



An Roinn Fiontar,  
Trádála agus Fostaíochta  
Department of Enterprise,  
Trade and Employment



# Horizon Scanning for Enterprise Growth

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Organised in conjunction with Enterprise Ireland, and the Irish Department of Enterprise, Trade and Employment, this panel discussion on the subject of ‘Horizon-Scanning for Enterprise Growth’, the first in a two-part series on the subject of horizon scanning, took place at IIEA headquarters in Dublin on 24 September 2024. The discussion focused on how horizon-scanning tools can assist and support policymakers, citizens, and organisations in making sense of and addressing uncertainty.

## A DEFINITION OF HORIZON SCANNING

The panel comprised of Larry O’Connell (Director of the National Economic and Social Council), Aaron Maniam (Fellow of Practice and Director of Digital Transformation Education at Oxford’s Blavatnik School of Government), Soile Ollila (Foresight Manager at Business Finland), and Alessandra Colecchia (Head of Science and Technology Policy at the OECD). IIEA Chief Economist Dan O’Brien chaired the event. The event was held in hybrid format, with participants being able to attend the meeting in person or online. After opening remarks from each panelist, the chair facilitated a discussion between the participants before a live Q&A with the audience.

In his opening remarks, Aaron Maniam, argued that foresight scanning is a necessary tool for modern decision makers. Maniam gave some examples of how horizon scanning is currently being used and referred to some examples of best practice, including in the civil service in Singapore and at the Estonian parliament. For example, in the Australian and New Zealand system, an interface has been created between the civil service and parliament, where government agencies are mandated by law to present Long-Term Insight Briefings or ‘LTIBs’ to parliament. He set out how the world is increasingly difficult to manage in ways that can make us question even some of our key assumptions about the way things are organised and how they work. Maniam posited that good foresight could help address this challenge and can help us make sense of a changing world. He remarked that foresight should not be used for predictive purposes, but that we should use it to perceive the present, rehearse what might be done in the future, and ultimately, to build resilience. Responding to these remarks, Dan O’Brien asked if there are any ways of counteracting bias when undertaking horizon scanning, and Maniam responded that the only way is by constantly questioning your deep assumptions about the world.

Larry O’Connell’s remarks discussed some of the foresight exercises that have been deployed in Ireland in the areas of economic, social, and environmental development. He acknowledged the huge uncertainty in the world and the significant pressure for policy actors to deliver results immediately. He argued that, in the current climate of uncertainty and pressure to deliver immediately, in order to develop effective and durable policies, there needs to be adequate space for policymakers to be reflective and to think while ensuring that policy making processes remain connected to the day-to-day. He asserted that in the Irish context, the foundations for successful foresight operations are already in place. He highlighted the success of the [technology foresight project that produced Science Foundation Ireland](#), which is a world-renowned practitioner of technology foresight. However, in keeping with Aaron Maniam’s remarks, O’Connell also remarked that we should acknowledge that foresight work only provides a ‘weak signal’ about what should be done, and reflection is required on whether the system or company or organisation has the capacity to take on the risk associated with responding to any weak signal. This requires leadership and a system that allows people to take risks. He concluded his remarks by stating his view that in addition to Ireland already having a track record of effective horizon scanning activities, it also has the systems capable of creating enough autonomy to allow people to take such risks.

In her opening remarks, Alessandra Colecchia addressed strategic intelligence, which integrates foresight and horizon scanning instruments. She emphasised how various forms of strategic intelligence must be combined to maximise effectiveness in technology-related policymaking. She explained how the OECD supports a three-step approach. The first step is to find and explore the ‘weak signals’ mentioned previously, so that horizon scanning can identify potential areas of technological interest, find key drivers of technological change, and explore how such change can create new opportunities or threats. This first step involves a 360-degree scanning of early-stage technologies. Once the area of interest is identified, the next step is to see if deeper analysis is required in order to take policy action and to identify what forms of strategic intelligence are needed. This analysis is required in order to see whether the technology is an area of concern or not. The subsequent step involves a deep-dive analysis to identify further evidence and to help to select the appropriate tools. She explained that if horizon scanning helps scan for weak signals, foresight can help

to ‘stress test’ policy options, while technology assessments can help unpack values and explore future impacts of emerging technologies. Colecchia finished her remarks by setting out an example of how the OECD is using strategic intelligence around emerging technology. Her example looked at a current project at the OECD which examines the evolution and implication of synthetic biology applications that are designed to help treat infections and genetic diseases.<sup>1</sup> This work also looks at potential convergence between synthetic biology and artificial intelligence (AI), and in the future this work will include an assessment of quantum technology. Synthetic biology could also help prevent food shortages and mitigate the impact of climate change. For example, synthetic biology could help crops combat disease thus reducing crop losses.<sup>2</sup> Colecchia also briefly mentioned some of the inherent risks of synthetic biology that centre on dual use research and deliberate misuse.

