

# BUILDING STRATEGIC FORESIGHT AND ANTICIPATORY CAPACITY AND KNOWLEDGE IN GOVERNMENT

A guidebook to curriculum and training  
for **senior leaders, policymakers**  
and **foresight producers**  
to tackle real world challenges

OECD Observatory of Public Sector Innovation (OPSI)  
May 2024



#SALMANQADIR

# TABLE OF CONTENTS

<b>INTRODUCTION TO THE GUIDEBOOK</b>	<b>1</b>
<b>EXPLORING ANTICIPATORY INNOVATION GOVERNANCE AND STRATEGIC FORESIGHT</b>	<b>4</b>
<b>USING THE GUIDEBOOK</b>	<b>8</b>
<b>DIAGNOSTIC: ASSESS KEY NEEDS AROUND ANTICIPATORY INNOVATION GOVERNANCE AND THE CHALLENGES TO HELP YOU CHOOSE CURRICULUM</b>	<b>10</b>
<b>CAPACITY BUILDING PROGRAMMES: INTRODUCTION</b>	<b>16</b>
<b>PROGRAMME 1 INTRODUCTION TO ANTICIPATORY INNOVATION GOVERNANCE AND STRATEGIC FORESIGHT</b>	<b>20</b>
Course 1.1 Anticipatory innovation governance and strategic foresight 101	22
<b>PROGRAMME 2 ANTICIPATORY INNOVATION PROGRAMME</b>	<b>23</b>
Course 2.1 Fostering a collaborative environment for innovative and experimental policy making that addresses horizontal issues	25
Course 2.2 Nurturing a culture of proactivity and creativity in policy making	27
Course 2.3 Innovation for resilient and effective policies	29
Course 2.4 Nurturing a cycle of continuous learning, adaptation and effective monitoring and evaluation in policy making	31
<b>PROGRAMME 3 STRATEGIC FLEXIBILITY FOR POLICY PROGRAMME</b>	<b>33</b>
Course 3.1 Policy making in uncertain contexts	35
Course 3.2 Futures thinking: mindsets, behaviours and building futures literacy	37
Course 3.3 Strategic foresight and systems application	39
Course 3.4 Effective communication and strategic engagement	42
<b>PROGRAMME 4 PROACTIVE LEADERSHIP PROGRAMME</b>	<b>44</b>
Course 4.1 Building political buy-in and anticipatory leadership	46
Course 4.2 Identifying emerging challenges: harnessing data and building contextual intelligence	48
Course 4.3 Stakeholder management, participation and engagement	50

Course 4.4 Adaptive policy making	52
<b>PROGRAMME 5 STRATEGIC GOVERNANCE AND COLLABORATION PROGRAMME</b>	<b>54</b>
Course 5.1 Breaking silos and building collaboration	57
Course 5.2 Designing robust policy frameworks aligned to national, organisational and global priorities	59
Course 5.3 Strengthening anticipatory innovation governance	61
Course 5.4 Network weaving and systems stewardship	63
<b>NEXT STEPS</b>	<b>65</b>
<b>GLOSSARY</b>	<b>67</b>
<b>ACKNOWLEDGEMENTS AND CONTACT INFORMATION</b>	<b>71</b>
<b>ANNEX 1: SUMMARY OF CHALLENGES IDENTIFIED IN THE LIMINAL PROJECT</b>	<b>72</b>
<b>ENDNOTES</b>	<b>74</b>

# INTRODUCTION TO THE GUIDEBOOK

This guidebook and accompanying curriculum map are designed to support decision-makers aiming to make their public service better at anticipating and preparing for future change by building the necessary futures capabilities. It offers systematic guidance for developing or procuring targeted training programmes that provide public officials with the knowledge, tools and skills needed to support more future-oriented policymaking. Building the capabilities of individuals and institutions is an essential step towards effective anticipatory governance.

Concretely, this guidebook supports users such as public service training institutions, centres of government and talent managers in government, to identify relevant capacity building programmes, and to build their own customised curriculum.

Governments face a complex and evolving landscape of public policy and governance in the face of rapidly developing systems and problems that have become the norm rather than the exception. Government anticipatory innovation governance<sup>1</sup>, shifting from reactive to practice approaches, is needed to help societies become more anticipatory, and resilient, while shaping the future.

There is growing interest and recognition among governments of the need to build anticipatory innovation governance capabilities to help them maintain continuity and confidence in the public system and public services, while rapidly adapting to a new environment of fast-changed and constantly evolving demands, volatility and complex problems. There is a clear need to move beyond traditional, reactive policymaking and overcoming limitations of a siloed, bureaucratic approach.

Anticipatory innovation governance offers a framework to do this. By fostering an environment that supports exploration, experimentation, and learning, anticipatory innovation governance helps build resilience and adaptability within governance systems. This approach is not just about preparing for the future but actively shaping it, and strategic foresight is a key component of anticipatory innovation governance. Building an authorising environment and the agency needed to legitimise and sustain the anticipatory innovation governance effort is critical, therefore ensuring that strategic foresight and innovation is implemented with the broader context, and giving impact from the knowledge generated<sup>2</sup>.

The transition to more anticipatory and innovative governance models is not without its challenges. It requires cultural, method, and process development within public institutions, embracing risk and uncertainty as integral to policymaking. It requires the development of new skills and capacities among public officials, including systems thinking, strategic foresight, and the ability to design and implement policy experiments.

By leveraging forward looking data, technology, and inclusive engagement processes, governments can better serve their citizens, becoming more responsive to their needs, and supporting more equitable and inclusive outcomes, reducing the risk of negative unintended consequences and ensuring that the benefits of technological advancements and societal changes are widely shared. This is the promise of what this guidebook henceforth calls “anticipatory governance”.

---

<sup>1</sup> **Anticipatory Innovation Governance** is a broad-based capacity to actively explore options as part of broader anticipatory governance, with a particular aim of spurring on innovation (novel to the context, implemented and value shifting products, services and processes) connected to uncertain futures in the hopes of shaping the former through the innovative practice (OPSI, 2019).

<sup>2</sup> *Futures & Foresight*. OECD. (accessed on 4 April 2024)

There is great potential value in comprehensive capacity building Programmes that focus on real world anticipatory governance challenges and provide a clear path to address real needs in public governance. Content should not be too theoretical or designed in the absence of real-world needs.

This guidebook is a starting point for public servants in government to become leaders in anticipatory governance. This guidebook enables schools of government, and centres of excellence in policy making to design and implement curricula that respond to five challenge areas that have been identified through OECD's work with national governments, including the LIMinal project<sup>3</sup> which is providing technical support to Lithuania, Italy and Malta.



Figure 1. 5 key challenge areas

Because of the dynamic nature of challenges facing governments, such as artificial intelligence or climate change, this guidebook is envisaged to be a living document that can be updated, reviewed and tailored to address the specific country needs and reflect developments over time, including the addition of further challenge areas if needed.

To provide guidance to help users develop their own challenge-led anticipatory innovation governance curriculum, this guidebook:

- Introduces the key elements of anticipatory innovation governance and of strategic foresight to situate the five challenges within the wider anticipatory innovation governance context.

<sup>3</sup> The LIMinal project is funded by the European Commission Technical Support Instrument 2022-2024.

