National Smart Specialisation Strategy Consultation Paper

This observation is submitted on behalf of the Economic Directorate of Clare County Council in response to the public consultation in relation to the National Smart Specialisation Strategy Consultation Paper.

I refer to the questions presented in the consultation paper and I wish to respond as follows:

Q: Do you agree with the suggested areas of strength for the three regions as set out above? Are there other areas of strength in the three regions to be highlighted?

The areas of strength as identified do, indeed, reflect the current strengths of the region and some of the opportunities. There are a number of observations which are necessary.

1. One observation is that the three regions are so large that they all carry significant clusters of activity right across a very broad range of activity. It is almost impossible to say that any region does not have a cluster of a particular type of industry and it seems somewhat invidious to be selecting specific types of activity for specific regions.

2. Climate action related activities will be a major focus of the future and it is not appropriate that such activities are not included as a specialisation in all regions. It may be that in future the focuses within the climate action area will have to be refined but, for now climate change should be included as a specialisation in all areas.

3. While there is some reference to the services sector (financial services for example), the areas identified are very heavily manufacturing/production focused. The service sector makes up a huge part of the Irish economy and to virtually ignore it in this context seems a little invidious.

Q: What, in your opinion, are the key sectors in your region? What are the skills, assets and capabilities within your region?

1. There is significant potential for a marine-based industry in Clare and work has been underway for some time to develop such an industry. Given the Shannon Estuary and a long Atlantic coastline are both present in the county it would be considered not to be appropriate to exclude such a specialisation from the Mid-West area

2. Sustainable construction is a significant future area of specialism. It is an area in which the Mid-West has particular strengths and it would be desirable that it would be noted.

3. While design is noted as a strength within the Southern Region in general, it is particularly identified in the South-East. There is a strong design specialisation in the Mid-West also through UL, LSAD of LIT and various private firms operating in this area. There is also a multi-partner project in place which is in the process of establishing a physical base for the Mid-West Regional Design Centre.

4. Tourism is an extremely important part of the economy of the Mid-West and the development of the tourism product and tourism services should be given consideration.

5. Data Centres and services may be captured by ICT but should be included as a specific area of enterprise for the Mid-West

Q: Which sectors could achieve critical mass in Ireland over the next seven years? Where are the opportunities and what needs to be done to unlock these opportunities?

1. Pharmaceutical and bio-pharma

2. Autonomous vehicles

- 3. Data bank services
- 4. Sustainable construction services (design and training)
- 5. Marine-related enterprise
- 6. Climate action enterprise
- 7. Advance Manufacturing Additive Manufacturing

For any of these opportunities to be availed of the following are some of the factors required:-

1. Close links between education institutes and enterprises to make sure that the necessary future skills are being developed

- 2. Identified dedicated locations for aligned enterprises
- 3. The provision of enterprise-ready facilities to be occupied at short notice
- 4. Limitations on third-party rights to block proposed developments
- 5. Continuation of tax incentives

Consultation Questions

It is hoped that this S3 consultation will provide further, contemporary insight into the digitalisation challenge facing Irish enterprise, and we would like to hear from stakeholders about their experiences and suggestions for what more can be done to help. Some questions stakeholders might consider are:

Q: Is digitalisation impacting your sector or region? How?

1. A number of new enterprise areas (Data centres, autonomous vehicles for example) that have a strong digital component are in the process of being established.

2. Some larger firms have digitised their processes and activities

3. Digital Hubs are being established at many locations to facilitate online and remote working

4. Not enough SMEs are digitising their enterprises where required in order to remain competitive

5. Virtual and enhanced reality processes need to be developed more extensively across the region and resources put into this area.

Q: Could your business or sector benefit from new digital technologies? What support would you need to adopt these technologies?

N/A

Q: How can we improve the alignment of the country's ICT and digitalisation expertise, initiatives and investments?

1. The current approaches which support the establishment of dedicated centres of excellence in academic institutions is positive

2. There needs to be a greater focus on applied research and the linking of successful application to funding outcomes

3. There needs to be a development of the Innovation Voucher system so that larger vouchers are available without having to engage in an innovation partnership

4. Support needs to be provided for digitisation audits where enterprises be provided with a report as t their opportunities for digitisation and a pathway to its implementation and an assessment of the business benefits which would accrue.

We would like to hear from stakeholders about their experiences and suggestions for what more can be done to support green transformation in Irish enterprise. Some questions stakeholders might consider are:

Q: What opportunities can you see as arising from Green Transformation for your sector or region?

- 1. The opportunities are many
- a. Renewable energy
- b. Marine energy
- c. Autonomous vehicle development
- d. Sustainable construction
- e. Energy efficiency and the associated goods and services
- f. The circular economy including but not limited to the Lisheen project
- g. Agri-innovation and agri-technology to reduce GHG emissions
- h. District heating developments

Q: What challenges exist for enterprises trying to reduce emissions or introduce sustainable practices?

1. A knowledge gap – knowing what to do. Access to sustainability audits need to be improved. There is also, however, a general lack of knowledge in the economy about what is possible.

