

# Committee for Enterprise, Trade and Investment

# OFFICIAL REPORT (Hansard)

Inquiry into Developing the Northern Ireland Economy through Innovation, Research and Development: Invest NI

29 March 2012

### NORTHERN IRELAND ASSEMBLY

## **Committee for Enterprise, Trade and Investment**

#### Inquiry into Developing the Northern Ireland Economy through Innovation, Research and Development: Invest NI

#### 29 March 2012

Members present for all or part of the proceedings: Mr Alban Maginness (Chairperson) Mr Steven Agnew Mr Gordon Dunne Mr Paul Frew Mr Paul Givan Ms Jennifer McCann Mrs Sandra Overend

Witnesses:	
Dr Joanne Coyle	Invest
Ms Carol Keery	Invest

**The Chairperson:** Briefing the Committee today are Carol Keery, director of innovation, research and technology at Invest Northern Ireland, and Dr Joanne Coyle of the collaborative R&D support service. I welcome you both here this morning; I am delighted that you could attend. We have received written material from you, with which we were very pleased. Would you like to make an opening statement, after which we can ask questions? Thank you very much.

NI NI

**Ms Carol Keery (Invest NI):** Thank you for the opportunity to come along today. As you have said, my name is Carol Keery, and I am director of innovation, research and technology at Invest NI. I am accompanied by my colleague Dr Joanne Coyle, who heads up the collaborative R&D support service. I know that we are coming to you at the end of a long list of providers of evidence.

The Chairperson: Yes; we have kept the good wine for last.

**Ms Keery:** That is exactly what I was going to say. If you will bear with us, I would like to present the evidence from Invest NI.

I will start by outlining our remit. We operate as a non-departmental public body and as Northern Ireland's economic development agency. In effect, we are the operating arm of the Department of Enterprise, Trade and Investment (DETI). We provide comprehensive support for businesses by effectively delivering the government's economic development strategies, making the most efficient use of available resources and providing high-quality services and programmes, support and expert advice. Principally, we support businesses in the manufacturing and tradable services sector.

In the context of the Northern Ireland Executive's Programme for Government and the associated economic strategy, our corporate plan sets out how we will contribute to the rebalancing and rebuilding of our local economy to increase the overall standard of living by driving up productivity growth and employment.

A key objective of Invest NI is to promote enhanced levels of R&D as a source of new technologies, products and processes and as a key driver of productivity growth and, ultimately, economic growth. Through the range of interventions at our disposal, Invest NI is committed to driving market-led innovation in the Northern Ireland business base. We are also committed to increasing the scale, quality and speed of R&D from the initial concept through to full commercial application. To that end, we provide support from cradle to grave.

A key indicator of R&D activity is business expenditure in R&D (BERD). I am afraid that we are, probably, heavily loaded with acronyms; hopefully you will bear with us. Despite recent record growth in levels of BERD in Northern Ireland, where it rose by 95% between 2005 and 2010 — in financial terms, that is from £176 million to £344 million in that period — the rationale for government intervention to incentivise R&D spend remains strong. That rationale is linked to the consistently small number of companies that do R&D — or, at least, those that recognise that they do R&D, as that is an issue — and the concentration of BERD in the 10 biggest-spending companies, which accounted for 59% of the total spend in 2010. In addition, externally owned companies accounted for 68% of the total BERD.

Therefore, although there has been much to applaud, there remain a number of systemic weaknesses in the business base that would need to be addressed if we are to achieve the desired and necessary levels of economic growth. In recognition of R&D as a key driver of economic growth, Invest NI has allocated a growing proportion of its budget to incentivising R&D activity. In the period 2008-2011, which was our last corporate plan period, the budget that was available to support R&D alone increased from £19 million per annum to £46 million, which represented 28% of the total Invest NI budget.

In the four years of the current corporate plan, which covers the period 2011-15, the R&D budget is projected to average £31 million per annum. Of that budget, around 80% will go directly to businesses with the remainder allocated to the research base in pursuit of higher levels of research, commercialisation and knowledge exchange. One of the main facilitators of that increased budget for R&D is its easy alignment to European regional development fund (ERDF) criteria. Currently, 80% of the annual budget that I hold is ERDF funded, making that a very efficient way of maximising the drawdown of EU structural funds into Northern Ireland. In total, Invest NI will draw down £245 million of ERDF money in the period from 2007 to 2013 to fund R&D support. Anyone who has experience of ERDF funds will know that that is not without its difficulties. ERDF, if I may say so, is a very unforgiving fund and one that can cause a number of burdens with regard to how it is managed.

