



UCD Michael Smurfit Graduate Business School  
Scoil Chéimithe Ghnó Michael Smurfit UCD



An Roinn Airgeadais  
Department of Finance

# **MEDIUM TERM ECONOMIC STRATEGY (MTES) CONSULTATIVE FORUM**

**Dublin Castle, 24 September, 2013**



# MEDIUM TERM ECONOMIC STRATEGY (MTES) CONSULTATIVE FORUM

## CONTENTS

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<b>Preface</b>	<b>3</b>
<b>Main Report</b>	<b>4</b>
<b>Appendices</b>	
1 Forum Objectives	7
2 Forum Topics	8
3 Summary of Ideas/Suggestions	10
4 ICT (1)	14
5 ICT (2)	18
6 Tourism, Arts, Hospitality and Consumer Spending (1)	20
7 Tourism, Arts, Hospitality and Consumer Spending (2)	23
8 Life Sciences	28
9 Financial Services	31
10 Property and Construction	33
11 Manufacturing and Industrial Design	37
12 Infrastructure (1)	40
13 Infrastructure (2)	43
14 Internationally Traded Services	49
15 Agrifood	52

# MEDIUM TERM ECONOMIC STRATEGY (MTES) CONSULTATIVE FORUM

## PREFACE

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UCD Michael Smurfit Graduate Business School was pleased and privileged to be asked to provide a team of rapporteurs to facilitate the working groups at the Medium Term Economic Strategy (MTES) Consultative Forum.

The School brought together the resources of UCD Business, UCD School of Agriculture & Food Science and the UCD Geary Institute to undertake this work. It also provided a team of students to support the rapporteurs in their reporting of the breakout sessions.

The output of this work represents the thoughts of over 150 people from businesses and enterprises, relevant government Departments and agencies and bodies representative of business and industry who participated. Three different themes were addressed in sectoral discussion groups over the course of the forum. This comes to the equivalent of nearly 700 hours of work by the members of the discussion groups. We hope we have brought an independence of mind, and a level of analysis to these deliberations, representing here only the opinions expressed in the working groups and reflecting the themes that emerged during the conference.

Given the leading position of UCD Business, comprising UCD Lochlann Quinn School of Business and UCD Michael Smurfit Graduate Business School, on the landscape of business education in Ireland, we recognise that we have a responsibility to lead initiatives that contribute meaningfully to Ireland's economic and social recovery. We see our active involvement in the MTES Forum as one such initiative. We look forward to seeing the fruits of our labour in the strategy when it is published

Ba mhaith liom mo bhuíochas a ghabháil leis an Roinn Airgeadais agus leis an Rúnaí Ginearálta, John Moran, as ucht an deis tacú leis an togra seo. Mo bhuíochas freisin le mo chomhleacaithe go léir a tháinig le chéile san iarracht. Guímid gach rath ar an obair thábhachtach seo ar son na tíre.

**Ciarán Ó hÓgartaigh**

Dean, UCD School of Business

# SUMMARY OF MAJOR THEMES

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**In analysing the output from the group discussions, a number of overarching themes emerged which we would summarise as follows:**

## **1. Consumer-driven innovation and decision-making**

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Innovation can only be successful if it starts from the standpoint of what consumers want rather than being producer or supply side driven. This will require much greater investment in market research, marketing and branding, particularly in overseas markets, and less focus on satisfying vested interests.

In this context it was suggested that market research costs be treated the same as other development costs for grant and taxation purposes.

It was also acknowledged that, while this might be seen as a statement of the obvious, too much research funding and product development was directed at what could be done rather than looking beyond to what products could ultimately be brought to market that consumers (whether trade or end consumers) would be prepared to buy. For innovation to endure, products should meet real consumer needs.

Ultimately, however, this requires a focus on high standards and on satisfying customer needs. This also warrants the active engagement of different perspectives, including, for example, young people and migrants as the next generation of consumers and leaders.

## **2. Making hard choices**

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There is a recognition that we are not good at facing up to the downsides of decisions which, perhaps, makes it difficult to make decisions. With every decision there will be interest groups that will believe they have lost out. So, there is a tendency to try to please everyone which leads to sub optimal decisions and even regulatory capture.

The groups strongly believed in the need to identify winners and to promote them. These could be individuals, geographic areas (such as cities), ideas or firms/organisations. However, there are downsides to this process and we may be reluctant to embrace them.

This specifically extended to regional policy and promotion, with particular reference to Dublin and, to a lesser extent, Cork and Limerick. There is a recognition that global urbanisation will extend to Ireland; that cities compete internationally; that being a physically attractive and comfortable place to live and work can be an important competitive differentiator; and that Dublin is the only city we have that can compete on even a European scale. The clear implication was that investment should be prioritised in the Dublin region. Infrastructure was part of this theme, with some suggestions that we need to face the fact that not everyone can enjoy the same level and availability of infrastructure in the country, which returns the debate to the urbanisation theme again.

### 3. Scaling

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There is a belief that we need more businesses that can scale internationally to become the new Kerry Foods or CRH, for example. A figure of four to five in the next twenty year was mentioned.

How to do this is the challenge; how do we incentivise entrepreneurs not to 'cash in' by selling out to a foreign multinational with the business passing out of Irish ownership. One suggestion included the introduction of financing structures which allow owners to 'stay in' while recouping their investment in the business. The treatment of share options for capital gains purposes – i.e. being levied when the options are granted instead of when they are cashed – was cited as a specific disincentive.

A particular and laser focus on the export economy was also suggested: given the scale of the market in Ireland, export revenues are the critical driver of economic growth.

### 4. Success and failure

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Entrepreneurship and innovation need to be better incentivised. In particular it was noted that failure comes at too high a cost which is perceived to be inhibiting risk taking in the first instance. There is no safety net. This is not just financial, but also the stigma that attaches to failure in this country, something which can be addressed through the identification and celebration of role models.

In this context, there was a view expressed that, at present, as a country, we are both losing talent and failing to attract the right overseas talent.

### 5. Aligning all the bits

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To get the country moving in the right direction, encourage and incentivise innovation and entrepreneurship and have everyone working together, we need to have all elements of policy, regulation, taxation etc. working in harmony. There is a sense that this is not happening as well as it could do.

There was a clear view that it is the State's role to provide the leadership in ensuring this happens. Issues referred to included ensuring that:

- regulation is universally enforced;
- investment can be made in the knowledge that regulations won't change over the life of the investment;
- trade policy is aligned with future innovation needs;
- State champions are provided.

For example, only the State can take the initiative regarding the changes in the education environment identified below. In particular, it was queried as to whether public procurement policy currently favours innovation.

## 6. Innovation and Entrepreneurship are all embracing

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There was a clear view that these themes extended far beyond the scope of starting new businesses. Much process and incremental innovation takes place within existing businesses, with the retail sector cited as an example of a sector where there is continuous incremental innovation.

Challenges were identified for low margin, high employment sectors such as retail and hospitality. How can innovation be fostered or made easier in a way which sustains employment? For example, can it be made easier or cheaper for these and other small businesses to produce prototypes to support innovation.

The scope for innovation within Government was also noted, along with the fact that the public service does not currently reward or recognise innovation. It was acknowledged that it is difficult to be creative within a culture that doesn't recognise or reward risk.

In difficult economic times this does not necessarily involve expenditure. There was a belief that policy initiatives could be innovative or that new work practises could be both innovative and cost effective. The ability for people to move in and out of the public sector can encourage innovation as can movement across departments. Pension issues were noted as particular barriers in this context.

Innovation should not be seen solely as the preserve of business. All aspects of life within the country are capable of benefiting from innovation.

## 7. Education and the education system

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Recognising that education was outside of the scope of the Forum, nevertheless, this was probably the single most common point of discussion. There was widespread agreement that the fostering of entrepreneurship and innovation needs to start earlier in the school system; at least in transition year, with some advocating it as early as primary school.

This approach involves identifying and celebrating role models in entrepreneurship and innovation to make these themes culturally more acceptable within our society. There is a widespread view that the dominating prestige of the professions within Ireland is stifling innovation by making it less acceptable as a career choice. It was suggested that careers guidance teachers don't really understand entrepreneurship and innovation.

Language teaching comes in for particular comment. Our language teaching ability is not rated highly, with some implications that the teaching of Irish is interfering with our ability to teach other languages. It would be the view that language teaching should start at as young an age as possible. This isn't a universal view, however, with one group seeing English as the international lingua franca of business, thereby conferring Ireland with an in built advantage. Others see acquisition of a second language – such as Irish – at an early age as facilitating the learning of other languages.

There is a widespread view that right up to third and fourth levels there needs to be more emphasis on aligning education with innovation and entrepreneurship. This extends to ideas such as a compulsory internships for all third level students and more colocation of businesses on third level campuses – to be promoted by the State agencies.

# APPENDIX 1

## FORUM OBJECTIVES

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- To set the context for the development of a medium-term economic strategy;
- To differentiate this event from the Global Irish Economic Forum (MTES conference will have a domestic focus , consultation exercise, geared towards identifying barriers to, and opportunities for growth – MTES outputs may be reviewed by Global Irish Economic Forum participants to get a broader view);
- To set out the vision for Ireland out to the year 2020 in terms of our obligations under the Stability & Growth Pact, our strategy for economic growth, our employment targets and our global market share across key sectors;
- To consult industry representatives in breakout sessions and engage on their proposed recommendations for realising their ambitions in each sector;
- To think creatively to reach our goals
- To inform Government of the outcome of the conference;
- To contribute the main conference outcomes to the Global Irish Economic Forum.



## APPENDIX 2

### FORUM TOPICS

*The topics considered by the working groups were as follows:*

Group	Rapporteur	MDP Student
Manufacturing & Industrial Design	Prof Mary Lambkin	Ian Matthews
Agrifood	Prof Dolores O'Riordan	David Scott Lennon
ICT	Dr. Seamas Kelly	Danny O'Brien
Internationally Traded Services	Dr. Collette Kirwan	Cliona McDonnell
Tourism, Arts, Hospitality, Consumer Spending	Prof Frank Roche	Niamh Galvin
Property & Construction	Prof Aidan Kelly	Tara Hennigan
Infrastructure	Prof Pat Gibbons	Anthony Kelly
ICT	Dr Diane Payne	Aisling O Dwyer
Tourism, Arts, Hospitality, Consumer Spending	Prof Philip Bourke/ Dr Maeve Houlihan	Clodagh O'Donnell
Infrastructure	Sean Murray	Caroline Wiemann
Financial Services	Prof Niamh Brennan/ Dr. Gerardine Doyle	Aoife O'Leary
Life Sciences	Dr. Eleanor O'Higgins	Shane Kelly

*The working groups were asked to consider these topics in the following contexts:*

#### Session 1 – Ireland, our position in Europe and the world

- With BRIC economies apparently slowing, should we be refocusing our efforts on other economies e.g. Africa (Nigeria)? How might Ireland grow its market share of European & Global trade beyond a proportionate share?
  - Can or should we re-orient ourselves away from 1) English-speaking countries, 2) Europe 3) BRICS and more towards faster growing economic areas such as some of the African countries?
  - What would this involve and are there any major barriers to our doing this?
- Does Ireland need to re-think its position on EU and Eurozone policy questions that affect the economy and how it approaches EU institutions in dealing with them?
- Are our current economic policies better suited to a nation or a region in a fiscal union and single market?
  - Which should they be?
  - Are we 'Philadelphia', 'Massachusetts' or 'Singapore'?
- Where do you see opportunities and dangers/challenges emerging within Ireland's participation in the EU over the rest of the decade?
  - Does the answer change if the UK is in or out?



