

## FORESIGHT – A SIGNIFICANT INPUT TO POLICY

**Dermot O’Doherty<sup>a</sup>, Donncha Kavanagh<sup>b</sup> and Michael Fitzgibbon<sup>cd</sup>**

UCD Centre for Innovation, Technology & Organisation

<http://www.ucd.ie/cito/>



### FORESIGHT – A SIGNIFICANT INPUT TO POLICY

The coronavirus pandemic has brought an acute shock to the global economy. The immediate challenge for governments is to start the process of economic recovery while protecting the health of citizens. The pandemic also poses fundamental longer-term questions about what societies across the world most value, how they should prepare for future public health shocks, and what should be the future social contract between governments and citizens.

Add to this a possible no trade agreement Brexit and the impact of climate change and you have ‘a perfect storm’. Advances in science and technology, such as artificial intelligence and the digital economy, offer both threats (e.g. unemployment) and opportunities (e.g. new services and better jobs) in this difficult societal context.

How are we on the island of Ireland going to address these economic and social threats and opportunities?

Foresight is one tool that seems particularly suited to the current challenge.

Foresight is a systematic, participatory, future-intelligence gathering and medium-to- long term vision building process aimed at assisting decision-making and mobilising joint actions. There have been many Irish examples at the sub-regional, national and sectoral levels, as well as the ongoing experience at EU level and in other contexts. For instance, the Technology Foresight exercise carried out in the late 1990s was instrumental in establishing Science Foundation Ireland and the Irish Research Council.

The OECD Strategic Foresight Unit is available to support OECD Directorates, Committees and Governments in applying an in-depth foresight analysis to key priority issues, with a particular focus on medium- to longer-term issues that cut across policy areas. The OECD has been particularly active in addressing all aspects of the [Covid crisis](#), from Tax and Fiscal policy responses to Agricultural and Food issues. In particular, the OECD has highlighted the urgent need for Strategic Foresight exercises. See their report [Strategic foresight for the COVID-19 crisis and beyond: Using futures thinking to design better public policies](#),

published in June 2020 (this report includes a comprehensive list of recent Foresight publications).

The Foresight process would:

- Inform policy-making so that key actors are more aware of longer-term scenarios, are more prepared for different possibilities, and able to recognise an emerging scenario and its wider implications. A Foresight exercise might be stimulated by the need to take particular decisions, but the knowledge developed, and the Foresight capabilities that have been embedded, can have a wider significance.
- Help build networks among the people centrally involved with shaping the future. Bringing people together – perhaps virtually – will facilitate collective sharing of visions and assessments of the future, help understand challenges and opportunities, and provide a basis for formulating strategies and objectives.
- Develop capabilities that shape a ‘Foresight culture’. This should enable individuals and groups to define and embark upon more detailed Foresight activities and to forge their own Foresight networks.

The Foresight exercise would be a cross-border initiative, in line with the Programme for Government’s mission to work towards a consensus on a shared island. An Island of Ireland view could be provided through cross border bodies such as InterTradeIreland (ITI), which operate under the aegis of the North-South Ministerial Council, as well as All Island organisations such as the RIA and the Irish Academy of Engineering.

An initial scoping study, including a review of prior exercises, should be carried out by a combination of organisations with background and expertise in the field, including NESC and Teagasc south of the border, as well as Matrix (<https://matrixni.org/>) in Northern Ireland. Matrix commissions research, analysis and studies to build an evidence base for future science and R&D policies in Northern Ireland. One of its objectives is to ‘identify, agree and oversee a programme of market led science and technology Foresight studies’.

### **Foresight Methodologies**

Foresight exercises seek to articulate views about the future, trends and contingencies that may give rise to alternative futures, as well as values, goals, critical priorities and strategies. The approach may involve large-scale surveys of opinion (such as Delphi), or much smaller and more detailed elaboration of visions (such as cross-impact analysis, scenario workshops, etc.). Typically, they mix ‘top down’ and ‘bottom up’ approaches, with a wide range of sources contributing inputs, which are then analysed by a small expert group. They often start by soliciting inputs on how to conduct the Foresight activity itself and may ask for views about its design, content, communication protocols, etc. A wide range of methods can be used to ensure that these are forthcoming – discussions on websites, meetings in localities and with special interest groups, presentations at a wide range of fora.