As a result of that increase in budget and subsequent increase in the number of projects that are supported, Northern Ireland experienced the second largest percentage increase of all UK regions in the total R&D spend in 2010. In 2010, BERD grew from 0.6% of GVA to 1.2%, placing Northern Ireland sixth of the 12 UK regions in relation to BERD, just below the UK average. That is a significant achievement but, nonetheless, there needs to be some realism about what we can achieve going forward. BERD will be required to at least double in quantum if Northern Ireland is to meet the European target of 3% GVA by 2020. That will be very challenging, given the systemic weaknesses in the economy and the business base, which I already alluded to. For all the stakeholders in the R&D ecosystem, but particularly for Invest Northern Ireland, there remains a significant challenge in mobilising individuals and firms, particularly small- and medium-sized enterprises (SMEs), to increase their capacity and capability to innovate either on their own or, more increasingly, through collaboration, by entering into collaborative research programmes that bring benefits to a wider spectrum of businesses in the economy.

I alluded to the fact that 80% of the R&D budget goes directly to businesses through R&D grants. I believe that we have one of the most flexible R&D programmes in the UK. In 2008, Invest NI was one of the first economic development agencies to embrace the new EU R&D and innovation state aid guidelines. We were second only to the South. The Commission's guidelines sought to reinforce the importance that the Commission placed on incentivising R&D and innovation, and permitted the provision of enhanced levels of support for SMEs and higher risk R&D projects. Through that framework, Invest NI revised its support to maximise its flexibility through the introduction of a single grant: the grant for R&D. Previously, we had over five schemes. A key feature of the grant was the flexibility it brought in responding to the needs of businesses. Although the grant for R&D is now the main support mechanism, there remain a number of other support mechanisms to facilitate businesses getting into and progressing up the innovation escalator. The progression of businesses up the escalator is not necessarily linear, and businesses can enter at any point in their development. It is for that reason that we have to be very flexible in how we respond to the range of needs that businesses present. We cater for businesses with no history of undertaking R&D and those with sophisticated R&D functions such as Almac, which I know you heard from. We deal with the full range of R&D, from R&D in a bucket — in the food sector, in respect of how to mix the best sauce — right through to the development of the most sophisticated technology that is new to the world, particularly in the health and life sciences sector and the IT industry.

I note that you specifically asked about competence centres during the previous session, when DETI presented to you, and you were advised that they are a work in progress. That is, in fact, the case. The competence centre programme is our latest initiative. It is designed to enhance levels of R&D and to provide collaborating businesses with the opportunity to agree and contract high-risk, long-term research that is currently outside their capability and capacity. The competence centres will be virtual large-scale entities that will require a period of transformational, long-term strategic investment by Invest NI to encourage greater and more efficient interaction between businesses, researchers and the public sector in pursuit of leading-edge R&D. We have five proposals under consideration, which are in the following sectors: agrifood; connected health; sustainable energy; advanced materials; and cloud computing.

The availability of risk capital for innovating businesses was also raised at a previous session. Invest NI's access to capital strategy provides for a suite of equity funds that will provide a continuum of funding from £50,000 through to £2 million, all targeted at SMEs. The establishment of the funds is at various stages, and the total investment in them by Invest NI will be over £100 million. In addition to the financial support for businesses, we also provide a cadre of 16 specialist advisers, offering a wide range of advice, guidance and support in the area of innovation, on such matters as technical issues; product development; intellectual property; lean; design; and collaborative R&D. We work closely with businesses to make them aware of the support available and, if necessary, help them to complete application forms. The Northern Ireland business information portal also provides businesses with a valuable source of self-serve advice and guidance across a range of business areas. The site has over 52,000 visits monthly across a wide range of subject areas.

Other issues raised in evidence have reinforced the need for greater connectivity in the local innovation arena and beyond. For our part, support programmes such as the proof of concept programme and the knowledge transfer partnership programme are targeted at connecting and facilitating a knowledge exchange between the research and the business base for commercial return.

The innovation vouchers scheme has also provided a valuable mechanism to provide businesses with a first step in building a culture of knowledge transfer between the research base and small businesses. We also provide hands-on support for businesses and universities to access EU and national funds for R&D. One example is the Enterprise Europe Network, which I referred to in the briefing, so will not cover again.

I am also aware of the growing interest stimulated by Barosso in the capacity of Northern Ireland to increase its drawdown of EU funding for R&D. In support of enhanced drawdown of framework funds, Invest NI has appointed two NI-based collaborative executives, who have been in post since late 2009. As well as responding to queries from Invest NI client companies, the wider business community, universities and other public bodies such as the PSNI, the team proactively targets companies currently

in receipt of Invest NI funding for industrial R&D. Those clients would be expected to be the best and most capable of succeeding in applications for framework funds.

More recently, Invest NI's collaborative R&D team, which Joanne heads up, introduced a mentoring scheme that seeks to provide funding to enable applicants to contract hands-on advice from framework programme (FP) 7 experts to overcome the costs and experience issue in developing suitably robust project applications.

Invest NI advises Northern Ireland businesses on applications to the Technology Strategy Board's (TSB) collaborative R&D competition. The collaborative R&D team also hosts TSB events, which directly target NI businesses. The team has also increased awareness of Northern Ireland's capabilities by attending network events with the TSB, the UK-wide Enterprise Europe Network and the UK FP7 national contact points. Most recently, Invest NI was represented on the Department for Business, Innovation and Skills' Horizon 2020 steering group, with a view to ensuring that the views of Northern Ireland are considered in the development of the UK's proposals for the implementation of the Horizon 2020 programme.