## Session 2 - Nurturing an entrepreneurial culture

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- What is our vision of an entrepreneurial Ireland? What will success look like - what will make us stand out from the crowd?
- How can Ireland ensure that we have the 'right' people coming through who will be the entrepreneurs and intrapreneurs in 2020?
  - How do we get more out of what we already have? – Let's start now...
  - What can we do to develop an entrepreneurial mind-set in people from an early stage & throughout their lives.
- We have a number of the building blocks in place to create a really dynamic environment to nurture and develop entrepreneurship .... **How do we make more of what we have...** make it REALLY compelling (Cities, Innovation & Collaboration, 'Google/digital quarter')?
- In an environment of constrained fiscal flexibility, what role can entrepreneurship play to boost consumer confidence?
- How do we create a series of new Irish mega companies, like Ryanair, from Irish start-ups?
  - With roughly an extra two billion of population growth in the world by 2050, are we positioned to attract the benefit?
- Nordic countries have over 70% participation by women in the workforce, we have only around 50%. How do we get the best female entrepreneurs to set up in Ireland?

## Session 3 – Building an innovation driven economy

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- What would an innovation-driven economy look like?
- How do we ensure that knowledge, technology and entrepreneurship are combined to promote an innovative culture across the economy?
- What are the most crucial supports – direct and indirect - that the State can provide to help the Irish economy maximise the benefits of technological innovation?
- What are the main barriers to Irish businesses embracing innovation as the way to increase productivity?
- What are Ireland's weakest systemically important economic sectors and what should be done to strengthen them?

# APPENDIX 3

## SUMMARY OF IDEAS/SUGGESTIONS MADE

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These are presented in no particular order, without evaluation or attribution to any particular theme/sector. Some are a little vague, reflecting perhaps the nature of an individual discussion, but represent possible areas of action.

**Many were common to several groups in some form.**

1. Don't bring in postcodes, introduce unique property indicators instead. It was argued that this is more appropriate to a digital economy and would represent a 'technology leapfrog'.  
However, in a separate group it was suggested that post codes be introduced.
2. The state should identify appropriate role models in the areas of innovation and entrepreneurship (for example, Michael O'Leary) and promote and celebrate their success.
3. Concepts of innovation and entrepreneurship should be taught at all levels, starting in primary school and should extend to entrepreneurs coming into schools/universities to teach some content.
4. Careers guidance teachers, in particular, should be educated in the importance of innovation and entrepreneurship within society so that they can properly direct students who want to develop these as part of their career paths.
5. In promoting development the State should identify winning ideas, people and/or organisations and structure policy and investment to favour these.
6. The State should prioritise development and investment in the Dublin region as the only city which can compete internationally and to realise economies of scale in infrastructural investment.
7. Use emerging technologies, especially digital technologies, to replace traditional physical infrastructure.
8. Provide adequate current account monies to maintain the infrastructure we've invested in as a nation.
9. Invest more in communications at the start of the consultation process for major investment projects. This reflects a view that the current consultation processes are taking too long because communications professionals are not involved early enough.
10. Provide access to shared facilities for low margin businesses to, for example, enable them to develop prototypes more cheaply.
11. Provide incentives and/or recognition for risk taking and innovation in the public service.

12. Encourage switching between the public and private sectors, allowing people to leave and come back. This should encompass switching between departments.
13. Provide a cross state sector portable/mobile pension plan to encourage this type of switching.
14. Co locate industry clusters on third level campuses with IDA support.
15. Invest more in education to enable our third level institutions to maintain their positions in world ranking tables.
16. Change the tax laws so that Capital Gains Tax is levied on share options when they are cashed rather than when they are granted.
17. Enforce regulation consistently and evenly rather than overly relying on self-compliance by large companies/State enterprises to deliver the bulk of the compliance.
18. Identify and remove social welfare based poverty traps in such a way that people working in low margin, high employment sectors can enjoy a 'living' income.
19. The Public Service should provide Open Platform Data as the basis for driving micro innovation.
20. Provide a more innovative centralised finance system which moves away from command and control to enable more flexible, innovative and efficient allocation of resources.
21. Provide some form of safety net, e.g. social welfare access, for entrepreneurs who fail in order to encourage greater risk taking.
22. Build a VC Fund for food and agrifood as current companies do not see food as a suitable investment.
23. Create a mentoring programme to allow/ encourage big companies to mentor smaller ones.
24. Provide incentives to companies to encourage them to allow employees take career breaks to pursue risk taking opportunities.
25. Encourage 'Ethnic Entrepreneurship': Relax the working ban on asylum seekers who have new, innovative ideas for start-up businesses. Provide incentives for immigrants to come here who would start businesses based on their native foods.
26. Include internships as mandatory for all third level and/or fourth level students.
27. Run a publicity campaign to highlight the profile of, and importance, of food in the Irish economy.
28. Create linkages between the Food, Pharma, Tourism and Education sectors.

29. Redesign the Public Procurement Policy to allow it incentivise/reward innovation. Public sector organisations could, for example, present problems and tender for solutions to them, without being too prescriptive about what such solutions would look like. Ensure that the process costs less.
30. Create a 'Health Innovation Hub' to get Departments of Health and Food working together.
31. Provide tax incentives for 'food formulation' to bring companies into this development space.
32. Improve visa provision; it is a key barrier to the development of the Asian tourist market.
33. Provide direct flights between Asia and Ireland, those who want to come need to be able to get here.
34. Pay little or no tax on private sector earnings to discriminate against people remaining in 'safe havens' within the economy and to attract entrepreneurs into the country.
35. Lower the rate of Capital Gains Tax to incentivise innovation and entrepreneurship.
36. Develop activity based tourism on the New Zealand model – walking, sailing, cycling.
37. Develop theme tourism – language, food, culture.
38. Offer free travel within Ireland to European senior citizens visiting Ireland.
39. Create a single Genealogy Portal, covering records and interests from all sources.
40. Provide a national network of crisscrossing cycle paths.
41. The Minister for Education should assemble a panel of entrepreneurs to meet once a year to discuss and advise on the promotion of innovation and entrepreneurship within the education system.
42. Create a Healthcare Innovation Hub as a focus for companies who want to invest in healthcare in Ireland.
43. Make registration of trademarks and patents easier, to increase innovation.
44. Consolidate and move resources where needed to get critical mass and sufficient intensity of effort, currently agencies are too fragmented, with resources dissipated and duplicated.
45. Create a Fraunhofer type organisation within the Irish educational system.
46. Re-introduce the Business Expansion Scheme to encourage friends/family to invest in start-ups.
47. Develop a portal-website where start-ups can gain easy access to information on all matters (financial and non-financial) relevant to starting and growing a business and which encourages peer-to-peer mentoring.
48. Place people with an international background on the boards of Semi- States and City Councils.

- 49. Develop an International Network for Ireland as opposed to a purely Diaspora network.
- 50. We need a National Languages Strategy to improve the way languages are taught to Irish children, with an emphasis on attracting nationals of the country in question to teach foreign languages.
- 51. The apprentice system needs to be extended to bring a more balanced – in terms of vocational training/education – approach to the educational system.
- 52. Incentives need to be provided for companies to reinvest rather than distribute earnings.
- 53. Provide more ownership incentives in large and medium-sized organisations for key executives in order to retain the best talent.
- 54. Redeploy staff from other state agencies to the front line of selling Ireland abroad for the next few years while it is most needed

## APPENDIX 4

### ICT INCLUDING SOFTWARE, HARDWARE, INTERNET, GAMING AND DIGITAL CONTENT

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Rapporteur: Dr. Séamas Kelly

Assisted by: Danny O'Brien

#### Session 1 - Ireland, our position in Europe and the world

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The group felt that tax harmonisation, in whatever form that might take, is inevitable over the next ten years. As such, we have to shift the basis on which we compete from one that is primarily about capital, to one that emphasises labour and innovation. This should involve efforts to expand our networks and build stronger relationships outside of the Anglo-Saxon world.

Currently, about 63% of ICT exports go to the US and the UK, with only 17% going to continental Europe. Notwithstanding the emergence of other important markets in BRIC and Asian territories, this European market was seen to be the most accessible and promising source of untapped potential. The question is, how can we make progress in this regard?

One of the strongest themes to emerge from the session concerned the need to improve our inter-cultural understanding and openness, as a nation. Improving foreign language and inter-cultural knowledge was seen as a key requirement here. It was proposed that we need a National Languages Strategy to improve the way languages are taught to Irish children. It was felt that it is important to begin children's foreign language education at primary level, and that any languages strategy would also have to look again at the place of the Irish language in school curricula. (It was felt that the way Irish is taught in schools is often alienating and puts students off learning other tongues; consequently, approaches to teaching Irish, and its privileged position on the curriculum, need to be reviewed.)

It was also felt that community-based, grassroots movements might have an important role to play in linguistic/inter-cultural education, with the example of Coderdojo being offered as a promising model. Moreover, it was thought that an emphasis should be placed on attracting nationals of the country in question to teach foreign languages. This would facilitate the development of a good practical grasp of the language, as well as improving students' cultural understanding of the region.

An emphasis was also put on the importance of attracting people from abroad (and particularly from continental Europe) with specific niche skills, which are scarce in Ireland and would take time to develop indigenously. Skilled ICT professionals are in great demand in the US and the UK, so we would be working in a very competitive context and would have to be able to offer Ireland as a particularly attractive location. The importance of financial incentives (e.g. in the form of personal taxation codes) and administrative ease (minimal red tape) were highlighted. Moreover, there was a sense of the importance of cultivating an attractive and cosmopolitan cultural environment, not only to attract such people here, but to help them integrate and invest themselves in Irish society for the long term.

Building stronger and wider networks of political relationships within the EU was also seen as a priority. Given the increasingly peripheral role the UK is beginning to play within the Union, it was felt that we could no longer rely on them as our main ally for lobbying for our interests in policy making and regulatory contexts.

Overall, then, the main emphasis was on the importance of integrating ourselves more fully within the European context. One member suggested that Ireland should try to establish itself as an 'EU innovation hub/gateway' - as a key bridge between Europe and the rest of the world (particularly, English speaking regions). It was suggested that our relatively small size should be a significant advantage in making us more agile than other countries, and that we should be endeavouring to become examples of innovation and openness for the rest of the EU.

## **Session 2 - Nurturing an entrepreneurial culture**

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Promoting entrepreneurship was seen very much as concerned with fostering an appropriate entrepreneurial culture in Ireland - i.e. with cultivating particular ways of thinking and doing, especially amongst the young.

The Irish education system was seen to be particularly anti-entrepreneurial, in that it promotes conformity and rote learning, and is very much disconnected from the commercial world. It was suggested that schools should promote a more problem-solving approach to learning, and that students should be encouraged to experiment, take calculated risks, and to fail fast and try again. Moreover, perhaps there is an over emphasis on academic performance in schools and that there should be a range of streams or pathways for people seeking a different kind of educational experience. It was noted that Ireland has a very strong population demographic, with plenty of young people coming through, but that a very strong education system is crucial if we are to capitalise on this.

Others pointed again to the success of the Coderdojo movement, making the point that grassroots, community-based organisations could also play an important role in promoting and fostering entrepreneurial practices amongst the young. The glamour associated recently with forms of social entrepreneurship was lauded as a very positive thing, and it was felt that many young people today are highly motivated to try to make a real difference in the world and to tackle big problems. The importance of positive role models, and the need to celebrate the success of successful entrepreneurs, was also noted. One contributor made the point that in recounting these success stories we should be careful not to sanitise them, so that people can get a realistic view of the struggles involved, and the demands of entrepreneurial work. Moreover, failure should not be stigmatised and should be seen as a vital part of the learning process.