A Foresight group should include a range of interests, including futures and domain specialists, researchers, business representatives, policy-makers, etc., and will also seek

input from the wider community. Several expert groups may work in parallel on different topic areas, with a high-level group drawing together their conclusions. Foresight exercises differ from much narrower forecasting exercises in terms of scope, openness to inputs from a wide range of contributors, and linkages to decision-making.

### Irish Foresight Experience

The [Technology Foresight Ireland](#) process was launched in March 1998 by the Irish Council for Science, Technology & Innovation (ICSTI), which had succeeded the Science, Technology & Innovation Advisory Council (STIAC), after the publication of the Government's only ever White Paper on this key policy area. Eight expert panels were established, each chaired by a member of ICSTI, to consider the future technological needs of the following sectors:

- Chemical & Pharmaceuticals
- Information & Communication Technologies
- Construction & Infrastructure
- Materials & Manufacturing Processes
- Energy
- Natural Resources
- Health & Life Sciences
- Transport & Logistics

Each of the panel areas was structured to cover a number of related activities so as to include as comprehensive a cross-section of the economy as possible. The panel membership came from industry, the HE sector, Government Departments and research institutes. The work of the panels was completed within 12 months.

Other important Foresight exercises over the past 20 years include:

- In 2005, the Border, Midland and Western (BMW) Regional Assembly published a [Foresight report](#) that identified ten critical areas as strategic objectives to be achieved.
- In 2005, the Futures Academy, Dublin Institute of Technology, Ireland, produced a document [Imagineering Ireland – Future Scenarios for 2030](#) to demonstrate how scenario development can be used in Ireland to explore the opportunities and threats facing the nation over the next few decades.
- The Agri-Food sector has been the subject of a number of Foresight studies. In 2005, Teagasc, NUI Maynooth and UCD published [RURAL IRELAND 2025 – Foresight Perspectives](#). Teagasc subsequently published its own Foresight report, [Teagasc's Role in Transforming Ireland's Agri-Food Sector and the Wider Bioeconomy - Towards 2030](#) in 2008 and another report, [Teagasc Technology Foresight 2035](#) in 2016.
- In 2009, the National Economic & Social Development Office (NESDO) led the [FuturesIreland project](#) which examined how best to enhance Ireland's ability to innovate and learn. Over an 18-month period, the project team interviewed 183

innovators from business, social and cultural organisations and the public service and also worked with a smaller group of high-level leaders and thinkers.

- More recent examples are Eirgrid's [Tomorrow's Energy Scenarios 2019 Consultation Ireland – planning our energy future](#) the ongoing [Imagining Ireland 2050](#) being undertaken by the Environmental Research Institute, UCC, and Queen's University, Belfast.
- The National Economic & Social Council (NESC) has recently returned to the type of wide-ranging analysis and discussion that characterised its role as a forum during the Social Partnership era. In particular, [Approaches to Transition](#) and [Just Transition](#), both published in 2020, deal with how technological and climate transitions can be addressed, including experiences and approaches to governance elsewhere, particularly in relation to protecting vulnerable groups and sectors.
- The Citizens' Assembly is based on a deliberative process not unlike those found in some Foresight exercises. For instance, in 2018 the Citizens' Assembly produced a report on [How the State can make Ireland a Leader in Tackling Climate Change](#).

---

<sup>a</sup> Formerly: Strategic planning manager in EOLAS; Senior Adviser on innovation and business development in InterTradelreland; Senior Adviser on technological and innovation policy in the Science, Technology and Innovation (STI) Division of Forfás.

<sup>b</sup> Full Professor of Information & Organisation, UCD College of Business.

<sup>c</sup> Formerly: Head of Science and Technology Policy and Programme Evaluation in Forfás.

<sup>d</sup> Any opinions expressed here are those of the author(s) and not those of UCD CITO. The Research Centre itself takes no institutional policy positions.