In April 2010, the focus of Invest NI on the framework programme was strengthened by the addition of an executive based in Brussels: Farha Brahmi. That executive has been developing relationships and relations with key individuals in EU institutions in order to support Northern Ireland R&D stakeholders and influence EU R&D policies, and is providing a valuable link for Invest NI into the Commission and its policies.

That is a summary of the range of things that we do; we would be happy to take any questions.

**The Chairperson:** Thank you very much for that comprehensive summary. How would you assess R&D in Northern Ireland at this moment in time? Is it good, bad or middling? Where would you put it?

**Ms Keery:** If you were to look at the recent figures that I referred to and the growth, it is burgeoning. The difficulty is that there is a focus on R&D activity in too small a number of companies. Large companies account for the majority of spend and activity. That is not to say that that is a bad thing. In a review we did recently of R&D undertaken by large companies, it is clear that they are producing well in excess of the average rate of productivity gains as a result of that R&D. They are also paying well in excess of the median salaries for the people doing the R&D. So, there is a lot to be gained from the R&D activity that has been undertaken by large firms. However, we would seek to widen its focus.

**The Chairperson:** That is a frank assessment. You are saying that research and development is concentrated too narrowly but productively within a range of companies that would, I suppose, be Barnett-compliant. In other words, if you take the Barnett report and were measuring them against what you want to achieve in Barnett, it is in those types of companies that you are getting higher-value jobs and a higher income level for workers.

**Ms Keery:** Yes, and also very strong spillovers. There is evidence that they are becoming increasingly engaged, on a collaborative basis, with other businesses, so there is that potential as well.

**The Chairperson:** The Committee is constantly saying that there should be opportunities for small and medium-sized enterprises (SMEs) to be involved in R&D. I am not so certain that that can be achieved, because I think that our businesses are too small for that. However, could they benefit from the application of some of the research and development and innovation? I would have thought that bigger businesses must attract smaller businesses, through procurement, supply and so on?

**Ms Keery:** There is very strong evidence to suggest that a number of spillovers derive from large companies doing R&D and, as you said, those are in the supply chain and where collaboration and knowledge transfer takes place. Maybe I could take you back: R&D is still very much interpreted as involving white coats and labs. If you were to look at the range of activities that are happening in our business base, very strong seeds of innovation and R&D are taking place in the wider business base. About 78% of our support goes to what you would term SMEs, where there are a range of activities and some very exciting —

The Chairperson: What do you mean when you say 70% of support?

Ms Keery: The number of offers that we put out.

The Chairperson: But not in R&D?

Ms Keery: Yes, in R&D.

The Chairperson: In R&D, 70% ----

Ms Keery: Yes; the number of offers. Now, not in value: 78% of the offers that we make are to SMEs.

**The Chairperson:** So that is in terms of the overall quantum of offers being made, but the value of those would be disproportionately less.

**Ms Keery:** That would be around 30% of the total amount going out. That is to be expected; they are doing smaller projects so it is a smaller amount.

**The Chairperson:** Yes. You said that R&D is growing and you would not be satisfied with the present level of R&D, although it has improved to 1.2% of GVA. What is the aim of the Department — sorry, it is not the Department, but is an agency of the Department — what is the agency's aim for the percentage of R&D spend and over what period?

**Ms Keery:** Until 2015, we have said that the target will remain at 1.2% of GVA. The reason for that is that GVA has been falling. Therefore, keeping it at that level is still providing us with a challenge.

The Chairperson: So you are really standing still?

Ms Keery: We are not, because —

The Chairperson: You are holding your own.

**Ms Keery:** We are holding our own, because GVA is falling. It is projected to stabilise around 2015, but that is within the context of the corporate plan. We have said that we will be doing well to stabilise around 1.2%.

**The Chairperson:** I have a couple of other points. The Committee has been talking about R&D for quite some time, and there is a sense that there should be an organisation with overall responsibility for driving R&D. What would you say to that?

**Ms Keery:** In driving R&D, it is very important that some central organisation has an overview of what is happening across the R&D arena.

**The Chairperson:** Can I just stop you there? You accept that, but do you think that it should be inside or outside Invest Northern Ireland?

**Ms Keery:** With regard to having an overview, I think that it would be difficult within Invest NI, because you have to have somebody who has a cross-cutting remit.

The Chairperson: Yes, true.

**Ms Keery:** Two things are back on the table as part of the economic strategy: the consideration of appointing a chief scientific officer — Northern Ireland is probably one of the few regions not to have such a post; and the suggestion that we should have an innovation council. In the past, Invest NI looked at VINNOVA in Sweden as a model for an innovation council. The strength of that council is that it is not within government but is aligned to it. It is at the heart of working alongside government.