- Provides guidance on key questions to consider when conducting a diagnostic on the status of the anticipatory innovation governance system to help users tailor a curriculum based on the country's specific needs.
- Maps the key principles to design an anticipatory innovation governance curriculum tailored to the different audiences; including necessary training methods and needed expertise.
- Outlines how to use the accompanying curriculum map and the heat map to create flexible curriculum designs to respond to specific time, content, and intensity needs.
- Outlines five capacity building Programmes consisting of one Programme introducing the concepts of anticipatory innovation governance and strategic foresight and four Programmes addressing the four challenges to help the users understand what courses and modules are appropriate for different government audiences and roles .
- Provides advice on ongoing capability, networks, learning and development resources that complement and extend the content of this guidebook.

# EXPLORING ANTICIPATORY INNOVATION GOVERNANCE AND STRATEGIC FORESIGHT

## Anticipatory innovation governance

Anticipatory innovation governance is a broad-based capacity to actively explore options as part of broader anticipatory governance, with a particular aim of spurring on innovations (novel to the context, implemented and value shifting products, services and processes) connected to uncertain futures in the hopes of shaping the former through the innovative practice (OPSI, 2019)<sup>4</sup>.

To reinforce governments' capacity to tackle complex challenges, the OECD has proposed an anticipatory innovation governance model<sup>5</sup>.

Anticipatory innovation governance operates within established government core architectures and acts on a variety of inputs to manage emerging challenges. It enables governments to use tools, methods and information resources to anticipate and innovate in practice in the face of fast-moving change and builds a public sector system that creates demand and validation for this work.

Anticipatory innovation governance is enabled by a set of mechanisms related to agency and the authorising environment, which help to overcome the "impact gap"<sup>6</sup>, where high-quality, policy-driven foresight is underused, failing to translate into real results and policy change, due to barriers relating to agency or the authorising environment.

---

4 Tönnist, P., and Hanson, A. (2020) Anticipatory Innovation Governance. Shaping the future through proactive policy making. OECD Working Papers on Public Governance no. 44.

5 OECD (2022) [\*Anticipatory Innovation Governance Model in Finland. Towards a New Way of Governing. Chapter 2.\*](#)

6 [\*Futures & Foresight\*](#), OECD. (accessed on 4 April 2024)



**Authorising environment** is the system within the public sector that validates anticipatory innovations – providing feedback that there is demand, value, and use for the work. Typical barriers include: thematic silos, lack of support from senior decision makers, conflicts of interest and public value.



**Agency** defines the tools, methods and information resources that enable public servants and organisations to anticipate and innovate in practice. Typical barriers include: cognitive biases, such as aversion to uncertainty, groupthink, status quo bias and loss aversion, and conflict of incentives for taking action amidst uncertainty.

## MECHANISMS OF AUTHORISING ENVIRONMENT

### Vested interest and cognitive biases

Ways to address incumbents' interests and biases in thinking about the future

### Public interest and participation

Involving a variety of stakeholders and new perspectives, and facilitating discussions around values

### Networks and partnerships

Working together with leading organisations and individuals with transformative ideas

### Legitimacy

Creating trust in government, experimentation and explored futures

### Evidence and evaluation

Evaluating future options based on value and accounting for opportunity costs

### Learning loops

Creating feedback loops from experimentation to dynamically inform policy choices

## MECHANISMS OF AGENCY

### Alternatives exploration and experimentation

Ability to consider different alternatives that may conflict with current strategic intent

### Data and measurement

Reading and interpreting signals in time

### Sense making

Uncovering underlying assumptions and making sense of trends

### Organisational capacity

Organisational structures that give autonomy and resources to explore transformative ideas

### Tools and methods

Approaches to create new knowledge about possibilities, creativity of thought, and operationalisation of innovations

### Institutional structures

Institutions that make room for experimentation and testing

Figure 2. Mechanisms that influence Authorising Environment and Agency as defined by OECD's anticipatory innovation governance model.

Anticipatory innovation governance mechanisms must be flexible and dynamic: there is no one-size fits all governance model or best practice to deal with the future. New combinations of governance mechanisms can make room for anticipatory innovation inside the government's innovation portfolios and core architecture. Consider these governance mechanisms as a web that shapes decisions at all levels over time.

## Strategic foresight

Strategic foresight is the ability of an organisation to constantly perceive, make sense of, and act upon different ideas of the future emerging in the present<sup>7</sup>. This capacity is particularly important in times of rapid change, when unpredictable uncertainty, novelty, and ambiguity

7 OECD OPSI [Futures and Foresight](#) (Accessed 24 March 2024)

challenge the limitations of traditional forecast-based planning. Governments worldwide are using strategic foresight to get early warnings of oncoming disruptions, to build resilience and future-proof their plans, to reframe and enhance the effectiveness of their strategies, and to generate shared language and visions of success. Foresight helps to challenge and overcome current assumptions about the future and prepare for a broader set of possibilities.

Strategic foresight is used to create functional and operational views of possible futures and the possibilities that exist within them to influence today's decisions. This allows organisations and institutions to gather and process information about their future operating environment while creatively examining their current landscape for meaningful trends and then leveraging those insights to extrapolate or explore potential outcomes that can be used for planning purposes<sup>8</sup>.

## The five challenge areas

The five challenge areas that are the focus of this guidebook were identified as critical for the development of anticipatory governance in public institutions through an initial assessment in the LIMinal countries.

The five challenge areas and their associated capacity building Programmes are set out below, and a summary of some of the wider challenges is summarised in Annex 1.



Figure 3. The 5 capacity building Programmes have been developed to address the key challenges observed across government bodies.

Based on these five challenges, the curriculum in this guidebook was designed to help countries to address their real anticipatory governance challenges, through five Programmes.

<sup>8</sup> OECD (2017), [Developing an integrated policy approach to risk management](#), High-Level Risk Forum, Public Governance Directorate, Public Governance Committee, (accessed on 24 May 2024).

## What might this look like?

### Example use case 1: Whole-of-government strategic foresight skills

A civil service training manager wants to build strategic foresight capabilities across the civil service and at all levels. How can the training curriculum be specific on foresight while also tailored to civil service officials at different levels?

- Run Programme 3 and 4 to help your policymakers and foresight producers to gain in depth knowledge of strategic foresight approaches and tools, but don't forget about Programme 2 and 5 which are critical for ensuring you are connecting foresight into decision-making and breaking down silos across your system.

### Example use case 2: Anticipatory governance and strategic foresight 101

A government wants to train all its policy staff across ministries on basic strategic foresight but has no time to conduct a diagnostic of the needs or existing capability of the policy professionals. They want an 'off the shelf' curriculum that entails training for around 15-days (around 60 contact hours). Participants want certificates of attendance. How do they build such a curriculum and how to ensure it covers all the key elements of strategic foresight?

- Start by running the introductory course: Anticipatory innovation governance and strategic foresight 101. Use clinics, monitoring and evaluation or other approaches to understand your foresight needs.
- Use the curriculum map to identify key modules for each of your roles—Senior Leaders, Policymakers, Foresight Producers—prioritising the courses based on the heatmap.

### Example use case 3: Strategic foresight for senior managers

A national school of public administration wants to supplement their existing strategic foresight curricula, including developing a course in strategic foresight for senior managers. How do they tailor the new curriculum to the needs of senior leaders and to those strategic foresight areas that they have not already covered?