Soile Ollila emphasised that foresight involves both explanation and experience-building. She noted that corporate interest in foresight has grown significantly over the past decade. However, she also highlighted that barriers to businesses fully embracing foresight include an emphasis on short-term issues in business planning, and that the process can often be complex and resource intensive. Ollila argued that strategic foresight needs to be broken down for businesses so that they can realise its potential. She said companies need to strengthen their own foresight capabilities by building a framework within the company that reflects learning and methods that are specific to any given context. She stated that a bridge needs to be built between foresight and actionable insights. Ultimately, horizon scanning is not enough on its own, there needs to be a translation of steps and someone to facilitate that translation.

Following the opening remarks, there was a question-and-answer session. The first question related to how foresight can be packaged for companies of different sizes. Soile Ollila said that small and medium enterprises (SMEs) do not have the resources to build up an organisation or framework for foresight by themselves. She said that at Business Finland, they have information and resources for SMEs and invite them to clinics where they can learn about foresight techniques. She also noted that it does not in fact take much to build smaller foresight processes, but larger companies have advanced systems themselves, and often do not need Business Finland’s foresight support.

Another question asked about cultural issues and differences, for example, between Asia and Europe concerning looking to the future. Aaron Maniam said that superficially there is a stronger sense of deference in parts of Asia and more of a willingness to push boundaries in parts of the Western world. However, he also argued that it depends on the individual personality and risk appetite, rather than rigid cultural differences. Maniam contended that there will always be people uncomfortable with change, however Maniam argued that a skilled futurist knows how to read not just the broad generic geographical culture of where they are at a moment in time, but also the extant organisational arrangements, bureaucracy, structure, and hierarchy, and then to figure out how to manoeuvre and think about the future.

Larry O’Connell was asked to evaluate Ireland’s culture regarding foresight. He stated that while the individual pieces of the overall architecture are indeed present for Ireland to have a good foresight system, he is not fully sure what is missing when it comes to realising and maximising Ireland’s foresight potential. He continued that apart from foresight, there are plenty of structures where policy can be challenged but argued that the issue might be that Ireland needs to nurture these structures to have greater depth of analysis and understanding, where assumptions can be robustly questioned. He also queried whether there was sufficient space for policymakers to really analyse policy.

A final question asked about whether AI can be used to support strategic foresight and asked whether success or effectiveness of strategic foresight can be effectively measured. Soile Ollila stressed that it is important not to be locked into processes or tools. She explained that AI has multiple uses such as when it comes to scenario planning. It can be used to define scenario questions and to spot signals. Alessandra Colecchia highlighted the importance of having quality methodologies and highlighted the need for organisations to set benchmarks to better understand data. She contended that one measure of success sees the promulgation of not one outcome but a set of outcomes, and that these can then be assessed and implemented in different contexts.

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1 OECD (2014), *Emerging Policy Issues in Synthetic Biology*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264208421-en>.

2 OECD (2014), *Emerging Policy Issues in Synthetic Biology*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264208421-en>.

Following the question-and-answer session, the speakers gave their closing remarks. Larry O’Connell stated the importance of trying to persuade and encourage policymaking in Ireland to focus on three things. The first relates to evidence-based policymaking, something which Ireland already practices, but the second involves making policymaking more attuned to the feasibility of different policies from the start. The third part involves making sure that the policymaking is focused on generating legitimacy by engaging with people who will be responsible for implementing the policy from the start.

Alessandra Colecchia emphasised the importance of anticipating trends and of connecting strategic intelligence to policy. Aaron Maniam used his closing remarks to invite us to think of different futures as campaigns, which involve long, protracted processes with many accumulating events. He explained that campaigns are intrinsically human and cannot be broken down into scientifically engineered pieces, arguing that the human cannot be removed from these processes. He further explained that we should avoid using the language of productivity and unproductivity when referring to foresight as it assumes that there is a point where you can optimise. Instead, we should consider whether the processes are as full and meaningful as possible. He said that the more we think about futures as evolutionary processes, rather than as the optimisation of individual moments, the stronger our work can become.

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