#### The Chairperson: Is that the Swedish model?

**Ms Keery:** Yes. That positioning enables it to have a cross-government remit and a much stronger influence on government, because it is not perceived to come from any one perspective. We would, as we have in the past, value the appointment of a chief scientific officer as somebody who can lobby strongly on behalf of the research that needs to be done to maximise the strengths of the Northern Ireland research base, of which there are many. Such an officer could also identify where we should prioritise our research activities, and that is difficult to do unless you come from an overview position.

#### The Chairperson: That is interesting. Do you have anything to add to that, Dr Coyle?

**Dr Joanne Coyle (Invest NI):** We should look at other regions, such as the South of Ireland, which has policy direction from Forfás. It also has Science Foundation Ireland, but Enterprise Ireland tends to provide grant support to businesses directly for R&D and similar programmes. That is important, because you have a team of account managers and client executives who talk to businesses and understand their needs. R&D is a business need, but there can be different timescales. It may be that a business needs more skills and job support, with R&D planned for the short or long term, so you need an agency like Invest NI talking to business directly all the time to understand when the time will be right for the R&D project to be progressed. Invest NI will ask when the business is looking to raise its game with innovation, to lead it into exports. So, it is part of the cycle, in that we bring in companies through the foreign direct investment (FDI) route, and part of our encouragement to them is our package of support for R&D.

**Mr Agnew:** You mentioned the level and importance of funding from Europe for R&D. We have the problem that, in the European context, some of our SMEs are micro-businesses and few businesses in Northern Ireland would be considered anything other than a small business. The more I hear about this, the more I think that there are two possible ways to go. It may be both rather than one or the other, I do not know, but we either try to get Europe to take account of the Northern Ireland context, or we try to get Northern Ireland businesses to understand the European context and collaborate, so that they can operate within that context and benefit from it. What direction are we taking? Are we doing both? What successes are we having?

**Dr Coyle:** You are right: there can be many approaches to this. On one hand, we need Northern Ireland's businesses and stakeholders to understand how Europe works. Europe puts forward funding for projects to meet the aims of Europe and to benefit its citizens; it is not just to benefit a particular region. We need to understand what Europe's priority areas are. If we view Europe's guidance to be aligned with Northern Ireland, we need to get on board with its programmes. However, we also need to let Europe know about our particular situation, and we fed that back strongly when Europe launched its consultative Green Paper on Horizon 2020. As well as being heavily represented through the UK's Department for Business, Innovation and Skills, Northern Ireland put in its own paper directly from DETI, emphasising the micro-business economy here. That is recognised in Europe, and the need for simplification of the processes is recognised. It is simplification for the benefit of the participants rather than simplification for the benefit of the European Commission. We felt very strongly about that.

We view the consultation on the Green Paper as a success from the European perspective, because the proposals for Horizon 2020 have something for everyone. In particular, there is an emphasis on innovation, and one of the pillars is about leadership and innovation. That will certainly bring more businesses in. The target set in FP7 of 15% participation by SMEs was to encourage that, and progress on that is monitored every six months. It has sat roughly at that level, and we have had feedback from our MEPs that the European Commissioner with responsibility for R&D is continually being told by MEPs that even 15% is too low and that we need more participation from SMEs and to take into account the needs of small businesses.

That having been said, it would be irresponsible, from our point of view, to encourage microbusinesses into European projects when they are not ready, and that is why Invest NI has other schemes that might be more suitable for them in building their capability and capacity. We look at our view of an innovation escalator as an appropriate way of working with companies to build up their capabilities.

A lot will come out of Horizon 2020, and we are keeping our ear to the ground. We are involved in a number of BIS working groups that are looking at the rules of participation. One issue that has been raised is the overhead rates, and that is being heavily debated. We are also working closely with our counterparts in the South of Ireland, because SMEs there have participated heavily in the programme, and there is a lot that we can learn from them.

There are many approaches that we need to take. One of the things that I always emphasise is the need to get involved in networks. Northern Ireland, especially through our contact in Brussels, has been much more active in networks. Invest NI hosts the Enterprise Europe Network in Northern Ireland, and Northern Ireland has always performed very well in that network. In evaluations of the old IRC, we were one of the top performing regions in bringing in —

#### Mr Agnew: What was the IRC?

**Dr Coyle:** It was the Innovation Relay Centre. It was combined with the Business Relay Centre to form the Enterprise Europe Network. That has continued to be the case through the technology transfer agreements that we promote, and that is a very strong network that we are a very strong performer in. Similarly, that is the case with the European Regions Research and Innovation Network (ERRIN), which is a European-wide network. Farha Brahmi sits on the management board of that now and has some influence in directing our activities. One of the key activities has been in developing and getting involved in European innovation platforms (EIPs), which we see as a key way to be more active in Horizon 2020. We are working with our Connected Health colleagues on the active and healthy ageing platform, and we are preparing for green week in May and getting involved in an agriculture EIP as well. We are laying the foundations to be ready for Horizon 2020.