- Run a diagnostic to understand the needs of your senior leaders.
- Use the curriculum map to design a course targeted to Senior Leaders.
- Select the relevant courses and modules that will help develop the core skills that you need.

### Example use case 4: Establishing a strategic foresight unit

The policy team in a line department wants to build the capacity of the staff of a newly formed strategic foresight unit in their ministry. How should they go about building the unit's capability? Where should they start?

- Bring the unit together to have a collective discussion about their needs, and how they can work with the broader system to integrate foresight and anticipatory innovation governance. Run Programme 1 to help them understand their roles, then tailor the rest to their needs.

### Example use case 5: Rapid training for senior leaders

Top-level leaders in a government want to become familiar with the key concepts and application of strategic foresight. They only have three hours to dedicate to this training. What should they learn?

- Focus on giving them the basics. Run Programme 1 Module 1-2 to help them really understand the why of anticipatory innovation governance and strategic foresight, and set them up as leaders to enable change within the system.

## USING THE GUIDEBOOK

This guidebook is designed to introduce the capacity building Programmes and to provide high-level guidance on how to tailor an approach to meet the needs of your country, your system and your workforce.

It won't give you all the answers, but it will help you to get started building the capability of three key roles: senior leaders, policymakers and foresight producers.

This beta version is supported by a curriculum map — a digital spreadsheet — that allows you to explore the Programmes, and to identify the relevant courses, modules and skills that each role might need.

The guidebook also provides a light self-diagnostic that helps you to think about the system that you are working in and its anticipatory innovation governance capacity, to think through the needs of your workforce in relation to the five challenges, and to think about how to design your curriculum.

If you need support to run a diagnostic or advice on how to implement or tailor the curriculum then please reach out to the OPSI team, who can help or signpost you to relevant experts and practitioners, as well as helping you to connect with other governments globally.

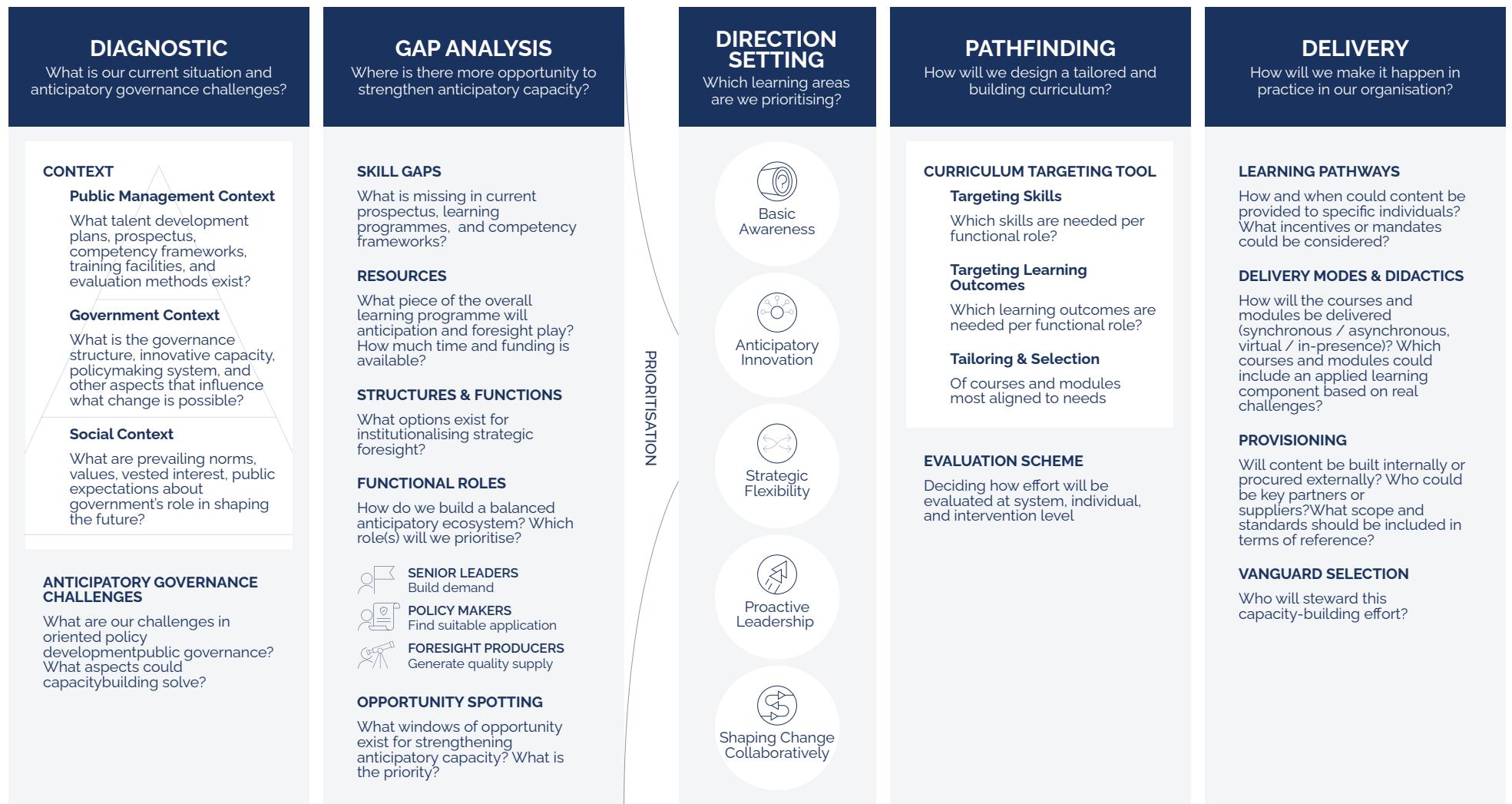


Figure 4. Situating the guidebook: Developing skills across public service to anticipate and innovate.

## **DIAGNOSTIC: ASSESS KEY NEEDS AROUND ANTICIPATORY INNOVATION GOVERNANCE AND THE CHALLENGES TO HELP YOU CHOOSE CURRICULUM**

The initial consideration when choosing your Programmes to run, or tailoring your curriculum, is to run a diagnostic to understand your system's current and desired anticipatory innovation governance capabilities.

With the help of the diagnostic, the users of the guidebook and curriculum can identify what an anticipatory innovation governance training curriculum tailored for their specific needs would look like. The diagnostic helps identify what assessments are necessary in skills and expertise at an individual and team level, and also at the workforce and system level.

Specifically, the diagnostic helps the user to understand how to prioritise by:

- Deciding if one of the existing Programmes is suitable for your needs.
- Assessing your broader anticipatory innovation governance and strategic foresight capability to identify key areas for your curriculum.
- Prioritising and tailoring your approach to specific roles and learning needs.

If you're not ready to start a diagnostic, that's ok too. You can start your journey today by designing and running what is called Introduction to Anticipatory Innovation Governance and Strategic Foresight. The process will help you to learn with your workforce what matters, what is needed and what capability already exists in your system that you can harness and build on.

## Step 1: Deciding if one of the existing Programmes is suitable for your needs

To use the assessment (Table 1), rate yourself against each of the four challenge areas, based on your judgement as to how advanced your capability is. You can perform this assessment as a government, a department, unit or team.