2. Time involved in the return on investment

- 3. Disruption to present processes
- 4. Fear of loss of business during transition

5. Fear of negative impacts on business bottom-line especially where there is lack of knowledge of what is possible, what is involved and costs and returns

6. Time availability in small enterprises to give to the exercise when keeping the business running is the principal priority

Q: How could government or enterprise agencies assist you in meeting those challenges?

1. Greater opportunities for tailored solutions with pathways to implementation. Some of this exists but not enough

- 2. Financial incentives to aid the transition
- 3. Grant aid for the provision of new equipment where needed
- 4. Mentoring during the transition process with a solution focussed approach
- 5. Development of peer learning networks for innovative solutions in this area

It is hoped that this S3 consultation will provide further, contemporary insight into the challenges facing Ireland for innovation diffusion, and we would like to hear from stakeholders about their experiences and suggestions for how we can improve the system. Some questions stakeholders might consider are:

Q: What are the barriers for innovation diffusion in Ireland? How can these barriers be broken down? Are their regional differences in these barriers?

1. One of the difficulties is that smaller organisations don't have the time or the dedicated resources to apply to the discovery and application of innovative developments even where these are not patent protected. The establishment of public resources which will provide a service of this nature to individual enterprises could help to address the gap.

2. Some of the response to the previous question are also relevant in this context.

- a. Peer networks which are online and require little time to engage with
- b. Opportunities to have audits of potential carried out by an external adviser
- c. Demonstrating pathways to innovation and the benefits involved

Q: What channels for diffusion are used by your business or sector?

N/A

Q: How can we enhance collaboration between industry and the higher education sector?

This was addressed significantly under a previous question. The answers are similar.

1. The current approaches which support the establishment of dedicated centres of excellence in academic institutions is positive

2. There needs to be a greater focus on applied research and the linking of successful application to funding outcomes

3. There needs to be a development of the Innovation Voucher system so that larger vouchers are available without having to engage in an innovation partnership.

Consultation Questions

As a small, open economy, Ireland relies on external demand and international markets for sustainable and continued growth. The market for innovation and research is also global – international cooperation in research and innovation plays an important role in the development and sustainability of our innovation and research system. Some questions stakeholders might consider are:

Q: What areas of research or industry sectors does Ireland have an international competitive advantage in? How can we build on that advantage?

- 1. Pharmaceuticals
- 2. Sustainable construction
- 3. Medical devices
- 4. Agric-technology
- 5. Fintech

- 6. Cyber-security
- 7. Bio-technology
- 8. Nano-technology

Continuing to have incentives for collaborative research, ensuring that those employed in academic institutions have time allocated to research as well as to teaching, greater investment in research technologies and spaces, more funding for PhDs ad Post-docs, more dedicated resources to creating international research partnerships. Greater funding of research overall, more embedding of PhD and Post-doc researchers in enterprise.

Q: In what areas or sectors should we be concentrating our international research collaboration activity? What supports do these areas or sectors need to be competitive on a world stage?

As above

Q. How can Ireland's regions use Ireland's international links and memberships to support their strengths and emerging areas of future opportunity?

Helping to create ongoing MOUs between high-class research institutes abroad and ones based in Ireland so that such relations are more extensive than project and endure over a longer term.

An innovation gap exists between large multinationals and indigenous SMEs in Ireland. Irish SMEs will require enhanced supports to innovate to ensure their competitiveness and survival. Some questions stakeholders might consider are:

Q: Which RD&I initiatives have been successful for your sector/region? Which programmes should continue? Which RD&I programmes for enterprise are not working?

- 1. Horizon 2020
- 2. SFI Grants
- 3. Technology Gateways
- 4. Interreg
- 5. Innovation Partnerships
- 6. Erasmus+ for training and upskilling in the VET area in particular

These have tended to bring positive results.

The following tend to be less successful-

1. Innovation vouchers which are too small

2. Commercialisation funding which does not always meet the needs of enterprises or HEIs and which tends to be cumbersome.

Q: How do we generate a stronger, unified ecosystem approach to RD&I across the country to strengthen the visibility of our RD&I supports?

1. Use the Regional Enterprise Offices and the Regional Skills Forums to bring together the various actors in the area – Large Companies, SMEs . HEIs – to identify common areas for research and development.

2. Develop systems for agreeing more partnerships and shared innovations when they are developed

3. Support an extended system of mentoring of SMEs by larger firms and the development of supply-chain partnerships

Q: How do we target RD&I spend in a way which maximises impact for the economy and which addresses the market failure evident in low RD&I in the indigenous SME sector?

1. Many of the observations above are aimed at this issue. Low R and D in SMEs tends to arise from –

- a. Lack of awareness of opportunity
- b. Lack of awareness of potential benefits
- c. A focus on the immediate future and the survival of the firm
- d. Lack of dedicated personnel
- e. Lack of time on the part of senior management
- f. Concern over cost versus return
- g. Concern over loss of market share

These kinds of issues need to be addressed at an enterprise level. It is difficult to attract enterprises to attend meetings/workshops which they see as having an uncertain purpose and unclear outcomes.

2. Where public funding is involved it is worth considering the imposition of obligations n researchers to share the research and/or innovation to a greater extent that currently.

3. Setting in place systems and supports for coopetition arrangements through which enterprises share in innovations and compete on the basis of other factors such as service and price.