**Mr Dunne:** Thank you very much, ladies, for the very informative presentation that you have made to us. We are impressed with your enthusiasm so far. We have had quite a few of these sessions and taken quite a lot of evidence. You have been talking about the reluctance of SMEs to get involved in drawing down funding through framework programme 7. Can firms go to you to look for funding rather than going down the European route, which is complex and difficult? We get that a bit from some organisations, which put the onus onto us. They say that Invest is not doing enough and is reluctant to take the risk. Is there a process? Obviously you have some sort of system in place whereby firms or organisations have to prove how they are going to manage risk before you will take the risk with funding.

**Ms Keery:** I will start off on that, and maybe Joanne can pick up on the European funding aspect. As Joanne has mentioned, there are horses for courses, and European funding is not suitable for everybody. One of the key things that Invest NI strives to do is build the sophistication of businesses to undertake R&D. We have a range of schemes for the small businesses that actually introduce those businesses to R&D for the first time. We have a target of 500 businesses that are new to R&D, and we hand-hold those businesses in the initial stages.

One of the key schemes that we operate is the innovation voucher scheme, which is a very small amount of money that is, very simply, given to businesses that potentially have a business need so that that business need can be met through research. That business need can be anything. I referred to R&D in a bucket, as such, but we deal with everything. I will give you an example. At the moment, we are working with a small business that is making ice cream. It wants to put bubblegum in the ice cream — it sounds disgusting, I know — so we are working with it to see what kind of coating could be put on the bubblegum so that it would not melt. It is a very simple idea, but it is very important for that business. We are trying to start with very small steps to get businesses to engage in product development and then to move up the innovation escalator.

You referred to risk. The risk associated with supporting R&D products has always been an issue. Part of that issue is because the outcomes of R&D are not known. In many instances they are speculative. One of the things that we are very clear about is that an R&D project that does not finish or complete is not a failure. It can be a success, because part of the R&D process is to test concepts to see whether they work or not. If, at the end of the process, you find out that it is not a viable proposition and it does not proceed, that is actually a success. That does not necessarily sit easily with allocating public moneys, so we do have to make some sort of risk assessment as to whether a project will be successful. In the past we have struggled, because, in general, the outcomes of R&D are unknown. In providing a value-for-money statement we are now much more sophisticated in that we have a new economic efficiency model that allows us to quantify the outcomes of R&D much more comprehensively and attach some sort of figure or quantifiable return to R&D outcomes. Previously, we were unable to do that. That gives us almost a scoring mechanism that enables us to say whether one R&D project would, possibly, provide better value for money. We are still involved in supporting high-risk projects; that is why we support R&D. It is about managing and minimising that risk.

**Mr Dunne:** Is there a lot that a firm or organisation has to do to justify getting the money initially? Are there a lot of hoops to go through to get it?

**Ms Keery:** Recently, we introduced the Boosting Business through R&D scheme. We tried to streamline the application form. We have brought it down, as far as possible, to a tick-box process. I have to be honest; we still require information on the finances, the market opportunity and the costs of the input that will be needed to make the R&D project work. We will always require that. That is what enables us to assess whether the R&D project will provide value for public moneys.

**Dr Coyle:** That is why we give companies assistance to develop their project plans. SMEs, in particular, can have some funding to help them. Our innovation advisors talk them through the process and help them to fill out the application form. We recognise that it is a challenge for them and we look at ways to try to help them through that process.

FP7 is difficult for SMEs to get involved in, due to the long lead-in times. You are asking SMEs to start committing to a project which is not even officially launched, because you need to get them involved to find the partners before the launch. Often, we have heard anecdotally that if you wait until the call is announced, it is too late to be involved, because you have only six months to write your application. It takes many hours to prepare the application. There are sections that they need to ensure are covered well, and, as I said, they have to get into their heads that we are thinking of this in terms of a project that will appeal to Europe; it has to have an impact and benefit for European citizens and not just for themselves. That can be difficult.

The challenge of collaboration can be difficult. When my team goes to talk to companies, the biggest thing it can do is listen to their needs. Often, we have a referral from a client executive who feels that the company might be ready to do a collaborative project. Similarly, they might have approached us after an event at which we have been promoting the opportunities that are there. My team members will go out and talk to them, one to one, and listen to the company's needs. Then they will look at the range of collaborative solutions that exist. FP7 is just one of a range of schemes. We might encourage them to look at the Technology Strategy Board, because it runs Eurostars, which is a European project. It does not need three transnational partners; it needs only two. That might be a better way in. It also gives a quicker answer on whether you have been successful, and you can get started. There are attractive rates of support there as well.

Similarly, we are trying to encourage more North/South co-operation, because we have another member state on our doorstep. Why not develop collaborative relationships there that can be built on, and progress to FP7, or Horizon 2020 as it would be, in the future? We would encourage them to look at the likes of the Innova programme.