Consider the following to support your ratings:

- 1) Limited capability
- 2) Emerging capability
- 3) Good capability
- 4) Strong capability, with pockets of excellence
- 5) Excellent capability

CHALLENGE AREA	DO YOU FIND YOURSELF ASKING?	SCORE	WHAT NEXT
<b>Anticipatory innovation:</b> culture of proactivity and experimentation in policy development.	What practical steps can senior leaders and policymakers take to improve the innovation and learning culture?		Run Programme 2 for your senior leaders and policymakers
<b>Strategic flexibility:</b> understanding and overcoming challenges and navigating uncertainty.	What practical steps can foresight producers and policymakers take to improve their ability to anticipate and navigate future complexities?		Run Programme 3 for your policymakers and foresight producers
<b>Empowering proactivity:</b> fostering stakeholder engagement and forward-thinking insights.	What practical steps can senior leaders and policymakers take to improve their forward-looking capability on emerging challenges and future opportunities?		Run Programme 4 for your senior leaders, policymakers and foresight producers
<b>Aligning for sustainable change:</b> overcoming discontinuity and enhancing collaboration.	What are effective methods and processes that policymakers and leaders can adopt to overcome silo mentality and improve cross-institutional coordination?		Run Programme 5 for your senior leaders and policymakers

Table 1. Capacity building Programme self-assessment

If you find yourself scoring highly against a particular challenge area you can choose to run this particular Programme. Please note that the roles are high-level suggestions — you can look at the curriculum map to see more granularity around which courses and modules are suitable for which roles.

## **Step 2: Assess your anticipatory innovation governance and strategic foresight capability against each of the 12 mechanisms of anticipatory innovation governance**

As outlined earlier, anticipatory innovation governance is centered on two core components of any governance system:

Agency: public servants' and organisations' ability, motivation, and opportunity to anticipate and innovate in practice based on the resources available to them. Public servants need to have agency to work with anticipatory innovation on the ground which requires the tools and methods, institutional structures, and organisational capacity to support the work.

Authorising environment: the system within the public sector that validates anticipatory innovation by providing feedback that there is demand, value, and use for the work. Any authorising environment needs to legitimise and support autonomy to shape the future. This authorising environment can be internal or external to an organisation, formal or informal. In many cases, authorising environments overlap and interact to produce authority and legitimacy in complex ways. Governments seeking to authorise anticipatory innovation can create learning loops, evidence and evaluation, legitimacy, networks and partnerships in order to address vested interests and cognitive biases and to promote public interest and participation.

The second step asks you to consider your broader system and make an assessment against each of the twelve mechanisms of Agency and Authorising Environment within the anticipatory innovation governance framework (see below). This helps to identify key areas and opportunities that are unique to your system. Each of these 12 mechanisms is important and highly interconnected. You may find that there are pockets of excellence that already exist within your system. However, it is rare that excellence is uniform across your system. It is important to understand how these mechanisms vary across different parts of your governance system.

This is not a formal assessment but is designed to help you pay attention to the 12 mechanisms. For each, make a subjective score as to your systems, organisations, teams or users' capabilities.

- 1) Limited capability and not widespread
- 2) Improving capability
- 3) Good capability, pockets of excellence
- 4) Excellent but not widespread
- 5) Excellent and widespread

Write down any areas of the ecosystem where you see existing capability or strengths, completing Table 2, on the next page.

Having made this initial assessment review your scores:

Are there particular areas that stood out as needing particular attention (scoring below average)? If yes, you can use the curriculum map to identify courses or modules that are particularly important to help you build capability.

If not, move on to Step 3.

	SCORE	STRENGTHS AND CAPABILITIES
<b>AGENCY</b>		
<b>Institutional structures</b> Institutions that make room for experimentation and testing		
<b>Alternatives exploration and experimentation</b> Ability to consider different alternatives that may conflict with current strategic intent		
<b>Organisational capacity</b> Organisational structures that give autonomy and resources to explore transformative ideas		
<b>Data and measurement</b> Reading and interpreting signals in time		
<b>Tools and methods</b> Approaches to create new knowledge about possibilities, creativity of thought, and operationalisation of innovations		
<b>Sense making</b> Uncovering underlying assumptions and making sense of trends		
<b>AUTHORISING ENVIRONMENT</b>		
<b>Networks and partnerships</b> Working together with leading organisations and individuals with transformative ideas		
<b>Public interest and participation</b> Involving a variety of stakeholders and new perspectives, and facilitating discussions around values		
<b>Vested interest and cognitive biases</b> Addressing incumbents' interests and biases in thinking about the future		
<b>Legitimacy</b> Creating trust in government, experimentation and explored futures		
<b>Evidence and evaluation</b> Evaluating future options based on value and accounting for opportunity costs		
<b>Learning loops</b> Creating feedback loops from experimentation to dynamically inform policy choices		

Table 2. Understanding your capability in each of the 12 anticipatory innovation governance mechanisms.

## Step 3: Prioritise and tailor your approach to meet the needs of your workforce

The final step asks you to prioritise the challenge areas and roles that you would like to focus on. We suggest you start by working through the questions in Table 3, on the next page.

Any system has a limited amount of resources, time and capacity to invest in training and capability building. There are always decisions and trade-offs to be made. However, having limited resources doesn't mean you can have only limited impact. By being strategic and investing in regular, ongoing and tailored training focused on real cases and action learning you can start to change the hearts, minds and ultimately the underlying culture of your system.

As with any curriculum or capacity building Programme it is important to consider the needs of your workforce, and to tailor the learning approach. The assumption of this guidebook is that you will need to build the capability of the three identified roles: senior leaders, policymakers and foresight producers. However, you may be wanting to focus on a particular role or subset of the curriculum. If this is the case, then you can use the curriculum map to explore different roles and skills and export the relevant parts of the curriculum.

As the training provider designs your curriculum, it is recommended that the trainers strike the right balance between lectures and more interactive training. Trainers will need to carefully consider the content of the training so that it is engaging, relevant, useful and can be applied in the workplace.

Training methods to be considered to deliver the courses should focus on best practice with respect to adult learning. These include but are not limited to:

- action learning
- peer learning
- demonstration cases
- analyses of real life scenarios
- discussions and problem-solving exercises based on real problems
- case studies to showcase real world examples of governments successfully implementing anticipatory innovation governance compounded with reflection on the application of the learning to the context of the country and of the specific audience.

It is important that the trainers who design and deliver the training work collaboratively and have the qualifications, experience and expertise required to deliver anticipatory innovation governance and strategic foresight training to the specific role and country context.

Information from participants on their level of knowledge and confidence in applying anticipatory innovation governance and strategic foresight could provide useful insights to feed into the diagnostic process. This information would enable schools of public administration or other training providers to tailor-make the Programmes to better respond to the learning context and the needs of the audience in their roles.

KEY QUESTION	RESPONSE
Which role(s) are you wanting to target?	
What are their current skills and capabilities?	
What are their learning needs?	
How much time will you have with each of the role(s)?	
How will the course be delivered e.g. face-to-face, blended learning, micro-learning?	
Are there particular skills that you need to build?	
What other courses are there?	
What teaching resources are already used?	
How will you evaluate learning at an individual, system and intervention level?	
What are the available financial resource for developing the curriculum?	

Table 3. Key questions to support your curriculum decision-making.

