The Department of Jobs, Enterprise and Innovation in Ireland Submission to the Call for Ideas for Designing a European Innovation Council

The Department of Jobs, Enterprise and Innovation (DJEI) in Ireland welcomes the opportunity to contribute to the Call for Ideas for Designing a European Innovation Council (EIC). In preparation for this submission, members of the Irish research and innovation community were invited to share their views on the proposed European Innovation Council with DJEI. The responses received from these stakeholders have been taken into account in the following submission.

Summary

Our engagement with Irish stakeholders identified three broad challenges that the European Union needs to address in order to boost its success rate in nurturing disruptive market-creating innovations which can lead to jobs growth and long term economic growth. Firstly, we need to identify and address deficits in the European ecosystem which weaken our competitive position vis-à-vis successfully commercialising market disrupting innovations. Secondly, innovators need to be able to access relevant and effective supports with minimum finding costs and associated delays. Finally, the portfolio of innovation supports needs to be tailored to take account of the challenges which are faced by small, high-risk ventures that are unlikely to have their funding needs met by the market. DJEI therefore proposes that the EIC could seek to address these challenges by taking a trifold approach – that is to act as a research/advocacy body, an advisory service for innovators and a funding agency for potential breakthrough innovations.

i) Do you agree that a lack of disruptive, market-creating innovation is an obstacle to job creation and economic growth in Europe?

DJEI, and the overwhelming majority of stakeholders who shared their views with us, agree that job creation and economic growth in Europe is stunted by the lack of disruptive, market-creating innovation.

This issue is manifested in a number of different ways. It is widely said that while Europe possesses some of the largest and most exciting potential innovations through the excellence of its basic and frontier research, it fares considerably less well in turning this vast pool of knowledge and these excellent ideas into marketable products and services of real economic value. Moreover, it is clear that Europe's innovation performance is lagging behind competitors such as the USA, Japan and South Korea.

The reasons for this are manifold and include the fragmentation of European knowledge across member states, language barriers and cultural differences. There is also much evidence that Europe is risk-averse, while innovation by its nature requires an appetite for risk and an acceptance that one may fail many times before ultimately being successful.

Europe's innovative capacity is negatively impacted by the low number of researchers transitioning from academia into industry and the need to foster greater levels of collaboration between industry and academia. Closely related to this is the issue of knowledge transfer and the challenges in effectively translating knowledge from the Higher Education Institutions (HEIs) in Europe to industry, which can then capitalise commercially on it. The point is also often made that there is a lack of understanding of the importance of Intellectual Property (IP) in Europe and stronger Technology Transfer Offices within the HEI's could significantly help in creating the necessary understanding.

In a more general sense, while the EU has a comprehensive structure of supports for Research, more efforts is required to ensure that the appropriate mechanisms are in place to support initiatives at the Development end of the TRL scale. More innovation-friendly regulations across the Union are needed to create those conditions which are conducive to engendering further innovations. In addition, European financial systems appear less supportive of disruptive innovation than leading innovation economies such as the USA.

Addressing the complexity of Europe's innovation challenge

It is clear that the challenge of improving the EU's innovation performance is multifaceted and complex. The EIC could deliver a significant impact by becoming a driving force for strengthening our understanding of this challenge, developing solutions and acting as an advocate for a more innovative friendly Europe. DJEI proposes that one of the key roles of the EIC would be to act as Europe's innovation research and advocacy body, focusing on developing a more competitive European innovation ecosystem over the longer term. Its primary activity would be to undertake strategic research to inform the EU's efforts to become a global driver of innovation. It would apply a systems approach to assess the innovation framework conditions which would take account of talent, culture, infrastructure, financial systems, regulation, networks and markets. In this way, the EIC could act as the voice of innovators in EU policy debates. Furthermore, it may be appropriate to establish a high level group of successful European innovators to act as advisors and provide experienced perspectives on current and proposed innovation policy issues to the EIC and the Commission more widely.

Addressing the under-performance in European innovation requires concerted action at both the national and EU levels. National policies and stakeholders have an important role to play in ensuring that potentially disruptive innovations are identified and given the required support to develop and thrive. For example, Enterprise Ireland, our national enterprise agency, is able to provide a very effective tailored service to each of its clients precisely because it works "on the ground" with companies, developing strong relationships and drawing on in-depth knowledge of sectors, market and local operating environments. The structure and operation of the EIC could be designed to leverage the work of national policies, agencies and supports and provide demonstrable European added value.

ii) Are there gaps in current EU support for disruptive, market-creating innovation and for scaling up of new business?