Knowledge transfer partnerships (KTPs) are excellent. They get companies involved in collaborating with the research base to start with. We will look at companies that are active in that space and then take them to the next stage. Again, it is about looking at the idea of an escalator and seeing whether those companies are ready and whether they should be attempting to go to FP7, given the risks involved. As you have seen from the evidence, the average success rate is 20%.

We have also been able to show, through our statistics, that there have been 132 successful participations in Northern Ireland, many of which are from the academic base. What you do not see behind that is that there have been 848 applications seeking funding of £301 million. They have, therefore, sought a considerable amount from Europe, but they have reached only £36 million. That

shows that there is a willingness there but some are failing. That is why we looked at the idea of mentoring support.

I want to clear up some issues. We have always provided project definition assistance to companies that participate in FP7. The mentoring scheme was introduced specifically to look at the needs of our research base, because we expected it to participate at a higher level, and we could see areas in which it was failing. We thought that it could benefit from mentors. The industrial base has always been able to avail itself of that support.

**Mr Dunne:** I have one other point. We talked earlier about the white-coat perception of R&D. Could more be done to try to broaden the outreach to a lot of firms and organisations that are involved in the service industry, providing IT and so on? I think that we have a perception that R&D applies more to people or firms involved in manufacturing. It is a lot more than that.

Ms Keery: It is.

Mr Dunne: I think we need to spread that message.

**Ms Keery:** To spread the overall message, we have gone out with calls. We have gone out with only two calls under the Boosting Business campaign, and we have received 153 enquiries. Over £1 million of support has gone out under that campaign. Through that, we are getting a number of services. I accept that a number of service companies with potential may have ruled themselves out of applying for R&D. We support a lot of service companies to engage in process innovation. The majority of the companies coming through in our design programme are in the service area. They are looking to avail themselves of design to upgrade the branding and overall aesthetics of their business. I accept that there is still that perception. However, we are trying to address that through our case studies, marketing and the message that we are putting out. We provide support for R&D in the service sector as well.

**Ms J McCann:** You are very welcome. I enjoyed your presentation. I want to ask a couple of questions on collaborative working, particularly among small and medium-sized businesses. You said that it is not just about European funding. However, a huge amount of European funding is available. As budgets get tighter here, we need to look at ways in which we can draw down more money. I do not think that we are doing enough to draw that money down. You mentioned businesses working more collaboratively with those in Europe and particularly with those in the South of Ireland. Do you think that organisations such as Invest work closely enough with the other investment organisations, for instance, in the South of Ireland, to promote that collaborative thinking? R&D is not just about small and medium-sized businesses; it is about developing the knowledge base and skills so that there is a skilled workforce that will attract foreign direct investment (FDI). I know that colleges are not in Invest's remit, if you like. However, sometimes, colleges do not even work that closely together. Do you see that as a barrier to the development of smaller businesses in particular and the knowledge base and skills, when we seek to attract investment to Ireland in order to create jobs for people?

**Dr Coyle:** Your point about available funding from Europe is well made. Certainly, the Barroso task force has been set up to try not only to get more money but to get the right money out of Europe. The fact that it has actually set the percentage of extra drawdown that it wants certainly shows its intentions. Certainly, bringing all of the Departments together is a key part of that.

I take on board your point about working with the South. I sit on a group that is led by InterTradeIreland. We work with the Department of Jobs, Enterprise and Innovation in Ireland, DETI and other Departments in Northern Ireland to look at the opportunity from FP7, specifically on R&D funding that is available and how we can work together. In 2011, one of the group's outcomes was the conference that we held in the Stormont Hotel in June. More than 200 participants from both the North and South of Ireland came to hear about the opportunities that exist. That was a great opportunity. We hope to hold another event like that on 7 June 2012, when commissioner Máire Geoghegan-Quinn will speak. Therefore, we are looking at ways of working together.

As regards our own organisation's being, perhaps, more proactive and innovative, we have, for the first time, been involved in Regions of Knowledge applications. Our remit was that we could work with other

regions but that we should work more closely with the South of Ireland. Our target was to submit two applications to Regions of Knowledge. We have submitted three. One thing that I will say about a Regions of Knowledge application is that it is not about funding from Europe for research; it is about looking at the landscape, finding out who the key players are in the area and preparing for the future. One of our project areas is biogas. That is a great opportunity, which also relates to energy objectives and the soaring costs of energy. It looks at alternatives that will benefit the whole of Ireland. Therefore, we have come together to look at that opportunity collectively.

In another area that we looked at, we worked closely with the Institute of Electronics, Communications and Information Technology (ECIT). We were involved in a project to look at security — cybersecurity in particular. Again, that is another key challenge that we all face. So much is done through the internet and the Web that there is a need for cybersecurity, particularly in money transactions.