# CAPACITY BUILDING PROGRAMMES: INTRODUCTION

The capacity building Programmes outlined in this Guidebook are not exhaustive of the field of anticipatory innovation governance, they address specific challenges faced by the governments of Lithuania, Italy and Malta as identified through extensive internal and external consultations with OECD OPSI.

Programme 1 is composed of one course introducing the key concepts and use of anticipatory innovation governance and strategic foresight to situate Programmes 2, 3, 4 and 5 within the wider context of anticipatory innovation governance.

The content of the five Programmes:

- 1) Introduction to Anticipatory Innovation Governance and Strategic Foresight**
- 2) Anticipatory Innovation Programme**
- 3) Strategic Flexibility for Policy Programme**
- 4) Proactive Leadership Programme**
- 5) Strategic Governance and Collaboration Programme**

These Programmes focuses on the key elements, skills, tools, methods, values and culture needed to embed anticipatory innovation governance across government for more innovative, experimental, resilient, relevant, inclusive and sustainable policies that address national and global challenges.

## Programme structure

Programme 1 comprises one course with two modules introducing the concept and application of anticipatory innovation governance and strategic foresight to familiarise the audience with the meaning and relevance of anticipatory innovation governance and strategic foresight in their role.

Each of the other four Programmes (2-5) is organised under four courses focusing on a topic that addresses the identified challenges. Each course outlines its learning outcomes and is composed of three to six suggested training modules that map the content of the course. The modules are not exhaustive; they are intended to provide key areas of knowledge and skills, values, attitude, and culture required to meet the learning outcomes. The number and content of the modules will need to be adapted to fit the specific audience and country context.

Except for the introductory modules, the content of the Programmes is not sequential as each of the Programme addresses a different challenge. Within the Programme, each course addresses a particular aspect of the main challenge tackled in the Programme.

The learning outcomes for Programme 1 are described with the term 'understand' following Bloom's Taxonomy<sup>9</sup> as this Programme introduces the key concepts of anticipatory innovation governance and strategic foresight.

Following the same taxonomy, the learning outcomes of Programmes 2 to 5 are described with the three terms of 'know', 'understand', and 'apply'. It will be up to the users of this guidebook to decide what level of learning they would like the audience (or the different types of audience) to achieve, depending on their diagnostic of the needs.

<sup>9</sup> Bloom's Taxonomy is a hierarchical classification of levels of thinking to be applied when creating course objectives. Blooms Taxonomy: Resource for Educators, (accessed on 15-05-2024).

## The Audience

Each course identifies the primary audience for the content proposed. The audience of the Programmes is composed of the three roles of 'senior leader'; 'policymaker' and 'foresight producer'.



### Senior leader

A person responsible for providing leadership, executive decisions and direction, and who has personnel, budget, or strategic cooperation responsibilities.

This could be a team manager, an advisor, a director, a public official, a minister, or a civil servant in any other senior leadership or management role including in change leadership, or in reforming governance structures.

The core anticipatory innovation governance functions associated with senior leaders are:



**Agency**—ensuring adequate institutional structure and organisational capacity to embed anticipatory innovation governance; promoting the use of rigorous data and measurement in government and society as well as the use of foresight alternatives exploration and experimentation.



**Authorising environment**—providing legitimacy, encouraging increasingly fruitful government partnerships and networks and active participation, and promoting broader use of foresight for more anticipatory evidence and evaluation in government and society.



### Policymaker

A person responsible for, or involved in, any stage of the policy development cycle or related areas—for example setting the policy agenda, designing policy, consulting with stakeholders, or evaluating policy.

This could be an officer, an administrator, a policy analyst, or a civil servant with any other working-level role focused on aspects of the policy cycle, or someone working on experimental and innovative policy.

The core anticipatory innovation governance functions associated with policymakers are:



**Agency**—ensuring integration of foresight in policy making within the institutional structures; doing sense-making in a policy context; promoting strategic integration of foresight data and measurements in policy; partaking in alternatives exploration and experimentation.



**Authorising environment**—encouraging networks and partnerships building; encouraging public interest and participation in policy foresight; integrating foresight in collecting evidence and evaluation of policies; using foresight to overcome vested interests and cognitive biases in policy making.



### Foresight producer

A person responsible for leading and facilitating the co-creation of research and planning with a systemic and long-term outlook, having extensive interaction with key internal and external stakeholders, and using tools and methods such as scenario planning, horizon scanning and systems analysis, from the fields of foresight, anticipation, or system thinking.

This audience does not necessarily already produce foresight; therefore, it could be roles in an organisation that deal with planning and strategic development, or generating evidence and advice for policy, or experimentation, or change management. But this audience could also be producing foresight in the role of a foresight analyst, a foresight expert, or analyst of the surrounding environment.

The core anticipatory innovation governance functions associated with foresight producers are:



**Agency**—leading and designing processes for alternatives exploration and experimentation; ensuring appropriate use of data and measurement, selection and application of tools and methods, and sense-making of collective intelligence; and embedding such tools, methods, and processes within the institutional structure of government.



**Authorising environment**—leveraging partnerships and public interest for participation and dissemination; moving away from vested interests and cognitive biases to shaping evidence with common views of the future; providing legitimacy by leading with example and creating learning loops in the design of participatory processes.

Within the context of anticipatory innovation governance, the three roles are interdependent and complement each other.

- The senior leader requires information, research and inputs from foresight producers as well as policymakers to set a strategic direction and make decisions. This is seen for example in the Finnish Government report on the future prepared during each electoral term.
- The policymaker will require insights from foresight producers to develop fair and sound policies and liaise with senior leaders. An example of this is the futures team at the UK Government Office for Science which conducts foresight for diverse sectors in government.
- The foresight producer will need to gather information and evidence from policymakers and senior leaders to inform their research and systematic process towards a rigorous foresight output. This was seen in Spain where the foresight unit was gathering information from the ministries to prepare "Spain 2050".

Therefore, several courses and modules will be relevant to more than one role. The trainers will need to tailor both the content and the training methods to fit the specific audience.

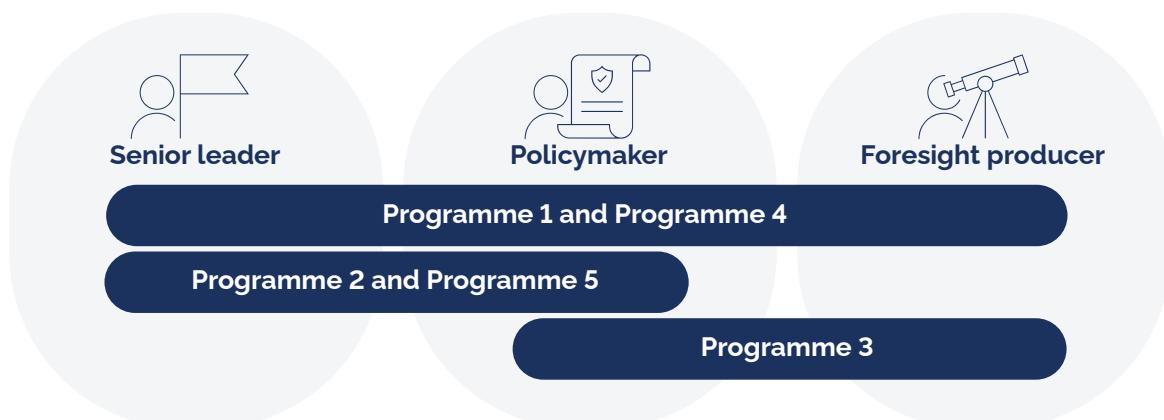


Figure 4. Targeted roles of Five Programmes.

