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Europe must keep taking the medicine

esearch, innovation, education – these issues seem to be very popular at the moment. At European and national level, there is growing awareness that investing in knowledge is a must if we are to maintain our quality of life and maintain our global competitive edge. Yet, for all the good intentions, the signs are not yet there that this analysis is being put into practice.

In 2002, the Member States made a commitment to increase investment in R&D to three per cent of GDP by 2010. The statistics for 2005 were made available at the beginning of this year and showed that R&D investment as a percentage of GDP (called R&D intensity) is in fact stagnating. The 2006 version of the annual scoreboard of industrial R&D produced by the Commission did show an increase in investment by the 700 biggest R&D spenders in the EU, but this was outstripped by the growth in investment of the 700 biggest non-EU spenders.

The recent key figures for research show that the EU's share of world research spending has fallen from 29 per cent 10 years ago to 25 per cent, and the trend is downwards. And while EU R&D intensity stagnates, China's research intensity is on course to overtake the EU's by 2010. It seems to me that Europe is like some patients – we know the illness, we know the right medicine to treat it, but the patient doesn't want to swallow it. Governments and administrations seem to focus their attention on other matters perceived to be of more pressing concern to those they represent.

At European level, one way that we try to address these challenges is through the Framework Programme. The seventh of these Framework Programmes runs from 2007 to 2013 and will provide almost €5 billion of funding for researchers in Europe and beyond. While we cannot address the problem of stagnating research investment with this programme, representing as it does something around five per cent of public research investment, we can nevertheless use it in a number of ways to improve Europe's research performance. Two things I would like to highlight here, addressing very different aspects of the EU research landscape, are European Technology Platforms, and the European Research Council. One of the challenges we face is to produce research that is attuned to the needs of industry. To do this, many of the thematic priorities within the programme are based on input from the European Technology Platforms, bodies bringing together all those with an interest in a particular industry or sector to define the future needs of that sector and to design a strategic research agenda that will help those needs become reality. In certain specific areas – aeronautics and innovative medicines, to name two – this logic is taken a step further with the creation of Joint Technology Initiatives, major public/private partnerships to build a coordinated research programme. These JTIs will channel billions of euros of research money in a way that directly corresponds to identified industry needs and avoids overlap and double-funding, thereby making the best use of resources.

We have designed a programme that encourages the best of European research. Such a programme must have excellence at its core. A prime example of this approach is the European Research Council, supporting the best teams or individuals carrying out research that pushes forwards the frontiers of our knowledge, based on the principles of excellence and scientific autonomy.

The ERC is led by a Scientific Council of distinguished scientists. The 2007 call for proposals led to over 9,000 applications, which are now being evaluated by panels of experts. This response clearly shows that European researchers are crying out for funding and we hope that we can find a way of working with Member States to ensure take-up of at least some of the worthy ideas that cannot be funded at EU level due to funding constraints.

I am often asked how I can ensure that those countries with a less developed science base can take part in the programme. We do have a part of the budget allocated to developing the research potential of Europe's poorer regions, but there is much more scope within the funds made available to each country for economic development. My colleague responsible for regional policy within the European Commission, Commissioner Danuta Hübner, and I have recently made some proposals about how these structural and cohesion funds can be used to support the development of a country's science base. If we get that right, then the participation of scientists from those countries will certainly increase in the Framework Programme in the future.

Of course, there is also much to be done outside the Framework Programme. In April of this year, we started a debate about the broader issues of the European Research Area – how can we make Europe a more attractive place to carry out and invest in research? We want researchers, policy-makers and business-people to help us identify the problems, and formulate possible solutions from which we will make new proposals in 2008.

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