In addressing this question, DJEI is mindful that the incentivising role of supports within the wider innovation ecosystem can be overstated, given the importance of systematic challenges in relation to risk-aversion, talent, financing, IP, regulation and knowledge transfer. In this regard it is worth noting a KPMG survey which found that a range of issues concerning fundamental conditions, rather than publicly funded supports, dominated the concerns of companies when surveyed about barriers and enablers for innovation. Restrictive Regulatory Policies were cited as the biggest constraint for EMEA technology companies seeking to innovate. In relation to enablers of technological innovation, innovation incentives ranked as only the sixth most important enabler, while availability of talent topped the poll.

Reviewing and streamlining existing supports

While problems with existing innovation supports are likely to be symptomatic of the EU's difficulty in nurturing market-creating innovation rather than a primary cause, it is still

¹ KPMG, "Technology Innovation Survey", 2014.

appropriate to evaluate whether the current framework supports are fit for purpose. The forthcoming mid-term review of Horizon 2020 should include a focus on the take-up, application and impact of the innovation supports included in the ongoing Framework Programme, in addition to assessing the views and learning from the experiences of both successful and unsuccessful applicants. The review should seek to identify any existing gaps in innovation supports. If the EU is to effectively drive disruptive innovation it should understand and address the barriers to greater engagement by the innovation community with the Framework Programmes.

A pertinent issue which the EIC should address is a weakness in the co-ordination of the existing EU structures in the research and development space, whereby they are sometimes considered as too unwieldy, disparate and lacking in overall coherence for applicants. There is also evidence of access difficulties for SMEs, with possible applicants unaware of what is on offer from the EU in this space.

In our engagement with stakeholders in Ireland, a key theme that emerged was the difficulty in navigating the range of supports and associated agencies. This issue occurs at a national level and is amplified when the European dimension is taken into account². The EIC should prioritise co-ordinating, streamlining and simplifying access to all current EU innovation supports, possibly through a single portal. The EIC should endeavour to ensure that all funding programmes are coherent from an applicant's perspective, reducing fragmentation and ensuring that administrative requirements are simplified. The Council will have an important role to play in communicating and educating innovators about the range and relevance of the supports on offer. In its role as an advisory service for innovators, the EIC could promote engagement of SMEs with existing innovation management standards and toolkits³. It could also act as a forum for matching innovators with venture capitalists. As an access point for all EU innovation funding supports, the EIC should be very much attuned to fast-paced business cycles. Therefore, it will be important that the EIC is equipped to deliver speedy decisions on applications and to enable timely drawdown of funding. While only supporting the best potential breakthrough innovations, the EIC should be cognisant that high failure rates among applicants can disincentives participation particularly among resource constrained start-ups.

Delivering European added value

Beyond improving the efficiency and effectiveness of existing EU supports, DJEI believes that the EIC could deliver added value through the provision of more innovation focussed funding. A perception exists, whether rightly or wrongly, that the EU's current initiatives in the research and development space place the emphasis more closely on research than development. In this regard, a European Innovation Council could go some way to redressing this balance and could provide a welcome counterweight to the successful European Research Council (ERC), which rewards excellent frontier research. In particular, the EIC could make a significant impact through the provision of direct grants to start-ups and through the active promotion of a new generation of European entrepreneurs.

Furthermore, Europe's pool of venture capital could certainly be described as more limited, less diverse and more risk averse, when compared with the United States, for example. Venture capitalists bring experience and a proven network, as well as funding, and these are key elements in helping a company or specific product to get to the next level. It is clear that

² In 2016, the Department of Jobs, Enterprise and Innovation is undertaking a review of all national RDI enterprise supports to assess whether these supports are meeting the needs of the enterprise community. 3 For more detail on the potential role of the EIC in relation to the promotion of innovation standards and toolkits see the submission to Commission by the National Standards Authority of Ireland, "Establishment of a European Innovation Council.

Europe would benefit from a new generation of venture capital firms, which would have a better understanding of entrepreneurship and bring relevant experience in specific sectors. Awards for 'breakthrough innovation' from a European Innovation Council could help to attract additional venture capital funds into Europe, in particular around such EIC grant winners. An EIC which offered funding for these bottom-up breakthrough innovations could also have the effect of generating much-needed competition amongst innovators across Europe, which would in turn increase innovation activity. This should lead to a further increase in venture capital availability to support these proposed innovations.

