

From: david mcdonald <[REDACTED]>
To: IDCsecretariat@djei.ie
CC:
Date: 16/03/2015 11:41:44
Subject: Consultation process on the SSTI successor

Hi,
I am writing to make a submission to this ongoing invitation for comment and input. I am the CEO of a recent startup, but have spent my career to date working between academia, high technology start-ups in the ICT field in Ireland and government agencies. I am making this submission in my capacity as CEO of Aperilink Limited.

Below are a set of specific points, which have come to mind, when reading through the comment on consultation_paper_for_successor_to_ssti_13_feb_2015.pdf, which in the round, I found very informative. Where I reference a specific page in my comment, I add the page number to the start of the paragraph

I hope some of these points will add to the mix and the debate.

Regards,
David McDonald, BE, MSc, PhD
CEO Aperilink Ltd.

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The data and evidence outlined indicated that R&D performed by multinationals in Ireland is not well aligned to the R&D performed by the indigenous sector - both sectors work into different innovation ecosystems. This mis-alignment has multiple repercussions for each and infers several additional things:

spillover opportunities from multinationals (subcontracting and deeper level of indigenous contracting) are lessened this situation is reflective of the lack of local "stickiness" of the more innovative R&D performing FDI clients of the country. By way of example, when Ireland had a large manufacturing sector 20- 30 years ago, there was a huge indigenous supplier base supporting a connected value chain that routed them - at least for a period. Building the conditions and the environment to allow the same to happen along the R&DI chain is critical and will help to embed, localise and enable alignment of the innovation chain between the multinational and indigenous sectors over a much longer time period.

this would indicate that there is a discontinuity in the innovation, scaled value system, from basic HEI based research, through spins-out/ins and indigenous start-ups, to being able to "cluster" and strengthen at home by engaging in B2B R&D activities with the MNC sector before exporting abroad. As a pull through element, and a way of strengthening tech transfer from the HEI sector, I believe this mis-alignment needs to be addressed.

Public sector role:

The role of the public sector itself, as a consumer of R&DI outputs, for "generating pull" and enabling an environment and pathways to market for innovations from the research base in Ireland need to be understood, acknowledged and employed, but at the same time providing improved value inefficiencies to the public sector delivered into. A public sector national programme that will work to leverage EU mechanisms such as PCP (Pre-Competitive Purchasing) and PPI (Public Procurement Initiative) and to build pathways for research and technology innovations in HEIs, through startup and indigenous sector innovations for first pass adoption and testing of local innovations.

Public sector access to scaled projects that allow everyone along the innovation chain (researchers, indigeous startups etc.) to get exposed to huge scale projects that can give them insight, experience and delivery pedigree into. This would allow them to better prove technology, research etc. to compete at world scale. In my own case, CERN, LOFAR and SKA are three potential projects that would expose Aperilink to problem sets, partners and scaled experience that would help me further the R&DI of my business. Some of these basic science project reflect other problems in society, so it is by being exposed to and solving these type of basic science problems that those developed tool-sets can be re-purposed for other societal and business opportunities. This proposed model is simialr to that model already in place for the SPACE sector via our participation in ESA.

Lastly, what is the role of the public sector in defining problems, that need to be researched, and then contextualizing these research outputs? How is this process executed and what role could such a role have in terms of

being an element of a future SSTI? This is more than just the role of PAG, but seeks to dig into the specific problem areas within Government Departments, public service delivery and engages with the national research base to formulate solutions that are then trialed and tested and in doing so will attract further scaled investment from the MNC sector to further grow and deepened the R&D routes in Ireland.

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As someone who has been involved with Irish, European research community for over 25 years, I query if many of the SFI Centres have the necessary "tooling" for what I would term "Research Operations". Along with the need for LIRE type items, there would appear to be no model currently available that providers for support of workflow infrastructure, supported by PhD level Scientists and Engineers, that support the delivery of research and STEM outputs. This has been solved and is in place for some of our long lived mature, single physical Research Centres (e.g. Tyndall) but is a significant challenge for distributed "virutal" SFI Centres split over multiple physical HEIs, and some of which have only very recently been formed into scaled Centres to achieve the critical mass necessary to meet the impact level needed. The lack of this leads to inefficient execution of the research activity where every research project effectively has to make or create their "Petri dish" every-time, before being able to get into the discovery process itself.

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How is Research agenda adaption occurring today and how is a cross cutting/connected approach achieved. I would point to some of the initiatives of the Chief Scientists Office in Israel and how Israel nationally, with limited budget, adapt the research; connect key research, startup and multinational performers to go after very defined problems of scientific excellence, plus having a constant eye to direct commercial impact. What can we learn from this and how can we adopt some element of an "Research adaption process" that can also be leveraged within the EU?

General:

Intellectual property. Two points for consideration:

- is the whole area of OpenInnovation, the possibility of liberating certain platform research outputs on a royalty free basis (with other constraints/incentives) and knitting this, as an element, into the Knowledgebox initiative.

This would be a policy of "activity generation" based on the most leading edge OpenInnovation thinking.

- Make patenting easier - for all - put the patent office should be online! Not directly part of the SSTI consultation but everything should be done to reduce the barriers for getting ideas out there for the benefit of Ireland

Benchmarking: this paper continually benchmarks Ireland against its EU peers. Can some element of international bench-marking be performed and included against the more aggressive and globally competitive hubs of R&DI such as Israel, S. Korea, Japan, California?**ATTACHMENTS:**