There was agreement with the point made in the plenary, which suggested that the attractiveness and security of some jobs ('safe havens') acted as a disincentive for the brightest and the best to take the risk of engaging in an entrepreneurial venture. It was suggested, however, that careers in the public service were unlikely to be very attractive to entrepreneurial types, and that typical wage ceilings here were far below what one could expect to earn from a successful entrepreneurial venture. Consequently, it was felt that some of the professions (e.g. law, medicine, banking) were the real problems; one participant reported that he was aware of a situation where some of the best Electrical Engineering students in an Irish university were going directly to London to take up highly paid positions in merchant banking. It was suggested that steps should be taken to make such professions a less attractive 'safe haven' for budding entrepreneurs.

The role of MNCs in skilling entrepreneurs and in helping small entrepreneurial companies was also acknowledged. 40% of tech entrepreneurs come through MNCs and reference was made to the role of companies like DEC in developing technical skills in the Galway area in the 1980s.



Networking opportunities and mentoring were also seen as vital in the formation of entrepreneurs. Enterprise Ireland's 'Leadership for Growth' programme was identified as a particularly good example of good State intervention in this area. The point was made that many people who go to Silicon Valley on this programme come back with much greater confidence and ambition; they learn to think bigger. Initiatives like the Digital Hub can also play a role in this area, as is the importance of leveraging the goodwill of our overseas diaspora. Networking events were seen to be particularly important for the development of female entrepreneurs, as these can help them connect with other women. (Enterprise Ireland has had some success recently in promoting entrepreneurship amongst women.)

Some important structural issues were also mentioned in the context of nurturing an entrepreneurial culture in Ireland. These included tax structures that incentivise and reward entrepreneurs, the continuation of Enterprise Ireland programmes, access to funding, and affordable child care (especially important for women).

Finally, there was some discussion about the challenges associated with scaling-up small enterprises. The point was made that, increasingly, scaling-up is not necessarily about growing headcount, but about growing the business. Consequently, we should be careful about the assumptions that scaling-up individual businesses will lead to significant employment gains. Furthermore, it should be recognised that some businesses are better sold-on rather than scaled-up by founders; scaling sometimes requires different skill-sets and resources and some founders might be better advised to sell and move on to another start-up.

### **Session 3 - Building an innovation driven economy**

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One of the interesting things to emerge from this discussion was a tension between two different ways of thinking about and promoting innovation. On the one hand, the discussion seemed to be implicitly informed by a top-down, design-oriented model, based on traditional, centralised, command and control approaches to management. But contributors often, sometimes simultaneously, spoke about the importance of bottom-up initiatives that emphasise decentralisation, collaboration, and multi-stakeholder engagement. The former approach is a more natural way of talking about management, which emphasises the importance of planning and strategic choice, and which consequently confers an important role on policy makers and government agencies. Within the latter discourse, the role of government (qua managers) is more ambiguous, as the emphasis is on more distributed and decentralised processes.

Interestingly, while contributors were clearly comfortable with the language of the bottom-up innovation discourse, there appeared to be a strong emphasis on the role of centralised macro-actors in building an innovation-driven economy. Perhaps this is only to be expected in a policy-making forum. One way in which this tension was partially resolved was by talking about the importance of fostering an innovation culture. Viewed in this way, the role of policy-makers is to try to create the conditions where people are encouraged to break out of their disciplinary/professional silos to engage, talk and collaborate with others. As with fostering entrepreneurship, it's about fostering an appropriate environment and helping people to connect with one another.

An alternative approach to public sector procurement was offered as a good example as a way of fostering innovation and encouraging more openness and creativity. The idea was that public sector organisations should present problems and tender for solutions to them, without being too prescriptive about what such solutions would look like. It was felt that this change of emphasis could be extremely beneficial in improving the quality of solutions produced, but it was also acknowledged that it could create other problems around the selection of solutions. A more open and less prescriptive

approach would not fit well with current bureaucratic, box-ticking, approaches to evaluation. If we are not evaluating proposals on the basis of prescribed criteria, then it was thought that personal judgement becomes much more important, which could raise difficult issues around fairness and transparency.

A further point that was raised concerned a distinction between innovation and traditional R&D. While R&D was seen to be about 'big ideas', innovation was seen as being about 'adding value', which sometimes requires a different mind-set. Innovation is about the 'translation' of ideas - i.e. taking solutions or technologies and embedding them in specific contexts and interesting ways. A big emphasis was placed on the importance of 'doing more with less', and the point was made that young people have become much more adept at this.

Two sectors were picked out as being prime candidates in which Ireland could innovate and compete internationally - Green Energy Technology and Big Data & Analytics. In the case of the latter, the point was made that the Irish climate makes it an excellent location for the kind of large scale data storage and server facilities required in the new world of cloud computing. Furthermore, the recent emphasis on small-scale app development was also thought to suit small natural resource-poor countries like Ireland. It was suggested that we might foster app development and analytics capabilities that could be exported as services.

The point was also made that Ireland should be actively trying to use Big Data approaches to improve the delivery of public services. For instance, data analytics and personal health apps could facilitate earlier intervention and more effective community-based healthcare. It was argued, however, that many of the problems with the Irish healthcare system were due to organisational and cultural issues, including a lack of leadership in hospitals. As such, it was thought that technical solutions would not suffice, and what was needed was a more private sector management approach.

Finally, the banking, retail and construction sectors were picked out as being amongst the weakest systemically in the Irish context.

# APPENDIX 5

## ICT INCLUDING SOFTWARE, HARDWARE, INTERNET, GAMING AND DIGITAL CONTENT

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Rapporteur: Dr. Diane Payne

Assisted by: Aisling O'Dwyer

### Session 1 - Where we are in the world

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The group had a three pronged approach to our current world position.

There was a view that Ireland is a **Transitioning** Economy.

- We should retain our traditional focus on the US as a primary source of FDI; but
- We also need to keep sight of what's happening in new, emerging economies as a potential FDI source in 10/15 years
- To remain well positioned to capitalise on these opportunities we need to continuously grow our indigenous ICT capacity

This leads to the concept of **Leveraging** our economy to maintain our relevance in the world

- We have the Ideas
- We have the Labour force
- We have the Natural and Green resources
- We can be a World Leader in these areas
- But we must build strong local Networks to maximise our opportunities

With specific reference, then, to the group topic, to leverage our ICT opportunities we need to be a **Learning** economy

- ICT is not a sector, this is too narrow a view
- ICT has application across many sectors, for example, health, education
- ICT can be the gateway which helps us overcome our geographic limitations as a small island; but
- We need to be developing ICT applications that can be exported
- In short, we need to be an agile, innovative flexible, learning economy

### Session 2 - Nurturing an entrepreneurial culture

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What do we need to do to increase the number of ICT entrepreneurs, as well as the volume of entrepreneurial activity?

- We need to tackle the **education** sector at all levels, from primary school up
- We need to manage graduate **expectations** as to what success looks like; fostering mobility and emphasising the importance of connectivity
- We need the right **policy environment** in terms, for example, of tax, financial support and publicity for entrepreneurial success
- Peer to peer **support** and the propagation of success via case studies can help

A key challenge is how to scale up entrepreneurs; how to move ventures to the €20-40 million investment level?

- Scale up is not fast enough in Ireland
- The solutions lie in the capital markets; for example in mezzanine finance facilitated by part risk reduction
- Markets and money are key

What does an ICT entrepreneurial environment in Ireland look like and what have we got?

- There are no real physical restrictions on ICT
- There is a global network of entrepreneurs available to support ICT entrepreneurial activity
- Ireland has a good quality of life
- We should strive to create an intense and peer based support network for entrepreneurs

### Session 3 - Building an innovation driven economy

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The group identified two broad dynamics to help foster innovation.

The **Pull** factors for innovation include:

- Creating consumer/ citizen driven innovation based on identifying needs; this can be facilitated by more data availability
- Setting clear goals and reward systems for innovation service delivery
- Micro managing the detail rather than just relying on the set out goals
- We need less monopolies of service supply - telecom/ education/ health
- We need to encourage/educate consumers to be more demanding of high quality

The **Push** factors for innovation include:

- Shared intellectual property between departments - remove the silos that exist
- Developing a co- creation model; be clear about end goals, with knowledge owned and shared
- Creating an intelligent procurement system for the public sector
  - with real public sector management and real empowerment, removing the high levels of security that currently exist
- Recognising within Ireland the advantages of:
  - the connectedness of Irish society
  - smaller and more incremental learning experiences
  - innovation supports, including matching capability and skills and matching both to the funds availability

# APPENDIX 6

## TOURISM, ARTS, HOSPITALITY & CONSUMER SPENDING (1)

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Rapporteurs: Professor Philip Bourke & Dr. Maeve Houlihan

Assisted by: Clodagh O'Donnell

### Session 1

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The viable recommendations were:

1. Develop the Asian markets – the key barrier here is the difficulty in obtaining visas.
2. Develop activity based tourism on the New Zealand model – walking, sailing, cycling,
3. Develop Theme tourism – language, food, culture.

### Session 2 - Nurturing an entrepreneurial culture

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The viable recommendations were:

1. Tax regime not set up for an entrepreneurial culture
2. Lower rate of Capital Gains Tax

### Session 3 - 'How do we build an innovation driven economy'?

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#### Challenges:

- **Survival mode** – even more of a problem than capital is having no time and space to think (particularly amongst SMEs compared to larger organisations). Good initiatives include peer learning networks and businesses collaborating and mentoring each other – but these don't work when you can't make the time.
- **Getting on Board with Digital reality.** Broadband investment - the reality is that what you provide must be online, app-ified, and 'couchable' (Louise Phelan, Paypal – sortable on your sofa by your smartphone). From buying a book to ordering lunch.
- **SME vs MNC:** When MNCs have the resources to think, and capital to spend, how do you protect the SME? How many SME products really are scalable – and how do we filter this. Do we get the real benefit of investing in them? Traditional nature of many SMEs means less time to explore/generational/ conservatism – perceived lack of openness to online channels etc.

- **Constraints:** A less enabling general environment 'it amazes me how much harder it is to get things done now, than it was in say the '70s' – when probed: regulation, overzealous interpretation of things, slow and paralysing responses. Predominance of 'no you can't'. Equally – hard to stay on top of just how many opportunities, funds, agencies there are – e.g. oversupply of 'enterprise supports', or culture agencies. (Solution found in partnering with information providers that they would 'alert' about the ones that fit).
- **Missing the moment:** for example in natural resources, where we've got raw material and other people have the expertise - key example inward investment in Wave Energy in Cork – went to The Orkneys Scotland when it could easily have been done here, because decisions and licensing took too long here – we weren't responsive, moved too slowly, they couldn't wait for us, and didn't need to. Similarly – distrust has shut down what would have been good initiatives – like offering free senior travel to European OAPs visiting Ireland. Stymied out of fear of abuse. Need a bit of unilateral thinking around decision/execution.
- **Stop trying to do everything:** Pick a region and focus on it 'can't cover all the BRICs' so choose one we've most synergy with and target them for tourism. Pick a theme and focus on it (as Visit Scotland has done). Every sector feels it is a priority, but we have to focus so we can have a vision, develop expertise, and react more quickly.