## Training methods and trainers' expertise

Each course offers some recommended training methods that would support the learning; and suggestions with regards to the specific knowledge required by the trainers to provide the training effectively and at the expected standard.

Figure 5. (next page) Overview of the Curriculum map of Five Programmes.

# CURRICULUM MAP OF FIVE PROGRAMMES



S Modules for Senior Leaders P Modules for Policymakers F Modules for Foresight Producers

## PROGRAMME 1: INTRODUCTION TO ANTICIPATORY INNOVATION GOVERNANCE AND STRATEGIC FORESIGHT

### Course 1.1 Anticipatory innovation governance and strategic foresight 101

Module 1.1.1 Introduction to Anticipatory Innovation Governance	S  P  F	Module 1.1.2 Introduction to Strategic Foresight	S  P  F
--	---------------------	---	---------------------

## PROGRAMME 2: ANTICIPATORY INNOVATION PROGRAMME

### Course 2.1 Fostering a collaborative environment for innovative and experimental policy making that addresses horizontal issues

Module 2.1.1 Experimental policy making and the policy cycle	S  P  F	Module 2.1.2 Effective participation, engagement and collaboration in policy making	S  P  F	Module 2.1.3 Working across functions to develop innovative and experimental policies	S  P  F	Module 2.1.4 Effective participation, engagement and collaboration in policy making for innovation and experimentation	S  P  F
---	---------------------	--	---------------------	--	---------------------	---	---------------------

### Course 2.2 Nurturing a culture of proactivity and creativity in policy making

Module 2.2.1 Shifting from reactive to proactive (why it matters and why now)	S  P  F	Module 2.2.2 Creating a culture of experimentation	S  P  F	Module 2.2.3 Dealing with uncertainty and disruptions	S  P  F	Module 2.2.4 Understanding the effects of emerging technologies on government work	S  P  F
--	---------------------	---	---------------------	--	---------------------	---	---------------------

### Course 2.3 Innovation for resilient and effective policies

Module 2.3.1 Innovation in strategic planning	S  P  F	Module 2.3.2 Fostering a culture of innovation and strategic foresight in policy making	S  P  F	Module 2.3.3 Experimentation and exploration as part of the job	S  P  F
--	---------------------	--	---------------------	--	---------------------

### Course 2.4 Nurturing a cycle of continuous learning, adaptation and effective monitoring and evaluation in policy making

Module 2.4.1 Fostering an evidence based and forward thinking approach in policy making	S  P  F	Module 2.4.2 Why data matters and what data matters for decision making	S  P  F	Module 2.4.3 Evaluation, monitoring and adaptation for innovative and experimental policy making	S  P  F
--	---------------------	--	---------------------	---	---------------------

## PROGRAMME 3: STRATEGIC FLEXIBILITY FOR POLICY PROGRAMME

### Course 3.1 Policy making in uncertain contexts

Module 3.1.1 Understanding complexity and uncertainty in policy making	S  P  F	Module 3.1.2 Strategic foresight in policy making	S  P  F	Module 3.1.3 Innovation, experimentation and creativity in policy making	S  P  F	Module 3.1.4 Ethics, sustainability and fairness	S  P  F
---	---------------------	--	---------------------	---	---------------------	---	---------------------

### Course 3.2 Futures thinking: mindsets, behaviours and building futures literacy

Module 3.2.1 Managing for the long-term: building a proactive and risk averse culture	S  P  F	Module 3.2.2 Leveraging futures thinking to support policy making	S  P  F	Module 3.2.3 Understanding behaviour, biases and assumptions about the future	S  P  F	Module 3.2.4 Building futures literacy	S  P  F
--	---------------------	--	---------------------	--	---------------------	---	---------------------

### Course 3.3 Strategic foresight and systems application

Module 3.3.1 Principles and use cases of foresight	S  P  F	Module 3.3.2 Designing and tailoring foresight approaches	S  P  F	Module 3.3.3 Thinking about different sources of change	S  P  F	Module 3.3.4 Systems thinking and modelling	S  P  F	Module 3.3.5 Imagining alternative futures: scenarios and visioning	S  P  F	Module 3.3.6 Generating and acting on insights from foresight work	S  P  F
---	---------------------	--	---------------------	--	---------------------	--	---------------------	--	---------------------	---	---------------------

### Course 3.4 Effective communication and strategic engagement

Module 3.4.1 Communicating uncertainty and insights from futures work	S  P  F	Module 3.4.2 Storytelling and visualization	S  P  F	Module 3.4.3 Strategic engagement to support anticipatory and adaptive policy making	S  P  F
--	---------------------	--	---------------------	---	---------------------

## PROGRAMME 4: PROACTIVE LEADERSHIP PROGRAMME

### Course 4.1 Building political buy-in and anticipatory leadership

Module 4.1.1 Leadership as a key skill for anticipating, shaping and planning for an emerging future	S  P  F	Module 4.1.2 Understanding the political environment	S  P  F	Module 4.1.3 Integrating futures into decision-making	S  P  F	Module 4.1.4 Ethics, accountability and governance	S  P  F	Module 4.1.5 Communication and influence	S  P  F
---	---------------------	---	---------------------	--	---------------------	---	---------------------	---	---------------------

### Course 4.2 Identifying emerging challenges: harnessing data and building contextual intelligence

Module 4.2.1 Building contextual intelligence	S  P  F	Module 4.2.2 Signal detection and horizon scanning	S  P  F	Module 4.2.3 Forecasting, foresight, and scenario planning	S  P  F	Module 4.2.4 Anticipatory Intelligence	S  P  F
--	---------------------	---	---------------------	---	---------------------	---	---------------------

### Course 4.3 Stakeholder management, participation and engagement

Module 4.3.1 Policy co-creation and engagement	S  P  F	Module 4.3.2 Stakeholder mapping and management	S  P  F	Module 4.3.3 Participation and citizen engagement	S  P  F	Module 4.3.4 Participatory futures	S  P  F
---	---------------------	--	---------------------	--	---------------------	---------------------------------------	---------------------

### Course 4.4 Adaptive policy making

Module 4.4.1 Foundations of adaptive policy making	S  P  F	Module 4.4.2 Implementing, monitoring, and evaluating adaptive policies	S  P  F	Module 4.4.3 Foresight in adaptive policy making	S  P  F	Module 4.4.4 Building collaborative networks	S  P  F
---	---------------------	--	---------------------	---	---------------------	---	---------------------

## PROGRAMME 5: STRATEGIC GOVERNANCE AND COLLABORATION PROGRAMME

### Course 5.1 Breaking silos and building collaboration

Module 5.1.1 Understanding silos and their impact	S  P  F	Module 5.1.2 Engaging across the system	S  P  F	Module 5.1.3 Tools for enhancing teamwork and breaking silos	S  P  F	Module 5.1.4 Leading diverse and cross-functional teams	S  P  F
--	---------------------	--	---------------------	---	---------------------	--	---------------------