The other area, which, you will be pleased to hear, deals with our strengths, is the Clinical Translational Research and Innovation Centre (C-TRIC). An application came in for a North/South project that also deals with other regions. Again, that sets the way forward for a Connected Health approach. Therefore, we are looking at areas where we have complementary strengths. Looking at the breakdown of funding that each region receives from FP7, our strengths are aligned. We are similarly strong in ICT and health. It shows an area that we can work on. Our colleagues in InterTradeIreland — about which you will hear more later — are working in that area, and we work closely with them to make sure that all the links are made. You made a key point that there is a need for greater co-operation and collaboration. We have those stepping stones in place.

**Mrs Overend:** Thank you for your presentation. I have just a couple of questions. How closely do you work with other Departments, such as the Department for Employment and Learning (DEL) and the Department of Agriculture and Rural Development (DARD), to see where there are opportunities or a need to change the way that you promote further R&D? On a separate issue, we have been primarily thinking about small organisations. Many larger organisations that we looked at are doing research, but we found that there are problems with the time frame of research and development. Funding may be available for a certain length of time but their research will take longer. Have you met those sorts of obstacles as well?

**Ms Keery:** We work closely with other Departments. Certainly, we work with DEL on the whole skills agenda and on making sure that sufficient skills are in place for the projects that we support, particularly from the FDI perspective. That is particularly true of R&D projects as well as wider projects. We also work quite closely with DEL on the Barroso agenda to bring more European money into Northern Ireland. We work closely with DARD on the innovation and R&D agenda. In fact, one of my heads of department leads the food innovation steering group, which is responsible for looking at R&D opportunities and combining R&D strengths in the food sector. We also work closely with the Department of Health, which has a strong R&D agenda. We have signed a memorandum of understanding with the Department to identify potential R&D opportunities in the area of chronic disease. So, we work closely with other Departments to try to maximise R&D synergy in those key areas.

#### What was your second question?

**Mrs Overend:** Sorry, I should not have given you both at the same time. It was about the time frame of research and development and the fact that funding was for only a certain budgetary period. Is that a challenge?

**Ms Keery:** Yes. I read Almac's evidence, which basically said that longer time frames were needed. There are two issues around that. I have said that, by their very nature, the outcomes of R&D are generally unknown. We tend to work in three-year time frames. Even within those, it is difficult to predict outcomes. Push that any further and you are into high-level speculation. So, it is very difficult to identify what you will be funding or supporting. The other, practical side is that, as a Department, we work in three-year Budget cycles. Funding for anything beyond that is not guaranteed. Longer-term funding is where we see potentially more scope for VCs to become involved and for businesses that need long-term guarantees to look towards venture capital —

#### Mrs Overend: Sorry, VCs?

Ms Keery: Venture capitalists.

#### Mrs Overend: Yes, OK.

**Ms Keery:** From our point of view, as a Department, three years would be about the most appropriate timescale that we can live with.

**Dr Coyle:** European projects do not tend to be much longer than that three-year time frame, because it is recognised that you cannot predict outcomes beyond that. Potentially, one of the improvements with Horizon 2020 would be taking forward activities funded through the ideas programme, under which the European Research Council has funding that goes directly to academics who are world class in their fields, and they will be funded to continue to do blue-sky research. The idea is that that research can then be moved forward with further project support. So, you are giving support at key parts because you will get more value added at key parts. In the likes of the pharmaceutical industry, what can happen is that a certain amount of development work will take you to a phase of approach, and you will have the value of that. The company can then choose to in-license further research to complement that work or out-license the results of that research to somebody else to take further. There is a long time frame for pharmaceutical research in particular, but there are certain ways in which you can cope with that.

The Chairperson: Just to widen out what you were saying, Mrs Overend, we do have a problem, do we not, if you are saying that three years is about the length of time that we can be supportive because we cannot go beyond a Budget cycle? That does raise difficulties and that inflexibility, particularly for a business such as a pharmaceutical firm, is not very helpful. There must be some way to get around that. That company talked of maybe six years to produce a product. You cannot really just say, "Well, I will give you three years' funding, and then you can do what you like after that." I understand your point. It is a very reasonable point, but there has to be flexibility and a more imaginative administrative approach to exceptional research periods, such as for pharmaceutical research. It is not good enough just to say, "Well, there it is, that's it."

**Ms Keery:** And we do not. However, those are the practicalities. We tend to work with the likes of Almac, and we have put over  $\pm 10$  million of research money into Almac. I think it has operated very effectively, so we are working closely with the likes of Almac to support its R&D programmes.

It is about how we set the milestones and what we are trying to achieve with the funding, then reviewing those milestones as we go along and putting in further support. It is incremental support from our point of view, but the time frame would not be as long as they potentially would like at the outset.

**The Chairperson:** As we are talking about Almac and the link-up it has with Queen's University, it put quite a bit of effort into that and so did Queen's, and it seems to be a very good model of how you can progress at a very high level and in co-operation with an academic institution in research and development. Have you learned any lessons from that? Is there scope for further development such as that?

Ms Keery: Yes.

The Chairperson: Or is that just a one-off collaboration?

Ms Keery: No. That model is very familiar to us.