#### Good examples

- **Inspiration matters and has real effects.** Trusting things like arts and genealogy investment that they do yield a big impact in getting people to Ireland because they inspire people. (Felt need to go bigger on genealogy – need for a single portal – Arts and Heritage working on this. Reality of control of records by Church etc. as typical constraint)
- **The Gathering** seen as a success broadly (noting it took 2 years to green light) by providing a single point of focus: come visit. (and a sense it wouldn't have succeeded in the boom – helped by citizens buying into it and seeing direct cause and effect). The key role of social capital.
- **Clustering** – for example in Spiddal around media and digital business hub – spinning out of TG4, Udaras investment, Ros na Run. Lots of night shipping!
- **Learning it's the really small things that matter:** bottled water in hotel rooms, Wi-Fi on trains, electronic signage connecting bus arrival information. Engaging with both public and state evaluation systems e.g. putting Tripadvisor as well as ITB star ratings on ITB Hotel websites. Getting people to realise that the end goal is about getting people here – they just need the information – the politics of it has to be gotten over.
- **Long timeframes, struggle for patient capital.** The fact is innovation takes time to really get to take off. Example Superquinn – committing to and researching self-service scanning at least 10 years before it really started to work. Having that vision, investing in it, but the long term timeframe for return.
- **Learning to be more of both a consumer and a producer society:** Ryanair – in its time a frame breaker, but not keeping up with the times. Yet UPC – was getting it all wrong in customer service as NTL, Chorus, yet has managed to reposition itself as an innovative and trustworthy brand.

### **Incentives/ Opportunities**

- **2016** – to celebrate 1916 and other anniversaries in a future facing way. View was that while it's a big deal to us, the world at large doesn't know or care about the politics of it – be careful not to let it become an internal dialogue – use it to face the future and the world outside rather than in.
- *Gaps in town centres as shops close leading to eroding footfall* – engaging with this. How to turn it around: the future isn't shops.

### **Process observations/reactions to this forum**

- A lot of people left by the final session. Sense that conversation was getting repetitive – not much return for participants on the time and energy spent.
- Suggestion from the group not to organise by sectors next time – the effect is people who know each other/each other's issues – better to mix it up.
- Let some questions emerge from the room rather than impose.
- Reporting back to the large room – limited value? A lot gets lost, and people get bored.
- Age/gender/lack of diversity.
- How can this event be valuable to participants too? Sense of being mined for information and ideas – almost causing a bit of paralysis – could be a more creative and affirming process.



# APPENDIX 7

## TOURISM, ARTS, HOSPITALITY & CONSUMER SPENDING (2)

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Rapporteur: Professor Frank Roche

Assisted by: Niamh Galvin

### Session 1 – “Ireland, Our position in Europe and the world.”

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#### BRIC Countries

- Looking to new markets for tourists, mostly coming from UK France and Germany.
- Possibly approach Latin America etc. and see if that is the future, this is where most population is and people abroad feel that Ireland does not connect with them.
- People know of Ireland, but must convince them to actually visit instead of just knowing about Ireland.
- Possibly linked to immigration and how successful or not we are.
- People leave Ireland after a few years due to feeling like outsiders....do we do enough in terms of cultural differences to get them to Ireland or to hold on to them.
- Transport links, complicated VISA process.
- Direct flights are a problem.
- Cycling e.g., in Ireland the infrastructure for cycling routes is not there – Green way in Mayo is proven. This could attract more tourists as they would have different activities to do in Ireland.
- Should try to attract more South Americans, i.e. hiking etc...Could be promoted.
- Standard of hotels is quite high in Ireland which is positive.
- Guinness – Arthurs Day, global marketing company supporting an occasion that could attract people to Ireland, other than St. Patrick's day. If it becomes more of a musical event and a more internationally established event it could boost tourism.
- Retail in Ireland is not good online, i.e. need to make ourselves “findable”.
- On a macro level, Failte Ireland etc. need to create awareness of Ireland and micro level retailers need to promote their companies.
- Some of the best technology and social media companies are in Ireland and this is not shown through micro level businesses in Ireland.
- Hard to get companies to engage in Ireland because Ireland is so small compared to other countries.
- Digital agenda needs to be put at the centre of organisations.
- Education about digital and social media is vital. We talk about technology and FDI, however we need to educate and give kids the skills to do it, we are already behind if we haven't done it yet. e.g. Google Academy.
- What is the link between tourism and retail? Online in most cases, are multichannel based. Digital presence needs to be consistent with what you find in store to give an all-round consistent experience for tourists and consumers.
- Shops being outside towns could result in tourists having nothing to do, the town shuts down as Lidl and Aldi etc. are located on the outskirts. This drives the business outside the town resulting in a deserted town centre.

- Multichannel retail experience, deliver a consistent experience for tourists.
- Town planning, town centre planning is forcing people to the outskirts. Town centre planning needs to improve.
- Discover Ireland websites are not very friendly.
- Create a unique identity for Ireland.
- Should still get behind the world Irish concept of a green Ireland.
- Can't get to BRIC countries with current transport.
- Must facilitate people to come to Ireland and find their way around.
- Acknowledge stores such as Avoca.
- A lot that we can do to capitalise on Europe.
- Bollywood now filmed in Switzerland, has provided Switzerland with an influx of Indian tourists. New Zealand has also benefitted from the Lord of the Rings.
- Should the government get behind something like this to promote the country globally?

*“Where do you see opportunities and dangers.....does the answer change if the UK is in or out?”*

- Build on what is on our doorstep instead of targeting the BRIC countries.
- We need to think more about what we can offer to the EU and the UK.
- Kids need to be taught foreign languages in school in order to become more internationally aware, too hard to learn in your teens.

## **Session 2: “Nurturing an Entrepreneurial Culture”**

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### **Q1: Vision of entrepreneurial Ireland, what will make us stand out from the crowd?**

- Expect to see a lot more people running their own businesses. 4% are involved in entrepreneurship at the moment, which is only half the level of the USA which is at 10%.
- Not a lot of local craft enterprises, people who will earn the most revenue are those who can export and trade with foreign countries.
- Ireland needs to be a leader in certain areas i.e. tourism, hospitality.
- Why is it low? The measure of entrepreneurship is the number of adults who are engaged or trying to start new businesses.
- The opportunity just has not been there.
- The spending and demand for start-ups is not happening.
- Culturally we do not encourage entrepreneurship. Professions such as accounting make a lot more compared to what entrepreneurs are believed to make.
- Entrepreneurship is often viewed like the “Dragons Den” show.
- Biggest impediment to growth is the lack of loans being provided.

## **Q2: How do we ensure that we have the right kinds of people coming through?**

- Possibly it goes back into the school system, kids are not encouraged to think entrepreneurially.
- Cultural perception that the Big 4 accounting firms, or number crunching jobs are better than family owned jobs.
- Our cultural values do not rate entrepreneurialism very highly.
- What's stopping us from recreating the Silicon Valley type market in Ireland?
- Could public procurement incentivise entrepreneurship?
- There is no exciting innovation going on in Ireland at the moment.
- Can we build hubs and spokes around Apple, Google and other multinationals?
- Universities have a key role in promoting entrepreneurship.
- How do we grow around already established areas?
- With Universities, companies and students all working closely together, this can lead to entrepreneurs coming out with new innovative ideas.
- Also, Boston and MIT have their own technologies.
- The Irish are not problem solvers.
- Companies have founders who are very innovative but as they go on they don't know how to grow the business, and do not get different management to scale the business.
- It is quite easy to get funding, enterprise Ireland supports these entrepreneurs.
- We have good programmes for entrepreneurs and our environment is very pro-business.
- There is an inability to attract funding. Scaling in Ireland means going to US, or Asia etc... and the Irish funders do not really have the ability to fund all these companies.
- The basic domestic market should be the UK and Ireland.
- Sometimes we underestimate or do not appreciate how big certain businesses are outside Ireland i.e. Glen Dimplex is successful internationally.
- Ernst & Young entrepreneurship awards have done a lot for young entrepreneurs.
- We do not celebrate success as much as we should.
- Minister for Education should have a panel of entrepreneurs to meet once a year and discuss what could be done.
- Web summit – created a world class event.
- Classroom – that's where the culture is born, currently seen as "chancers".
- Trying to shift learning in schools from learning from words and revising, to more of a problem solving environment.
- The business course and transition year could focus on entrepreneurship more.
- Female entrepreneurship in Europe was possibly driven by the war.
- Childcare is the number one issue when it comes to female entrepreneurs.
- Women's not working has resulted in a lot of underutilised resources.
- Women need to be taken seriously in the workplace.
- Businesses such as Kerry group, are very good companies but they are not investing in Ireland, but instead countries such as China.
- Entrepreneurship in tourism is work intensive and based in Ireland.
- Encourage public procurement to have a look at what companies are successful in the market.
- Knowledge and expertise, procurement involves less and less decision makers.
- Enterprise Ireland "meet the buyer" events, opportunity to see what is available in the marketplace and could allow companies to procure small business and scale them to grow.

## Session 3

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### ***“What would an innovation driven economy look like?”***

- Japan, Boston, London, Silicon Valley – all innovative areas.
- Gaming? – innovative industry.
- When shopping in different countries you will see a lot more innovative and a wider range of products. 20% of their sales are coming from products that weren't there 5 years ago.
- Innovation is about understanding the consumer and what they want, it's not about having a huge new idea.
- Other countries are very customer focused in their shops; this is something Ireland needs to focus on.
- Conditions around the idea, whether it would allow it to succeed or not.
- Irish consumers are late adapters, not early adapters therefore it's harder to get Irish consumers to pick up new innovative products very quickly.
- Find areas that are naturally suited to our culture so consumers are more readily willing to accept new innovations.
- Are there more needs that are currently unrecognised i.e. Ryanair saw that the Irish love to travel, and love to travel for cheap?
- Irish people don't often plan for success.
- America has had innovation and business successes since the 60's, whereas it has only occurred in Ireland over the past 20 years.

### ***“How do we ensure that knowledge, technology and entrepreneurship are combined to promote an innovative culture across the economy?”***

- The sooner/earlier children learn about innovation, the more successful they could be in years to come – Linking to education.

### ***“Most Crucial State Supports”***

- There is an awful lot to be done to get the domestic economy up to speed with the rest of Europe. Fraud is the biggest problem for companies online, mainly because we don't have postcodes.
- Infrastructure in Ireland is not set up. 75% of sales online in Ireland are made through companies outside Ireland.
- There are not enough Irish people who can do the skilled IT jobs i.e. Google has had to bring people in from other countries to fill jobs.
- Measurement helps to make decisions.
- Transparency needs to be shown, and specific appropriate data needs to be collected.
- Data protection, Digital Footprint, Postcodes.
- Some businesses will succeed because they do not incorporate innovation into their companies; they see them as Silos and pay lip service to these silos.
- Depends whether everyone is fully tuned into the digital aspect.
- CEO needs to believe in it and give the mandate.
- Innovation is not at the centre of the government's strategy – Need to put the Digital Agenda at the heart of Government Strategy.

### ***“Barriers to Innovation”***

- Very restrictive data protection in Ireland.
- Makes it difficult in certain areas to take risks.
- Everyone can see the way Ireland is going, culture, the way you work.
- Google and Facebook presence.
- Innovation of planning, out of town shopping centres takes away consumers from the centre town.
- Collaboration with a really strong management team in order to work good together and drive the strategy.
- USA is good at collaborations.
- We have a tendency in Ireland to look to the government to solve our problems, people need to come out and talk about it.
- Google, everything is about the market and that they believe in the market, this is driving the company because the consumer is not in control of the market.
- At your service TV show – good example of simple innovation in the tourism industry. The team within the hotel etc... Modernised the hotels and upped the profitability of each.
- Corporation Tax may change in Ireland and may result in companies leaving to find other lower tax bases, and need to look at companies and see how they can stay for other reasons other than low corporation tax.
- Culture, are we attracting people to live here?
- Investment in tourism areas helps to drive innovation.