### Course 5.2 Designing robust policy frameworks aligned to national, organisational and global priorities

Module 5.2.1 Challenging the pull of 'short-termism' in your organisation	S  P  F	Module 5.2.2 Integrating international priorities and commitments and addressing global challenges in national policy making	S  P  F	Module 5.2.3 Aligning long term priorities	S  P  F
--	---------------------	---	---------------------	---	---------------------

### Course 5.3 Strengthening anticipatory innovation governance

Module 5.3.1 Understanding AIG: agency and authorizing environment	S  P  F	Module 5.3.2 Building and nurturing anticipatory culture, skills, and organizational capacity	S  P  F	Module 5.3.3 Innovative ecosystems and foresight integration	S  P  F
---	---------------------	--	---------------------	---	---------------------

### Course 5.4 Network weaving and systems stewardship

Module 5.4.1 Introduction to network weaving	S  P  F	Module 5.4.2 Building collaborative networks and developing a networks mindset and culture	S  P  F	Module 5.4.3 Systems stewardship in the public sector	S  P  F	Module 5.4.4 Techniques for effective public engagement	S  P  F
---	---------------------	---	---------------------	--	---------------------	--	---------------------

# **PROGRAMME 1**

## **INTRODUCTION TO ANTICIPATORY INNOVATION GOVERNANCE AND STRATEGIC FORESIGHT**

Programme 1 focuses on introducing the basics of anticipatory innovation governance and strategic foresight. The learning content of this Programme addresses the need for governments to understand the need to develop conditions and new capabilities to govern innovation and respond to emerging developments and challenges proactively.

The Programme aims to increase awareness of strategic foresight and anticipatory innovation and of the benefits of using these in government.

The Programme equips participants with an overview of concepts and understanding needed for further capacity building in anticipatory innovation governance and strategic foresight.

This Programme is aimed at senior leaders, policymakers, and foresight producers.

### **Suggestions for trainers**

Trainers of module one require specialist knowledge of anticipatory innovation governance and how it applies to the strategic planning and public policy context in government.

Trainers of module two require specialist knowledge and deep understanding of strategic foresight and how it is applied and used in governments to enhance policy planning and making processes.

It is recommended to provide practical insights to make the training relatable and relevant to civil servants, and to use case studies to showcase real world examples of governments successfully implementing anticipatory innovation governance and strategic foresight..

## PROGRAMME 1: INTRODUCTION TO ANTICIPATORY INNOVATION GOVERNANCE AND STRATEGIC FORESIGHT

### Course 1.1 Anticipatory innovation governance and strategic foresight 101

<b>Module 1.1.1</b> Introduction to Anticipatory Innovation Governance	S P F	<b>Module 1.1.2</b> Introduction to Strategic Foresight	S P F
--	-------------	--	-------------

Figure 5. Programme 1 courses and modules



## Course 1.1 Anticipatory innovation governance and strategic foresight 101

This course covers key concepts and use of anticipatory innovation governance and strategic foresight to senior leaders, policymakers and foresight producers in government. The main aim is to familiarise the audience with the subject matter and make them more knowledgeable clients of Programmes 2, 3, 4 and 5.

### Learning outcomes

By the end of this course policymakers, senior leaders and foresight producers will understand:

- Key concepts and application of the anticipatory innovation governance model and its importance for public policy.
- Key strategic foresight concepts and principles and their importance for public policy.
- Anticipatory innovation governance mechanisms and their use in governments.
- Strategies for integrating anticipatory innovation governance practices into governance.
- The complementarity of the roles that senior leaders, policymakers and foresight producers play in anticipatory innovation governance and strategic foresight.

S  
P  
F

### Module 1.1.1 Introduction to anticipatory innovation governance

- > What is anticipatory innovation governance and why it is important for policy and government.
- > Understand key concepts and applications of anticipatory innovation governance.
- > Learn about anticipatory innovation governance mechanisms and their use in government including through case studies.
- > Learn strategies for integrating anticipatory innovation governance practices into governance models.
- > Understand the role of different actors (senior leaders, policymakers, foresight producers) and their complementarity in anticipatory innovation governance capacity.
- > Identify opportunities for building anticipatory innovation governance capacities and understand challenges, gaps and required skills for building capacity.
- > Develop personal plans for using anticipatory innovation governance (requires tailoring of the content to senior leader, policymaker, or foresight producers).

S  
P  
F

### Module 1.1.2 Introduction to strategic foresight

- > What is strategic foresight, the evolution of the field, and why it is important for policy.
- > Understand key strategic foresight concepts and principles.
- > Learn about the application of strategic foresight in government and other sectors including through case studies.
- > Understand the role of different actors (senior leaders, policymakers, foresight producers) and their complementarity in strategic foresight capacity.
- > Identify opportunities for building strategic foresight capacities and understand challenges, gaps and required skills for building capacity.
- > Develop personal plans for using strategic foresight (requires tailoring of the content to senior leader, policymaker, or foresight producers).

# PROGRAMME 2

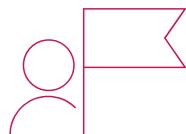
## ANTICIPATORY INNOVATION PROGRAMME

Programme 2 focuses on proactivity and experimentation in policy development. The learning content of this Programme addresses the growing need for governments to develop new capabilities to govern innovation and enable policymakers to respond proactively to unforeseen events and technological change in real-time, instead of reacting to change when it occurs<sup>10</sup>.

The Programme aims to address challenges in government — including entrenched practices, cultural norms, value systems, organisational structures, and both individual and institutional incentives — that inhibit innovation and creativity. These include a prevailing top down and reactive culture, a risk averse and compliance focused environment, limited use of evidence in decision making, lack of collaboration and consultation in decision making, limited knowledge and use of strategic thinking and of a continuous learning cycle.

The Programme equips participants with the essential tools and understanding needed for anticipatory innovation governance, aimed at crafting innovative, future-oriented and resilient government policies. It enhances teamwork, internal cohesion and collaboration within government functions, and a culture of creativity and proactivity. It also applies innovative thinking to policy making, strengthens stakeholder engagement, and fosters new practices for continuous learning, iteration, and adaptation. It underscores the critical need for governments to develop new systems, values, and culture, and to adopt innovative practices to anticipate and respond to current local and global challenges.

### PROGRAMME 2 audience by roles



Programme 2 is aimed primarily at **senior leaders** in government because they hold the agency and responsibility for creating and enabling an environment for change, they make executive decisions, champion models and approaches to decision making, they model values and behaviours, determine personal development incentives and career development outcomes and hold resources.



The content of this Programme is important for **policymakers** as they are involved in any stage of the policy development cycle, including setting the policy agenda, designing policy, consulting stakeholders, and evaluating policy. Hence, policymakers need to be familiar with and able to use the knowledge, tools, and skills necessary to produce more experimental, innovative, and resilient policies that serve the government and the public.

### Suggestions for trainers

Trainers of this Programme require specialist knowledge in innovation, organisational culture, foresight, evidence-based policy making, and design thinking.