While national innovation systems provide the initial platform where policy makers can take steps to create conducive framework conditions for entrepreneurs and firms to take ideas and new technologies to the marketplace, these efforts could be more effectively cohered through a more joined-up innovation framework at European level. In line with this, there is a need for positive integration and good alignment between the EU and the national agencies in terms of supports for innovation. Avoidance of duplication between the two is certainly the goal to be achieved and it is here also that the much sought-after European added-value can come into play. The proposed EIC should seek to add value to the innovation promotion activities of the individual Member States.

The key policy areas in relation to innovation that require a concerted effort at European level include enhanced demand-led initiatives and Small Business Innovation Research (SBIR) type schemes, as well as improving the financing environment through improved venture funding and improved access to financial markets and investment opportunities via EIB and EIF. While there are opportunities for accessing finance through InnovFin and the EFSI to support innovation, it is not clear that there is a level playing field across the member states to take advantage of these opportunities, given the different structures that exist at a national level. It will be important that the EIC seeks to achieve an optimum balance of the allocation of funds between loan and grant type mechanisms.

iii) What issues could a European Innovation Council Address?

Our engagement with stakeholders identified three broad challenges that the European Union needs to address in order to boost its success rate in nurturing disruptive market-creating innovations which can lead to jobs growth and long term economic growth. In the first instance, we need to identify and address deficits in the European ecosystem which weaken our competitive position vis-à-vis successfully commercialising market disrupting innovations. Secondly, innovators need to be able to access relevant and effective supports with minimum finding costs and associated delays. Finally, the portfolio of innovation supports needs to be tailored to take account of the challenges which are faced by small, high-risk ventures that are unlikely to have their funding needs met by the market.

The mission of the EIC could seek to address these challenges by taking a trifold approach – that is to act as a research/advocacy body, an advisory service and a funding agency.

1. **Research / Advocacy**: Given the depth and complexity of the innovation challenge, a focussed effort on understanding how Europe can improve its performance in turning excellent research into commercial opportunities is required. This requires a focus on developing a more competitive European innovation ecosystem over the longer term. As a policy research and advocacy body, the EIC could undertake strategic research to inform the EU's efforts to become a global driver of innovation. It would apply a systems approach to assess the innovation framework conditions which would take account of talent, culture, infrastructure, financial systems, regulation, networks and markets. In this way, the EIC could act as the voice of innovators in EU policy debates and champion a more innovation-friendly Europe.

- 2. Advisory Service for Innovators: Acting as a "one-stop-shop" for innovators, coordinating available supports, streamlining them and ensuring ease of access. It would provide a single point of entry for information on Horizon 2020 innovation funding instruments (and subsequent Framework Programmes) and wider European Union innovation-related supports. The Advisory Service could provide mentoring and business planning support through, for example, the development of an Accelerator Programme. It could also act as an intermediary connecting venture capitalists with innovators and assist in the building of relationships between the two.
- 3. Innovation Focussed Funding: The evaluation process and awarding of all Framework Programme innovation supports could be overseen by the EIC. To embed competitiveness and commerciality in the mind-set of applicants, and to increase the likelihood of commercial success, the evaluation procedure for these funds should be aligned to market opportunities and challenges, with reviews undertaken by venture capitalists and relevant industry experts. Focussing on high-risk, potentially disruptive innovations will require the use of bottom-up, non-targeted calls to ensure the best innovations can be identified. Measures to bridge gaps in existing innovation supports should be addressed through the EIC. It may be appropriate for some of the EIC's competitive funding to be allocated through venture capital style schemes allowing ongoing engagement with the enterprise post the award, with further drawdowns of funding being linked to reaching performance targets, etc. Regardless of the exact form by which EIC funds are awarded, the general principle must be to support "breakthrough innovation" with the focus being on placed on marketability and likely market success. In time, by developing a strong track record of success, the EIC brand will bring with it a cachet that should prove attractive to other investors as the enterprise moves up the TRL scale.

Until a more developed proposal for the structure and function of the EIC is put forward by the Commission, it would be inappropriate for DJEI to indicate a preference for the governance structure, budget or operational details that should apply. However, it is clear that the calibre of Europe's basic and early stage research is one of our key strengths. If the European Union is to overcome the innovation challenge, it will need to capitalise on existing assets, therefore the establishment of the EIC should not negatively impact on the budgets for existing research programmes and supports.

DJEI once again thanks the Commission for the opportunity to input into this important policy issue. We look forward to the Commission's response to the public consultation and to progressing further the discussion on the establishment of the European Innovation Council.