# APPENDIX 8

## LIFE SCIENCES INCLUDING PHARMACEUTICAL AND MEDICAL DEVICES

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Rapporteur: Dr. Eleanor O'Higgins

Assisted by: Shane Kenny

### Session 1 - Ireland's position in Europe and the world : how should we position ourselves for growth?

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- **If the low corporate tax rate was to go, what would be the effect on Ireland? Need to replace this with other advantages**
  - Advantage in quality. Ireland has established quality reputation with regard to steps in product production in pharma and medical devices; we are trusted. High standards and fast time to market.
  - Proven skilled employees.
  - US companies looking for full value chain when going to Europe – can be provided from Ireland.
  - Easier for IT companies to uproot from Ireland if tax rate goes than for pharma/med devices companies to uproot, will buy some time.
  - Politically neutral, makes us acceptable for FDI and trading partners, export, etc.
- **Issues with implementing some of our advantages**
  - FDA issues and EU vote to centralise drug licensing.
  - Slowness in establishing indigenous companies - Hard for entrepreneurs to start up business in Ireland. The group seemed to complain about lack of incentives, confusion in implementing support schemes.
  - Skills – students are not going into science, and of science graduates, most do not seem to go into life science industries.

#### Global perspectives

- The Global Health market will decrease in the EU and the US → Need to look at Asia and Brazil, Africa. Need to build relationships with these countries before someone else. One idea for building relationships is through technology transfer agreements. Not clear on what technology Ireland has to transfer beyond technology from FDI base in Ireland.
- We should market ourselves all around the globe. Dollar, Euro, Pound strategies need to run in parallel.
- Gaps in the Irish labour market need to be filled. Visa policy needs to be improved to attract necessary skills and capabilities. Most comparable countries produce students with more quantitative skills compared to the Irish graduates.
- Learn from other countries. E.g., UK Patent Box; Switzerland 0 per cent tax rate in return for jobs – but may not be possible within EU.

## Session 2 - How do we nurture an entrepreneurial culture, bearing in mind that the concept of entrepreneurship extends beyond business start-up?

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- **Need to increase number of new companies and scale up to build a sustainable model**
- **What we need to do:**
  - Finance (Funding ) – Ireland needs to become creative on how we use our funding.
  - Discussion about government supports. Simplify EIS.
  - Support needed at very early stage – conversion of initial idea to seed level.
  - Sunshine Act in the USA – opportunity.
  - Better tax credits for R & D.
  - Tax Relief to help a qualifying company business get involved (Help them to grow faster).
  - Enhance business skills in growing companies.
  - Structured entrepreneurship programme in school transition year.
  - Need for support to entrepreneurs at decision points, e.g., exit versus sustainability; how to best implement for sustainability, using outside finance and skills supports. Help in drawing up viable business plans.
  - Best practice exchanges between companies?
  - Good to see EI and IDA Ireland working together. This should help to establish links between FDI and indigenous companies.
  - Need to stop people moving abroad for education and to keep skilled foreigners in Ireland.
- **Various obstacles to establishing and growing companies were identified:**
  - Entrepreneurship is being driven out of the medical system. Clinicians with entrepreneurial ideas are discouraged. (Penalised if you try to be an Entrepreneur).
  - Problems with Capital Gains Tax, vesting stock options.
  - Irish company founders unwilling to cede control, happy to grow only up to a point where 'lifestyle' takes precedence over allowing in outsiders.
  - General lack of patience for slow and steady growth of companies. Venture capital investors want 'big ideas' – very impatient.
  - Social Welfare System – no fall-back for self-employed discourages entrepreneurship.
  - Culture of encouraging professional or secure career paths, rather than entrepreneurship.
  - Education system does not encourage or teach entrepreneurship.
- **General Observation - Short and Long term need to be looked at by companies aiming for sustainability**
  - Question - To what extent should taxpayer fund private sector company development?



### Session 3 - How do we build an innovation driven economy

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- Build many small innovative life sciences companies.
- Growing convergence requires more collaboration between IT and life sciences companies. Great opportunities because of large IT base of companies in Ireland.
- Another opportunity to combine IT and life sciences: Keep people at home instead of hospitals ( New technology); IT at home; patient management.
- Opportunity: Health Care Innovation Hub (All companies coming together to create world leading health care system).
- Remember need to commercialise innovations. Simplify IP licensing. Adopt innovative approaches to licensing, so intellectual property creation properly rewarded and shared.
- Academics must have links to industry. An issue is that Irish universities R & D are hard to work with.
- Put systems in place for knowledge transfer (complementary systems between education, health, finance, etc.).
- Innovation from the bottom up. This could be enhanced by the appointment of a Director of Innovation in the health system.
- Ireland as test bed for life sciences, built on past reliability.
- Use of data over years of manufacturing.
- Make Science/ Maths mandatory in Inter and Leaving Certs.
- Establish special SFI fund for innovation?

## APPENDIX 9

### FINANCIAL SERVICES – DOMESTIC AND INTERNATIONAL SECTORS

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Rapporteurs: Professor Niamh Brennan and Dr. Gerardine Doyle

Assisted by: Aoife O'Leary

#### Session 1 - Ireland's position in Europe and the world : how should we position ourselves for growth

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- BRIC economies are still developing, seeing investors coming in. We shouldn't be giving up on BRIC economies. Ireland seen as a safe place for investment.
- Everything that is done should be focused, combining resources.
- What is Ireland? Everyone has different experiences. Build a philosophy for Europe.
- Risk: determines where you go for investment. There is also risk in missing opportunities.
- New type of Institution aid to companies looking to expand abroad.
- Not all opportunities will be economic.
- Find niche markets in Europe.
- Ireland's approach to equity: get away from the idea that one has to own 100% of the business. Open up the capital system.
- EIB- method of funding to badly structured SMEs – deep structural difficulty. Currently we have attractive businesses overloaded with debt.
- Pensions massive unaddressed issue at the moment.

#### Session 2 - How do we nurture an entrepreneurial culture, bearing in mind that the concept of entrepreneurship extends beyond business start-up.

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- Re-orientate Ireland away from a producer driven perspective towards consumer driven society
- State systems should support and enable entrepreneurship
- Change in culture and attitude required in Ireland such that, similar to the US model, we celebrate success.
- Change in culture and attitude required in Ireland such that we accept that some companies/ventures will fail. Our systems should make it easy for entrepreneurs to try again, similar to the US model.
- Ireland is a small, flexible economy with a highly educated and qualified workforce. We need to create an entrepreneurial eco system building on these strengths.
- We need to foster an entrepreneurial spirit at the stage of second level. Fourth year /transition year in schools should expose every pupil in a systematic manner to entrepreneurship, with strong mentorship support from business. This should be an opportunity for different business sectors to get involved. It might include a dragon's Den style project for transition year students.

### Session 3 - How do we build an innovation driven economy

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- Re-orientate Ireland away from a producer driven perspective towards consumer driven society
- The highly clientelist political system needs reform. The political system needs to be aligned with national needs. Politicians should have incentives to put national issues rather than local issue to the fore. Are our political incentives in tune with the needs of the country?
- The US is an exemplar of the benefits of employees being easily able to move between the public and private sectors. Better mobility between the public and private sectors would benefit innovation
- Great ideas are not being pushed through. This needs strong leadership to make it happen
- Risk of failure – Irish society has become risk intolerant. There is a culture and attitude in Ireland that leads to a lack of acceptance of failure.
- Innovation has to be promoted as a policy at national level
- We need to think to be smart about innovation: we are currently losing top end jobs which are being replaced by lower end jobs.
- We need to promote the reputation of Ireland as an innovation driven economy

# APPENDIX 10

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## PROPERTY AND CONSTRUCTION

Rapporteur: Professor Aidan Kelly

Assisted by: Tara Hennigan

### Session 1 - Ireland, our position in Europe and the World

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The group initially focused on four issues, as follows:

- Taking advantage of emerging economies
- Question of UK not being in Europe
- Whether the Euro is a help or a hindrance
- Implications of the loss of the country's tax advantage

#### Summary of Observations

- For construction, the domestic economy is critical and the international economy is less a consideration. Also, the domestic economy is local, is understood, but is also risky.
- We should focus on economies that are proximate and stable as these are the most attractive – such as the UK and northern European countries.
- Language and culture are big obstacles and adjoining cultures are easier to penetrate.
- For construction investment coming into Ireland it is important for local companies to insert themselves into the system, such as in the provision of supplies, transportation, technical support, etc. It is important to capture and harvest as much as possible of this inward investment.
- The UK market is by far the most important for construction exports.
- It should be noted that the large scale, global type of company is less appropriate in construction; for construction, the future is the small/medium-sized company, as evidenced in the UK and Germany.
- In the immediate future, special services (engineering excellence) will become a critical component of construction in Ireland.

## Session 2 - Nurturing an Entrepreneurial Culture

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### General and Specific Observations

- In business there is a serious stigmatism to failure in Ireland, which is reflected, for example, in the current bankruptcy laws. In this regard there is a need for a fundamental change in the public attitude. One way of addressing this is to bring ideas surrounding the entrepreneurial spirit into the school curriculum.
- The entrepreneur has low status in Ireland where there is little or no celebration of success and profit (unlike the situation in other countries, particularly the US).
- The educational system is deeply flawed in terms of its relevance in supporting a successful 21st century economy. While the education system is frequently lauded as one of the country's greatest assets the reality is that it is not fit for purpose from primary through to third level.
- One serious flaw lies in the system of rote learning, where individual initiative, freedom of expression, encouraging difference, thinking outside the box and swimming against the tide are suppressed. To address these deficiencies students at all levels should be involved in creative activities, project-based assignments, presentations and team structures.
- A fundamental problem with entrepreneurship in Ireland concerns the lack of finance. Seed capital is a key issue. People have plenty of ideas in Ireland, but the real need is to get access to the capital needed to realise the entrepreneurial potential. In Ireland venture capital is very limited, due to the size of the market and therefore the perceived opportunities. In general, it is relatively easy to access initial, but small amounts of capital. However, if substantial support is needed for marketing it is generally unavailable; also, foreign venture capitalists (US) are less likely to make capital available in Ireland due to its distance and size.
- Incentives in large and medium-sized organisations for key executives are insufficient. There is a need for more ownership incentives in order to retain the best talent (eg. Ryanair's recent decision to allocate shares to senior management). In Ireland, such incentives are the exception.
- Organisations also need to recognise the necessity to create environments (space) that foster creativity, such as in Google and other foreign enterprises.
- It should also be recognised that central procurement is now a significant aspect of business in EU economies; however, the problem (in construction) is this stifles entrepreneurial flair. There has always been a tradition in this industry of solving problems at the coalface as issues arise, but this is becoming less possible due to greater centralisation of a wide range of procurement standards and processes.

