some compete with cheap labour, which we do not want. Some compete at the expense of the environment, which we cannot accept. So we must achieve competitiveness and a vibrant Europe through knowledge, in other words through world-class research and innovation.

We must pass the message clearly that Europe's response to current problems is not to create more uncertainty and decreased job security, but to create more opportunities and better jobs through education, research and innovation.

The "Lisbon strategy" is all about building on what Europe can and should do best: provide excellent education, foster excellent research, and make room for creativity and innovation.

Now, what is the situation as regards research investment and research performance in Europe?

Let me share with you some of the latest facts and figures for science, technology and innovation as published earlier this year.

R&D investment in the EU is stagnating. If current trends are allowed to continue, by 2010 we will have arrived at a figure of only 2.2% of GDP.

At the same time, research intensity in, for example, China is currently growing at a rate of 10% or more per year. If this trend continues, China will, in 2010, devote at least the same share of its wealth to R&D as the EU-25. In other words: China is catching up with Europe, and Europe is not closing the gap on the US and Japan.

Furthermore, business funding of R&D in Europe has decreased since the year 2000. In 2002 it stood at only 55.9% of domestic R&D investment, compared to 63% in the US and 74% in Japan.

As regards research performance, a major trend is that companies appear to be turning increasingly towards Asia - notably China and India - not just for market or cost reasons but also because of the knowledge environment that they find there. To give just one figure, in 2004 China awarded degrees to over 600,000 graduate engineers and India 350,000. There is more and more anecdotal evidence of enterprises creating research centres in China, and this shows in the recent figures of research expenditure in China, where the trend over the last five years is around 20% annual growth.

It is therefore time to take some courageous steps forward, including with the EU budget, to turn the current crisis into an opportunity. It is essential that we act decisively to create more attractive conditions for companies and people to work, invest, research and innovate in Europe.

Research must be our main engine. Studies have shown that each extra percent in public R&D leads to an extra 0.17% growth in productivity. In the long term, research also leads to more and better jobs, particularly in those sectors of the economy that recruit highly-skilled people with salaries to match.

This shows that public spending on RTD represents not a cost, but the best possible investment in Europe's future.

To achieve this, we need the next long-term budget of the EU – which is as you know being currently being discussed by Europe's leaders - to fully recognise the priority that must now be given to research. These negotiations must not underestimate the importance of going ahead with a better and stronger Seventh Framework Programme (FP7), the flagship programme for enhancing knowledge in Europe.

We are now at an important moment in the European Union, a moment of truth where Member States be called on to decide whether they will grant the EU sufficient budget to execute an ambitious Seventh Framework Programme, or allow us to slip further behind our competitors.

Europe's leaders have an opportunity to make a courageous and collective political decision to demonstrate their serious commitment to the Lisbon vision, and it is one that I hope they will not miss.

However, so far I am afraid to say that the signs are not very positive.

I find this both surprising and deeply disappointing. Especially when we take into account that a vast majority of Member States have signalled research and/or innovation as one of their main challenges in the National Reform Programmes through which they will implement the Lisbon strategy.

One of the conclusions of the Hampton Court summit was that the Structural Funds should support more regional competitiveness, and research and innovation in particular. I agree that this is extremely important and I strongly support the idea of earmarking perhaps 60% of Structural Funds for "competitiveness" expenditure, including research and innovation.

But I must emphasize that, however important, the regional funds are not enough. There is an equally strong need to ensure critical mass and coherence for major research and technology programmes and projects, which can only be ensured through strong European funding. It constitutes a significant stimulus for the realisation of the European Research Area.

Whatever the outcome of the discussions on the Financial Perspectives at the European Council, our challenge will be to make it the best Framework Programme possible.

And, if we cannot double our funds, we will surely have to double our efforts.

My ambition for FP7, therefore, is of a powerful instrument leveraging knowledge for growth, with flexible and simpler instruments and procedures, focusing on consolidating our strengths, addressing our weaknesses, and serving the needs of our Society.

The links to other programmes and instruments that will also implement the renewed Lisbon agenda are essential. For research infrastructures this concerns in particular the Structural Funds and the operations of the European Investment Bank.

So now I come to the focus of this conference: Research Infrastructures - the highways to generate knowledge.

The access to effective research infrastructures in Europe is a key factor for competitiveness in both fundamental and applied research. Adequate research infrastructures are also vital to promoting innovation by offering the necessary conditions and the critical mass to carry out cutting edge research.

This should be translated in particular into specific requirements for the construction of new pan-European research infrastructures, for their integration at European level, as well as for the provision of better access for all scientists.

A policy on research infrastructures at European level provides added value by pooling talent, maximising resources and generating a strategic vision for research in the European Research Area.

In line with this approach, I am proposing under FP7 to increase support to the use, operation and integration of existing research infrastructures.

I also propose to reinforce support for the construction of new research infrastructures through the catalysing and leveraging role of the Framework Programme.

Although some countries make significant investments in Research Infrastructures, none of them can provide all of the required state-of-the-art facilities on a national basis. The high investment and operational costs – as well as the local demand, particularly in smaller countries - do not allow for the building and operation of the required research infrastructures. Present limits in national and institutional budgets are therefore decreasing the flexibility and capability to respond to the growing demand. A Community effort is needed today to foster the “building of capacities” in Europe.

Funding the construction of new infrastructures affects the direction of research for many years. It is therefore vital to define priorities well, and to establish a clear prioritization process enabling funding of the most important projects needed in Europe in the next ten to twenty years.

This should be based on a strategic vision and, here, the European Strategy Forum for Research Infrastructures (ESFRI) plays an important role. As you know, the establishment of this Forum has, since 2002, ensured a much better coordination of national and European actions and has paved the way towards the development of a European policy on infrastructures.

ESFRI is currently working on a European Roadmap and this will greatly help the European Research Community to concentrate its efforts towards commonly agreed objectives.

National and international research infrastructures are key elements of the European Research Area. However, it is clear that more can be done if we make better use of resources at European level. We can become much stronger if we pool our efforts in an intelligent way. Developing in Europe the next generation of Research Infrastructures will bring about the development of cutting-edge technologies, enrich society with new job

opportunities, and will fuel the dreams of a new generation of young people, the scientists of tomorrow.

Ladies and gentlemen,

In the field of Research Infrastructures, Europe must respond to renewed challenges.

This Conference will no doubt lead to important discussions and I am very much looking forward to hearing its conclusions.

Building a knowledge society is the best way, and maybe the only way, to sustain the European model of society without having to make a trade-off between economic growth, social cohesion and environmental protection.

I see challenging and exciting times ahead of us, where the EU is set on a coherent path towards enhancing growth and creating jobs and where research is at the heart of this process. Only increased investment will allow Europe to stay in the lead and to face these challenges effectively, and this is where European research infrastructures play a key role.

We need to make sure that our political leaders, who will take crucial decisions for the EU's future in the days and weeks ahead, reach the same conclusion!!

And we need to find the right approach to mobilising the public at large to participate in the building of "Knowledge Europe".

I am convinced that we can do it. I am also convinced that we must.

Thank you for your attention.