#### The Chairperson: Right.

**Ms Keery:** That used to be the model that would have operated through a previous scheme called Start. There are other examples, such as the work we have been doing on the composite side, which

is very much about promoting and funding a collaboration between the research base and business. So, it is a model that is very familiar to us, and one that we would like to emulate. It is something that we agree has proven very successful.

**The Chairperson:** There seems to be some lack of knowledge among companies about tax credits, their extent, availability and how to get them. Do you go to companies or have any facility for companies coming to you and saying, "We think we could get tax credits for x, y and z. Will you help and advise us in relation to that?" Is there any facility such as that in Invest Northern Ireland?

**Ms Keery:** We provide information. We have produced a booklet with HM Revenue and Customs (HMRC) to advise companies. There was a misperception that you could not get grants or support for R&D from Invest NI or tax credits. So we have advised companies on that.

The Chairperson: So businesses can get support from Invest NI, and they can get tax credits as well?

**Ms Keery:** Yes; we have advised them on that front. However, we advise companies to go to their accountants to get detailed guidance on financial regulations and Financial Services Authority guidelines. We have done calculations that will allow companies to decide whether it is cost-effective for them to go down the tax credits route or whether it is more effective to come to us, because there is a break-even point where it is more effective for them to go for tax credits.

**The Chairperson:** So are you saying that that facility is available? If I had a company and I came to you and said that I thought that I could get tax credit for this or that, could you advise me?

**Ms Keery:** We would advise companies as to whether that was the case, and we would also provide them with either a source of expertise or direct them back to their financial advisers.

**The Chairperson:** Obviously, you cannot micromanage their tax returns. Do you know what percentage of companies are availing themselves of R&D tax credits, or are you not privy to that information?

Ms Keery: It was there in the dim and distant past, but it has gone. It is low, but it is increasing.

**The Chairperson:** If it is low, what does that indicate? Does it indicate that companies are not involving themselves in research and development or, alternatively, that they do not realise that they can get tax credits for research and development?

Ms Keery: I think that it would be the latter.

**The Chairperson:** Or is it that they do not realise that they are actually doing research and development?

**Ms Keery:** It would be a combination of those. When we look at the survey of companies that say that they are doing R&D, the numbers are extremely low. About 400 say that they are doing R&D. We know that that is not the case. However, companies still equate R&D with white coats and labs. Therefore, they exclude themselves from going for R&D tax credits because they do not think that they are eligible. From that point of view, there is an awareness issue; it is important to make it clear to businesses that it is highly likely that they are doing work that would qualify for R&D tax credits.

**Dr Coyle:** Until 1 April this year, companies had to show that they were spending at a rate of at least £10,000 per annum on R&D to be able to claim the tax credits. That has now been removed. That was an indication from HMRC that it did not want to disadvantage anybody, particularly the small businesses, and to show that tax credits are also an option. I emphasis this key point: people in businesses who are doing R&D are not necessarily closely connected with their financial directors, for example. When we evaluated our own schemes and asked about their awareness of R&D tax credits, the people in the labs might not have been aware of it but their financial accountants were. It is a process of understanding what R&D they are doing that can be put towards the scheme. Again, our advice is that, in order to understand the actual calculations that are involved and the amount that they might be able to draw down, they should speak to their accountants and HMRC. We have a good

relationship with HMRC; its representatives have come to Invest NI to update us on the changes that are happening. The situation has evolved over the years to try to encourage greater participation.

The Chairperson: Do you get that information out to companies?

Dr Coyle: We have the booklet that we produced in association with HMRC.

**The Chairperson:** It is right and proper to produce a booklet, and I am sure that it is a very helpful booklet. However, should you not be a bit more proactive and go out and tell companies that they could get tax credits and advise them to look into it more closely? You could tell them that you can give them a little bit of advice on it but that you cannot give them detailed advice on their tax returns or things like that. Should you not be a little more proactive?

**Dr Coyle:** I believe that we are. Our innovation advisers advise companies, and the feedback that we have sometimes got from companies is that they may prefer to take the tax credits route rather than go through the appraisal process.

The Chairperson: When was the role of innovation adviser established?

Ms Keery: Around 2009.

The Chairperson: How do you think they are working out?

**Ms Keery:** Extremely well. We have 16 in total across the group, and three working specifically in R&D, in three specific sectors. They are proactive, so they are out there actually knocking doors to try to get more companies to understand that they are doing R&D and there is potential for R&D support. They are also hand-holding businesses to take them through what we acknowledge can be an onerous step for them to actually apply for funding. As a resource, particularly for the smaller businesses, they have worked extremely well.

**The Chairperson:** Thank you for that. It would be helpful if you could send us a copy of Invest Northern Ireland's organisational structure for its R&D arm. I just want to let you know that, during our research, we had a very positive response to what Invest Northern Ireland has been doing. I do not think there are any further questions. Thank you very much for coming along, it was very helpful. If there are any further questions, we will write to you.