## Session 3 : Building an Innovation Driven Economy

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### What an innovation driven economy would look like :

- A discerning demanding client brings innovation
- Evidence of a truly competitive infrastructure
- Evidence of constant product/process innovation
- A willingness to embrace change
- A sensible, responsive regulatory environment
- A continuous questioning of bureaucratic procedures (emphasis on quicker/cheaper/better quality)
- Widespread sharing of information (without loss of competitive advantage)
- More product variety (competition)
- More fragmented industries/suppliers
- Low regulation in general

**Examples of Innovative Economies:**

- Italy - leather, textiles
- Switzerland – watches, instrumentation
- Denmark – design
- Germany – engineering
- UK – financial services

**Examples of Notable Innovation Locations**

- Silicon Valley
- Seattle
- Boston
- Route 128
- Austin
- San Diego
- Baltimore

**Crucial State Supports for Innovation**

- R&D grants (SFI)
- Extension of the apprenticeship system (note German success)
- Fostering a climate of continuous questioning of our educational system
- Increase numbers of student placements in companies
- Training
- Product development agencies
- Market development agencies
- Management training
- Need for more concentration of university educational system (university system too fragmented, resulting in inefficiency and unnecessary and fruitless academic competition)
- Encourage more partnerships between companies and universities to address significant design/process issues
- In construction, much innovation now evident in more off-site development and assembly in controlled environments
- In agriculture, more demonstration farms, farmer discussion groups, food inquisitiveness/innovation practices

**Barriers to Embracing Innovation:**

- Access to capital a critical issue
- Various regulatory dimensions
- Lack of encouragement for companies to invest rather than distribute earnings
- Lack of capital to facilitate the building of market confidence in a product
- There are issues surrounding economies of scale which impede innovation

**Ireland's Weakest Economic Sectors:**

- Credit institutions in general
- Banks not fit for purpose in the 21st century innovative economy (middle management have no competence/ understanding of economy's /industry needs)
- Other forms of innovative financing
- In tourism, Dublin as a city location is a weak product
- In property, upward only rental renewals
- In local government, regulations on parking
- Fishing

# APPENDIX 11

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## MANUFACTURING AND INDUSTRIAL DESIGN

Rapporteur: Professor Mary Lambkin

Assisted by: Ian Matthews

### Session 1: Ireland, our position in Europe and the World

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#### Attracting and Maintaining FDI

The discussion began by noting that we are fortunate to have a well established FDI position in Ireland across a number of industries. They may have been attracted by tax incentives in the first instance, but have stayed for numerous other reasons, especially our people. We cannot take this for granted, however, because countries in Europe and elsewhere are now competing on tax rates and other incentives. We must remain vigilant in nurturing our investor companies, and in making sure that we remain an attractive place for them to do business, on multiple criteria.

As regards outward trade and investment, it was suggested that we should be more selective in where we focus around the world, concentrating resources in a small number of places where we have strong existing links, and where we have a real prospect of doing well. Africa was suggested as offering huge opportunities for the future, and Eastern European countries such as Kazakhstan were also mentioned as places where we could be early movers and therefore capture a strong position. However, the risk of dissipating resources too widely was also raised, with the resultant effect that nothing of scale is achieved anywhere.

#### Promotion Efforts Fragmented

We also need to continue and even to redouble our efforts to attract new investors from around the world which requires an investment of manpower. It was suggested that our promotional efforts are currently very fragmented and therefore sub-optimal. We have multiple agencies involved with their resources spread thinly around the world, and possibly duplicating their efforts (DFA, EI, IDA, Bord Bia and Tourism Ireland).

Currently, 70% of FDI is from USA and IDA resources are allocated proportionately. The remaining resources are spread very thinly across the rest of the world and we not have critical mass anywhere. Another suggestion was that we should redeploy a number of staff from other state agencies to the front line of selling Ireland abroad for the next few years while it is most needed.

#### A Unified Brand for Ireland

Another theme that emerged was that we need a common vision and a common goal for the nation—a single Brand Ireland that all agencies could promote. Israel was mentioned as a role model, as a unified brand with the whole populace united behind it.



## Session 2: Nurturing an Entrepreneurial Culture

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### **Society Values “Safe Haven” Employment**

It was suggested that a preference for “safe haven” employment such as the public sector and the professions is a deep-seated cultural value in Ireland that will be difficult to change. Not only is entrepreneurship seen as a high risk and therefore unattractive occupation, but it is positively frowned upon—associated with greed and corruption.

Additionally, business failures, which are an inevitable outcome for some percentage of new entrepreneurial ventures, still carry a social stigma. The harsh punishment accorded to the property developers following the recent economic crash has provided further evidence of this, if it were needed.

### **Lack of Incentives and Safety net**

Changes to capital gains tax (up from 20 to 30%) and other tax credits in recent years were cited as indications that government is not really committed to stimulating entrepreneurship. Any objective to increase the rate of start-ups would need a re-think of the tax and incentive structure to make it more attractive for risk takers in setting up new businesses.

Furthermore, the fact that self-employed entrepreneurs are not entitled to any social welfare benefits provides an additional impediment. There is no safety net for anyone whose entrepreneurial efforts fail, another disincentive.

### **Enabling Change**

The first suggestion was that leadership needs to come from the top—The Taoiseach and the government must adopt a policy that prioritises the setting up of new businesses, and must demonstrate its seriousness by matching this with incentives and safeguards to encourage and protect those people who take up the challenge. The success of the IFSC which was an initiative from the Taoiseach of the time might serve as a suitable analogy.

Secondly, the education system must embrace business and entrepreneurship as a subject and a positive value from the ground up. Students must be made to see that setting up and running your own businesses is an attractive career option to consider.

Thirdly, to change the public mind set, there needs to be a concerted communication campaign, something similar to the drink driving campaign, which has been very effective in changing mind sets.

Fourthly, on a very practical note, it was suggested that we need to train more apprentices such as tool makers and polymer engineers who are badly needed by industry and who are not being produced in any significant numbers at present.

Finally, there was some support for the suggestion that an organisation should be set up with the sole objective of commercialising research from the universities, similar to the Fraunhofer organisation in Germany. This was in response to the observation that 90% of PhD students do not want to set up businesses themselves, and perhaps do not have the skills to do so.

### Session 3: Building an Innovation-driven Economy

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There was a consensus in the group that to be truly an innovation-driven economy, we would have to have innovation in our DNA as a nation -- we would have to be, and be seen to be, creative in all aspects of our activities. This creativity should be manifest to locals and visitors at every touch point—our transport systems, healthcare systems, communications systems, education systems etc. Stockholm was cited as a good example of a place where such creativity is palpable.

It was stressed, however, that innovation and creativity did not just refer to technology, but also to how we deliver services and all other aspects of our behaviour. It would mean that services are speedy and efficient, that websites (including government departments and state agencies) are easy to navigate, that we are easy to do business with, and not bogged down with onerous paperwork.

In practice, it was suggested that we tend to view innovation as something led by government through funding agencies such as SFI, and therefore belonging in a rarified world of scientists in universities, apart from the wider society. In fact, the state supports for innovation are believed to be very good, but they are difficult to access due to excessive paperwork and rigid criteria.

It was also argued that the state spending on scientific research is not applied in a strategic way. It relies on random applications from researchers around the country, each of whom is pursuing their own “world class” research. The participants in the discussion felt strongly that this scatter gun approach was likely to spread resources too thinly and to gravitate towards mediocrity. It was recommended instead that the funding agencies should identify a small number of key areas in which to concentrate resources and to have a genuine chance to build something world class.

## APPENDIX 12

### INFRASTRUCTURE – ENERGY, WATER, WASTE, COMMUNICATIONS AND TRANSPORT (1)

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Rapporteur: Sean Murray

Assisted by: Caroline Weimann

#### Ireland, our position in Europe and the world

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- How infrastructure can balance loss of tax advantages: we'd build the advance factories beside the motorways etc. rather than in more isolated towns.
- Centres of excellence: Dublin, Cork, Limerick are where FDI wants to go. We should concentrate and not spread ourselves too thinly.
  - Pick winners, pursue what's working.
  - Increased urbanisation is inevitable which places all infrastructure under pressure.
  - Cities compete globally and Ireland only has one city which can do that (and even then probably only at a European level) and we must make sure it's properly equipped to do so.
  - Who can we benchmark against?
  - Everyone in the country is not going to have the same level of infrastructure or connectivity.
  - Sustainable waste infrastructures around cities.
- Need to make hard choices a pervasive theme. This means some interest group will be upset but actions must be those which give best overall result for Ireland.
- Infrastructure has a social dimension in ensuring better physical living standards. While this can help competitiveness, it comes with a cost which must be met from future growth.
  - Is there a trade-off between competitiveness and quality of life?
  - Can green cities offer advantage?
- What constitutes infrastructure?
  - Include legal, IP and intellectual infrastructure.
  - Competitiveness and rule of law issues.
- What do we want infrastructure for?
  - To create the environment to support economic growth?
  - What does this mean, how do we define our requirements?
  - Is our legal framework (planning etc.) able to deliver and streamlined with our development plans?
  - Should we let the infrastructure we can provide dictate industrial development policy?
- Public transport issues, how do wean people off cars – particularly in higher density population areas.
  - What will these areas look like – Dublin high rise?
- How can we use emerging technologies, especially digital technologies, to replace traditional physical infrastructure.

- Capital investment is not enough; we need to provide the current account revenues to maintain the investments we've made.
- Unique property identifiers Vs post codes: opportunity for a leap frog change.
- How do we get the best return on investment.
  - We have a poor history with managing change and/or major projects: what have been the inhibitors?
  - How do we assign weights to competing stakeholder/interests to avoid sectional interests capturing the benefits?
  - Are public procurement policies fit for purpose?
  - How do we speed things up?
  - Invest more in communications consultants at the start of the consultation process.

### **Nurturing an Entrepreneurial Culture**

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- Concept of entrepreneurship should extend beyond start ups and into entrepreneurship within existing businesses.
- Education as a start point:
  - Start in schools
- Role of careers guidance teachers?
  - Role of universities and co location with same; IDA should encourage.
  - Over emphasis on professions as 'respectable' routes forward.
- We need to identify and promote role models.
- Reward and the tax implications! Current emphasis on what people are paid rather than what they do for it.
  - Is talent loss a major issue right now?
  - How do we encourage people to take risk? How do we provide a safety net for those who might fail, to encourage them to make the leap?
  - How can entrepreneurship compete with the multinationals for talent?
  - Why do Irish people innovate more willingly/easily abroad?
- International trading policy and agreements must meet the future entrepreneurship growth needs with companies as the start point.
- How do we tap the entrepreneurship potential of immigrants in terms of education and giving them the right to work
- Israel as a role model – emphasis on sales, cultural.
- The business of arts/culture as a source of entrepreneurship.

### **Building an Innovation Driven Economy**

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- Innovation much broader than entrepreneurship.
- Importance of a signal and leadership from the State.
  - E.g. via tax policy.
  - Creation of certainty within the environment to allow people take a long view.
  - Back winners.
  - Champion needed but little enthusiasm for Chief Innovation Officer.
  - Are multi nationals occupying the space Govt. should be in?
- Innovation strategy ( report of the Innovation Task Force) but only 60% implemented.
- Over regulation Vs. competition Vs. smart regulation.
  - Regulation itself less of a problem than non or uneven enforcement.
  - Compliant companies paying a 'rent' to the non-compliant; self-compliance by large and/or state companies.

- Challenges for innovation in the low tech sectors which provide large employment numbers.
  - Why does immigration still persist in hospitality & retail, for example.
- Leadership is needed around the hard decisions on removing social welfare based poverty traps.
  - US/Canadian/Nordic models.
  - Would we tolerate the level of intervention involved?
  - As a society we tend to avoid the unpleasant downsides that attach to any decision.
- Open Platform Data from the Public Service is essential as a micro driver of innovation.
- We need a more innovative centralised finance system.
  - Move away from command and control.
  - Blunt, across the board cuts may be easy but they're lazy and inefficient.
  - Methods of allocating or changing the allocation of funds leave a lot to be desired.

# APPENDIX 13

## INFRASTRUCTURE – ENERGY, WATER, WASTE, COMMUNICATIONS AND TRANSPORT (1)

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Rapporteur: Professor Pat Gibbons

Assisted by: Anthony Kelly

### Session 1

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#### **The pace of change - Urbanisation**

- People living in smaller cities
- Countries like Nigeria 2050 larger population than the US
- Earth can support 15-18 billion

#### **Education System**

- English Speaking
- Important to have a second language and a commitment to being able to speak one
- Should Irish be dropped- Chinese or French
- Lack of proficiency in languages
- European counterparts have second language
- Knowledge on renewable energies
- As population grows have to do more with less
- Teach kids to live more sustainably

#### **Development of Ireland's Competitive Advantage**

*Ireland's climate suits the*

- Cloud Sector
- Renewable Energy

#### **Next Industrial Revolution – Energy**

- The development of Wind Energy that can be exported when capacity is reached

#### **Opportunities to engage with other economies**

*What is Ireland good at?*

- Good at Processing Food- opportunity with Africa
- Capacity to build motorways- Engineering Skills
- City Planning- Teach countries how to build their motorways, cycle networks and humanising their cities
- Ireland needs to have the ability to be agile

### **The Development of an Irish Offering**

- Do we organise what we offer in a clear and concise matter?
- Developing a more joined up approach
- Other Examples mentioned
  - Denmark setting up a renewable energy centre in China
  - NZ manage the food plants and supply chain in China

### **Renewable Energy**

- Compelling case we are world leaders
- How do we leverage expertise and push that out as a compelling offering
- Ireland Inc need to focus our efforts
- Know How and competitive advantage needs a joined up approach

### **Ireland Inc.**

- Insular View of the world
- How many key decision makers have experience in the emerging markets
- Infuse an International Orientation with our policy makers
- Nigerian Communities – How to engage with these communities back home
- The Development of “ Think Tanks”
- Need to welcome Immigrants communicate with them and gain an insight

### **The Development of a Personal Network**

- Should individuals explore a pen pal relationship with people overseas and the idea of growing these personal networks?
- The Idea of economic partnerships- Dublin partnership with Beijing
- Shanghai with Cork
- Are these been maximised- what is the follow up approach?

### **The Development of our Civic Spaces**

- Create spaces that people want to live in
- Scope for us to be an exemplar
- More attractive we make our shared space the more investment it will attract

### **Energy and Green Revolution**

- Resource Availability will be an issue
- The idea of sustainable development

### **Growing Emerging Markets**

- Are we allocating resources efficiently?
- The idea of locating strategic clusters
- Pick the winning economies and see the fit between what they need and what we can offer

## **EU**

- Stop being a taker but actually a shaper of policy
- How do we contribute to the EU?
- Do we think of ourselves as Irish or European?

## **Recommendations**

- Provocative reforms of the education system – Should Irish People Learn a Second Language
- Development of the International Network as opposed to Diaspora
- The idea of Network Building – Intimate network being fed into an national network. Reach out every time we go overseas
- Semi States, City Councils should have international representation.
- The idea of internships

## **Session 2**

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### **Innovation and Entrepreneurship**

- The idea of producing creative capital - teaching people how to think

### **Scope of entrepreneurship in the Public Sector**

- Hierarchal structure kills entrepreneurship
- Risk Aversion
- Obsessed with not making a wrong decision- Harcourt Line
- Issue with permission to innovate
- Safety Culture driven from Politicians “Political Straight Jacket”
- Our Economic Model Public sector is critical- Entrepreneurial Culture in the broader public sector
- Public Sector bruised and battered – need to figure how to better regulate
- People of expertise in their correct system
- Competitiveness test
- Could they pull back from overregulation

### **Design Thinking**

- Determine the problem and work back

### **Regimented Education System**

- What gets recognised and rewarded
- Publicly funded Dragons Den

### **Irish Culture**

- Begrudge culture
- How they are dealt with in Irish Society
- Do we need a society that accepts failure? (Ivan Yates)
- Normalise failure – The personal guarantee ideal.
- American Culture – How do they deal with failure?



### **Changes in Third Level Education**

- To Foster Creativity

### **The Business of Ageing**

- Fantastic Research and Initiatives not transformed into HSE initiatives. Business and excellent research not married.

### **Key Issues**

- Entrepreneurial Culture
- Risk and Rewards are they appropriate
- Financing / Support Networks

### **Support Networks**

- Making them aware of the information / schemes
- Complicated
- Myriad of Schemes

### **Social Welfare/PRSI system**

- Potential to cultivate an entrepreneurial culture

### **Public Sector**

- Does the public sector crowd out entrepreneurship?
- The need to liberalise
- Over Regulate and Under Enforce

### **Women Entrepreneurship**

- Flexibility with childcare

### **Multinationals**

- People with golden handcuffs

### **Serial Entrepreneurs**

- People sell company and reinvest

### **2020**

- At sectors of opportunities we are at the forefront
- State aren't making the companies

### **State having a conflict of interest**

- Aer Lingus v Ryanair
- Dublin Bus/CIE

### **Clusters need to be developed**

- Around where we possess a competitive advantage

### **Quality of Place**

- Development of Hubs
- “We are good at getting people together”

### **Summary**

- Entrepreneurship and the Public Sector
- Stimulating Entrepreneurship – Design Thinking
- Risk/ Reward of entrepreneurship
- Liberalisation of Markets
- Holistic approach to the quality of place
- Myriad of services – Clarity of information

## **Session 3**

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### **Delays within the EPA- Stumbling block to Innovation**

- No resources within the EPA
- Statutory Delays
- 4 Years to get a green light
- Statutory Time limits – driven domestically and by Europe
- Applications need to be moved along
- Exporting 150,000 tonnes of waste - Plan for anaerobic digestion mechanism
- The Polluter Pays
- Policy system that is fit for purpose

### **Regulation should support innovative environmental legislation**

- There should be a path to completion.
- Agricultural Anaerobic Situation

### **Becoming Better for Community Engagement**

- Public Participation
- Process for community engagement - Acceptance and path to completion
- Focused Attention at the earliest part
- Still Potential to divide a community

### **Co-Development**

- Establishment of a community fund

### **The Idea of Science Shop's**

- The Dutch Method of marrying community problems with third level institutions

### **Three Departments and many Regulators**

- Are there too many stakeholders? – Closer Integration needed
- Compliance with the EIA directive
- More Collaboration needed with Third Level System

### **Formation of an Infrastructural Vision for 2020**

- Establish what we value as a quality of life
- The Development of Public Transport- will we push people out of rural locations?
- Joined up approach is needed- A view to join the Dots

### **Private Sector**

- Remote monitoring and smart sensing

### **Cross Cutting Teams to facilitate proper innovation**

- Clontarf flooding scheme
- Quadruple Helix
- The development of open innovation partnerships

### **Weakest Systematically Important Economic Sectors**

- Energy
- An area of Huge Competitive Advantage
- Banking
- Retail
- Legal Costs

### **The Inability to Build Grid is a huge barrier**

### **Innovative Economy**

- Openness to trying new things
- Joined up thinking – cross cutting approach

### **Summary**

- Regulation delays in infrastructural licensing
- Better community engagement facilitating the co- design of infrastructure
- Need to produce an infrastructural development map/plan for Ireland to ensure we are using each of the plans as efficiently as possible
- Ireland as a test bed for trying new technologies particularly in Renewable Energies

# APPENDIX 14

## INTERNATIONALLY TRADED SERVICES

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Rapporteur: Dr. Colette Kirwan

Assisted by: Cliona McDonnell

Summarised are the key points discussed by the Internationally Traded Services Group. The discussion is analysed around the three headings (i) Ireland's position in Europe and the world, (ii) How do we nurture an entrepreneurial culture, and (ii) How do we build an innovation driven economy. Also included (Appendix A) is a summary received by e-mail from one of the members of the working group.

### Session 1: Ireland's position in Europe and the world: how should we position ourselves for growth?

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To develop internationally traded services, it is necessary to message/brand services collectively and to celebrate success stories. Other sectors collectively have a brand and strategy. There is no collective brand/strategy for the services sector.

#### Barriers to gaining entry to overseas markets

- Micro finance packages not working for services.
- Scalability of services.
- Lack of skills in key areas such as online marketing and strategy execution.
- At all levels of education, insufficient attention given to languages (Ireland's USP as an English speaking country is no longer relevant), science and maths.
- Barriers preventing talented workforce/entrepreneurs coming to Ireland, for example visa process.

#### Action points

- Financial/non-financial support for companies that do not meet Enterprise Ireland criteria.
- Smaller service companies coordinating to increase their collective scalability
- Developments in education
  - Encourage the placement of students (second and third level) in SMEs; benefits students (i.e. develop commercial awareness, knowledge of business etc.) and SMEs (i.e. access to resources).
  - A wider variety of languages offered at primary school level. Developing language skills at second/third level is too late.
  - Concerns expressed that third level students were expected to specialise too early; narrowing their focus and development.

## **Session 2: How do we nurture an entrepreneurial culture, bearing in mind that the concept of entrepreneurship extends beyond business start-up?**

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The entrepreneurial culture in Ireland is a significant barrier. There is a fear of failure and a low tolerance of risk. Successes and failures contribute to entrepreneurial development. Encouraging entrepreneurial activity requires a cultural and attitude change. Entrepreneurship is not just about developing the individual but about developing an attitude.

### **Action points**

- Encourage a broader entrepreneurial pool, for example ethnic entrepreneurship and female entrepreneurship.
- Create mentoring links between MNCs (mentor) and SMEs (mentored).
- Developments in education.
  - Entrepreneurship and knowledge of business fundamentals incorporated in to the education system. An experiential focus, for example policy-led initiative to incorporate entrepreneurial activities in all transition year programs and mandatory internships at third-level.
  - Encourage entrepreneurship and introduce students to the fundamentals of business (i.e. technical, finance and accounting) at an early stage (i.e. introduce at primary school level).
- Foster stronger links between industry and universities.
  - Industry contributing to the funding of research activities and investing in internships.
  - Entrepreneurs more visible in universities (for example, lecturing, mentoring).
  - Develop “Entrepreneur in resident” positions in universities.
- Develop funding supports. For example, re-introduce the Business Expansion Scheme to encourage friends/family to invest in start-ups; State Investment bank aimed at entrepreneurial activities.
- Develop a portal-website where start-ups can gain easy access to information on all matters (financial and non-financial) relevant to starting and growing a business and which encourages peer-to-peer mentoring.

## **Session 3: How do we build an innovation driven economy?**

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### **Action points**

- Winning Sectors of the future: Much debate around identifying/picking “winner sectors” of the future. Suggestions included:
  - Develop product innovation in key sectors (for example, pharm, ICT, agrifood) but maintain an innovation edge to stay ahead of sector changes. Look at mega-trends and tap in to fundamentals (for example, health sector, food sector).
  - Concerns that an over-emphasis is placed on product innovation compared to process innovation (for example, quality assurance processes). By focusing on our strengths in process innovation, Ireland could become the world leader in process innovation relevant across different product sectors.
  - To develop an innovation driven economy.
- Combine both product and process innovation.
- Combine different sectors (for example, food and tourism).
- Promote clusters/campus style settings to promote industry and research.
- Build a reputation for innovation: Much debate around branding Ireland as an innovation centre. Diverging views expressed around (i) branding Ireland as a single brand, (ii) branding Dublin as a hub, or (iii) branding regions of excellence.

- Other matters discussed:
  - Simplify registration process for trademarks/patents.
  - Attract innovation /entrepreneurs to Ireland.
  - Enhance knowledge transfer opportunities between industry and research institutions.
  - Develop science, technology, language and math skills (refer to previous points).
  - Re-visit the public procurement process and the challenges experienced by some service providers.

**Conclusion:** The discussion by the Internationally Traded Services Group was engaging and diverse. The role of education, across all levels, received much attention. The importance of promoting an entrepreneurial attitude and providing the necessary skills to realise entrepreneurial appetite (for example, technical skills, language, finance, accounting) was highlighted.

#### Appendix A: Summary received post-event from a member of the working group

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The following summary points were received from a member of the working group:

- Services is different and a sector in its own right and also a key element of product sectors ie the servicisation agenda
- The preoccupation with “bio, nano, IT etc” has not helped the reputation/brand around services.
- Perhaps more news on economic impact of services’ contribution to economy compared to others, growth, regional dimension etc.
- Developing economies are important for services but established markets such as the UK, US and Canada remain important trading partners with English speaking aspect a key dimension
- [Businesses] are curtailed in significantly scaling overseas and often hampered by lack of funding/facilities. The absence of an export credit agency is a big issue.
- On the Education Services side Ireland can be a leader in on-line delivery (blended learning, MOOCs etc) however limited progress underway. Strength in technology and e-learning and long standing reputation in education should offer competitive advantage if investment and focus made.
- Females potentially are under-represented in Industry as leaders, managers etc and EI pushing this with Female Entrepreneurship etc... Remember the Warren Buffett comment!
- Ethnic Entrepreneurship another opportunity in Services and link to International students underway to progress this
- Our reputation (Ireland’s) internationally has not helped our industry base and hopefully in coming years it will be more positive. Looking at building our reputation leading with Dublin while interesting will be challenging in markets where Ireland is unknown... I am thinking about the problems we have getting Ireland considered as a destination for education in India, China, Asian...
- We need to embrace, celebrate and brand success and business growth in Services ... not judge or be-grudge it or ignore it!

# APPENDIX 15

## AGRIFOOD – AGRICULTURE, MARINE AND FOOD PROCESSING

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Rapporteur: Professor Dolores O’Riordan

Assisted by: David Scott Lennon

### Session 1: “Ireland, our position in Europe and the World”

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#### Population Change

- Conscious of moving our resources away
- Must develop relationship with other countries and develop links
- Education Importance
- Great advantage of immigration can we encourage entrepreneurs untapped resource
- Pick a theme and find what markets this applies to. Launch products into right areas

#### Unique advantage in agrifood

- Best quality from natural resources
- Where our ingredients go- Stay in Ireland/Abroad
- Not doing enough to brand ourselves
- Don’t align all our strategies as a country-This needs to be done to move forward
- Europe allows us to play on a global scale
- Looking at Ireland from Brussels we are on periphery
- Strategic Partnerships important- Focus on theme, regulations pose a significant challenge

#### Ireland has to realise it’s a small country: need to focus on areas to improve

- Need to look at education as third level rankings are dropping we are losing these foreign students
- We need to concentrate and maximise assets- through branding and innovation not just in emerging markets
- We haven’t done Europe great so why do we think we can do China
- Didn’t put the resources on the ground in Europe
- Focus at home- Major markets are close to home and have a say in shaping regulatory changes in EU

#### Global Trade

- Need to prepare for trends and directions
- Make the connection with what we have and what we can achieve
- How do we position ourselves in global markets?
- Opportunities there to provide services as well - Export services outside Europe there is a huge market of growth there  
Demands for particular types of food

- Are big companies driving what we need. To what extent are SMEs doing so?
- Authorities are key to defining what standards are the appropriate standards. Need Irish on the ground in these countries
- Not done in strategic way which means mixed messages abroad. We can do better in how we engage need to align this

### **UK In Eurozone**

- A lot of exports are to UK we need to knit our relationship with our base
- Logistics beyond the UK
- UK going to remain a massive market for us
- Exchange rate could cause problems
- History has shown we can maintain this, despite a change in Exchange rate
- Even if they leave we will remain a trading partner
- Food doesn't have a uniform product that can change so it is difficult in the European market

### **Philadelphia, Massachusetts or Singapore?**

- All 3
- ~ Aspire to be Massachusetts - Good focus on education, diaspora and university linkages, they suffered like us and reconfigured themselves at a great pace and have not tried to be everything and our Sectors are quite similar
- Singapore- Hub R and D and Innovation
- We can't look to do everything
- Opportunities- Does the answer change if UK is out of EU
- Don't think anything would really change for us
- Education problems
- We want masters not PhD

## **Session 2: "Nurturing an Entrepreneurial Culture"**

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### **What's the entrepreneurial vision of Entrepreneurial sector in the agrifood sector?**

- Innovation, Creativity, Ambition, Hard work, Risk takers
- Unstructured thinking and opportunity.
- Make the environment as safe and supported as we can. For both new business people but also experienced people.
- No social welfare for failed entrepreneurs as an issue.

### **What would success look like?**

- Not such a bad thing to fail because we learn
- Take away negative stigma associated with failure.
- Begin at early stages to learn from mistakes
- Creates a new energy, vibrancy and we could bring more people into the country.
- Culture, with a VC Company assisting new start-ups.
- New Companies
- Get children involved in entrepreneurship.
- Making Food industry sexy again.



- 10 companies per annum with each having 100 employees by 2020.
- 5 of these ten should have ambitions to be the next Glanbia.

### **Fabulous energetic food companies**

- What prevents them from growing
- Need to help them improve and grow as company.
- Build a VC Fund for food and agrifood as current companies do not see food as a suitable investment.
- People want to invest, need tax breaks to encourage people to invest.
- Should get big companies to mentor new start ups
- Bring industry into education

### **Pull and Push Factors associated with entrepreneurs**

- Need people to take risks, can companies allow career breaks is it in their interest.
- Need to create the market for these entrepreneurs
- Lack of Scalability failed to make bridge from small new companies to scalable businesses in recent times
- Farmers markets everywhere.
- Barrier of Regulatory

### **How can we get more out of what we have?**

- Push and pull factors need to be met- tax breaks incentivise people to take risks
- Every industry has barriers.
- There is a latent opportunity in food just got to outline this
- We need to prioritise food.
- Break down into categories
- Where do we want to be- We have a very clear industry strategy in the agrifood industry. We are not aspiring at the moment.
- We need to create jobs.
- 400,000 people unemployed they have nothing to lose, they are skilled can we allocate funding for these people to get started. Are we harnessing activation measures to these natural resources and assets.
- Start small and organically grow

### **Masters and PhD programmes**

- Need to have a longer period which would include working in the industry

### **Do what we do better**

- We do have many food innovation programmes operating at the moment.

### **How do we create the new Companies?**

- There are companies out there
- There are even more opportunities here
- Are we bringing enough immigrants in who are specialists in their foods?
- Are we encouraging immigrants to come here and set up?

- We need to be able to fund these new companies
- Bureaucracies have changed since the days of the Glanbia
- We have to think about their specific needs in the food industry in terms of attracting investments.
- Do companies know about consumer needs are we making enough use of the funds available. There are opportunities to leverage the funds in a better way.

#### **Number of start-ups are growing but not in food what do we need to do.**

- People are afraid of failure
- Get people talking about food
- It is very good for the economy- Multiplier Effect
- Need a dedicated fund.
- We should teach it in schools not just Home Economics, need to think about food as a business.
- Bring in industry professionals to schools.
- Get talent into the industry and raise the profile of the food industry.
- Leverage EU Funding, Use Resources available.
- Publicity campaign to highlight profile of food.
- Invest In Language Skills.

Think Big

We need to pick the industry that government that are going to back.

Female Entrepreneurs

- Going for Growth

Opportunities in all aspects of the services industries.

New Technologies packaging etc.

### **Session 3: “Building an Innovation Driven Economy”**

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#### **What does innovation driven economy look like?**

- Have a clear vision
- New products
- Sustainability- Environmental and Economically
- Continuous innovation- Process and supply chain innovation
- Stronger linkages – Pharma Food-Food Tourism, Education.
- Bio-Economy-How natural resources can be used across sectors Think bigger picture for 2020.
- Ahead of the game in terms of External Factors.
- How we deal with social media is very important in the food industry.
- Crowd sourcing could be the future
- Focus on Leadership in some areas

- Education is so important need more interaction with industry.
- Build Leaders in Food production and Food services and processing
- First mover in nutritional and Formulas
- Enable citizens to play a role

#### **How can we link innovation and entrepreneurship culture?**

- Small and interconnected we should be able to get this information out to entrepreneurs.
- Collaboration and work together with a common vision.
- How does part A know what Part B is doing
- Focus and centralisation
- Critical Supports needed
- Short Medium and Long-Term vision we can't keep moving the goalposts
- Business Skill with Technical Skill
- Pull push between industry and academics.

#### **Problems for the State**

- State needs to look at public procurement policies and these need to be integrated
- Hard to engage with the system due to the lack of above.
- We need the FDI and the big companies as it is part of the infrastructure.
- Can't get the research out to the people coming up with the policies. Needs to be top-bottom and bottom up.
- Health Innovation Hub- Need to get two departments Department of Health and Department of food to work together

#### **Huge Opportunity**

- European Innovation
- Haven't taken into account the role healthy food and nutrition plays in health living-ageing
- If that could get into policy here could become a European THING

### **What are the barriers to Irish companies with taking innovation forward?**

- We have problem with consumer insights
- There are incentives for R and D- but cost barrier looking abroad?
- A major programme of consumer insight needed.
- Need more holistic view with all the departments' views then look at the consumers in the markets Ireland is targeting
- It's about consumer and process and benchmarking yourself. The government can help here how it's doing its innovation and its results.
- Grants are very clear, R and D and taxes are difficult to utilise
- Taxation incentives specifically food formulation that will bring companies into the space.
- Consumer insight is critical.
- Businesses need to know failure rate is high
- Regulations hinder innovation in some cases
- We need to test a change in regulation in order to see how businesses react
- Taste and overall sensory attitudes have to come in to it but there must also be a re-education of the consumer
- Is it held back by lack of funds- Tax doesn't work in food the grants do

### **What weakness?**

- Energy we are a price taker
- European Energy Policy
- Incredible strength in natural resources and we are not using these resources. Opportunity's for Bio Economy
- ICT and Agrifood are not really connected. Agrifood is one of the biggest movers this could help us to improve productivity. Farmers should be using this.
- Weak in construction no rebuilding structure
- Childcare reduces productivity in many sectors.
- Tourism industry not value for money we could market Ireland better
- Funding to education reduction is a problem. Need to invest in people. Budget Cuts an issue .
- Do we need all the IT's and Colleges could we rationalise?
- Social Welfare money not being spent properly

### **Primary agricultural production**

- No Scale in Fragmentation
- Demographics
- Mobility so that you can make scale
- Access to land
- Rationalisation
- Access to funding is a massive issue
- Start Ups and developed industries

**What we need to do**

- Increasing spend in R and D
- Linkage between all industry's so that we are all on the same page
- Integrated Healthy ageing reputation
- Dream Fund
- Life-long learning
- Public Procurement
- Open innovation conference forums
- Investment in Supply Chain
- Target Market Grants- Business Accelerator programmes