<sup>10</sup> OECD Working Papers on Public Governance No. 44

## PROGRAMME 2: ANTICIPATORY INNOVATION PROGRAMME

### Course 2.1 Fostering a collaborative environment for innovative and experimental policy making that addresses horizontal issues

<b>Module 2.1.1</b> Experimental policy making and the policy cycle	<b>S P F</b>	<b>Module 2.1.2</b> Effective participation, engagement and collaboration in policy making	<b>S P F</b>	<b>Module 2.1.3</b> Working across functions to develop innovative and experimental policies	<b>S P F</b>	<b>Module 2.1.4</b> Effective participation, engagement and collaboration in policy making for innovation and experimentation	<b>S P F</b>
--	--------------	---	--------------	---	--------------	--	--------------

### Course 2.2 Nurturing a culture of proactivity and creativity in policy making

<b>Module 2.2.1</b> Shifting from reactive to proactive (why it matters and why now)	<b>S P F</b>	<b>Module 2.2.2</b> Creating a culture of experimentation	<b>S P F</b>	<b>Module 2.2.3</b> Dealing with uncertainty and disruptions	<b>S P F</b>	<b>Module 2.2.4</b> Understanding the effects of emerging technologies on government work	<b>S P F</b>
---	--------------	--	--------------	---	--------------	--	--------------

### Course 2.3 Innovation for resilient and effective policies

<b>Module 2.3.1</b> Innovation in strategic planning	<b>S P F</b>	<b>Module 2.3.2</b> Fostering a culture of innovation and strategic foresight in policy making	<b>S P F</b>	<b>Module 2.3.3</b> Experimentation and exploration as part of the job	<b>S P F</b>
---	--------------	---	--------------	---	--------------

### Course 2.4 Nurturing a cycle of continuous learning, adaptation and effective monitoring and evaluation in policy making

<b>Module 2.4.1</b> Fostering an evidence based and forward thinking approach in policy making	<b>S P F</b>	<b>Module 2.4.2</b> Why data matters and what data matters for decision making	<b>S P F</b>	<b>Module 2.4.3</b> Evaluation, monitoring and adaptation for innovative and experimental policy making	<b>S P F</b>
---	--------------	---	--------------	--	--------------

Figure 6. Programme 2 courses and modules



## Course 2.1 Fostering a collaborative environment for innovative and experimental policy making that addresses horizontal issues

This course aims to enable participants to make government policies more experimental, innovative, and relevant through effective engagement with non-traditional stakeholders; improving internal cohesion and collaboration between government functions; and enhancing external consultation processes and networks. This course emphasises the urgency and importance for governments to adopt innovative and experimental practices, values, culture, and systems to increase legitimacy and improve policy resilience in response to current and future shocks and challenges.

This course is aimed primarily at senior leaders and policymakers.

### Learning outcomes

By the end of this course senior leaders, and policymakers will know, understand, and apply:

- Experimental and innovative policy making and its significance in the policy cycle.
- Participatory policy making and its critical role in fostering innovation and experimentation.
- Strategies for effective engagement and collaboration across sectors for innovative and experimental policy making.
- How to work across government functions to tackle horizontal issues.
- How to build and leverage effective networks for innovative policy making.

#### Module 2.1.1 Experimental policy making and the policy cycle

S  
P  
F

- > Experimental policy making and what it means for the policy cycle.
- > What does an innovative and an experimental policy look like.
- > Developing a robust theory of change that allows for innovation and experimentation.
- > Using behavioural insights to understand and develop policy solutions.
- > Monitoring and adaptation of policy implementation.

### **Module 2.1.2 Effective participation, engagement and collaboration in policy making**

S  
P  
F

- > How to foster a culture of effective engagement, participation, and cooperation to make innovative, experimental, relevant and resilient policies (incentives, values, attitudes, organisational structures and systems).
- > Participatory and inclusive decision making - pushing the boundaries - going beyond the 'usual/traditional stakeholders'.
- > Working collaboratively with stakeholders to explore innovative perspectives and solutions.
- > Listening to and reflecting future challenges in current policies.
- > Effective communication with and for different stakeholders.

### **Module 2.1.3 Working across functions to develop innovative and experimental policies**

S  
P  
F

- > Addressing horizontal policy issues for more resilient and effective policy making.
- > The cost of failing to respond to complex multi sectoral challenges.
- > Breaking the mould - working in cross functional teams to find forward thinking, experimental and innovative solutions.
- > Embedding cross functional policy development in government.

### **Module 2.1.4 Building effective networks for innovative policy making**

S  
P  
F

- > Building effective and sustainable networks.
- > Encouraging and embracing pluralism of involved actors, viewpoints and inherent values.
- > What is a community of practice and why we may want one.
- > Building and nurturing a community of practice for innovative, experimental and forward-thinking policy and governance.



## Course 2.2 Nurturing a culture of proactivity and creativity in policy making

This course aims to enable participants to acquire those tools, skills, values, and culture necessary to develop a more inclusive, creative, and proactive working environment where innovation and experimentation in policy making is valued and developed; a culture of learning and iteration prevails; and strategic thinking is encouraged and nurtured. The urgency of tackling issues and finding solutions at pace becomes the 'new normal' as governments become more able to respond to emerging national and global challenges.

The course introduces what is a proactive culture and why it matters. It explains how complexity, uncertainties, and disruptions affect the approach and methods of policy design and the need for continuous adaptation. It also explores 'risks taking' and learning from failure as part of the process of creativity, iteration, and adaption. Finally, it outlines how technologies affect the policy-making environment (both from the government and from the customer perspectives) and how ex-ante, real time, and iterative policy making allows for governments to anticipate technological innovation, to use it for improved service delivery and potentially to mitigate its negative effects.

This course is aimed primarily at senior leaders and policymakers.

### Learning outcomes

By the end of this course senior leaders and policymakers will know, understand, and apply:

- Practices that foster a culture of proactivity and why it's crucial for innovation and experimentation.
- How to embrace risk-taking and the value of learning from failure.
- How to manage uncertainties and disruptions in policy making.
- The importance of anticipatory innovation in addressing the impacts of technological changes.

#### Module 2.2.1 Shifting from reactive to proactive (why it matters and why now)

S  
P  
F

- > Fostering a proactive culture - what does it look like, key features of a proactive environment.
- > Understand the cost of 'doing nothing'. Why personal and organisational pro-activity matters and why now
- > Values, attitudes, incentives, communications that underpin a culture of proactivity.
- > Who needs to do what to break the mould (hierarchy/ reward structure/ career structure/ organisational expectations/ legislation)

### Module 2.2.2 Creating a culture of experimentation

S  
P  
F

- > Creating a culture of experimentation and risk taking (incentives, values attitudes and systems).
- > Discussing and learning from failure.
- > Moving from punishing to rewarding initiative and thinking 'outside the box'.
- > What does a 'less risk averse culture mean' for senior leaders in the organisation? - how would their role change?

### Module 2.2.3 Dealing with uncertainty and disruptions

S  
P  
F

- > Explore various types of uncertainty and disruptions that policymakers face today and understand what this means for policy.
- > Understand how to translate trends into uncertainties and how uncertainties can be monitored over time.
- > Learn strategies for building resilience within organisations and policy frameworks to effectively respond to and recover from disruptions.
- > Understand how to take a proactive approach to the future and develop policies that are not only responsive but also anticipatory.
- > Understand decision-making frameworks that are effective under conditions of high uncertainty.
- > Understand how to Integrate robust risk management strategies into the policy making process.
- > Understand the importance of building and leveraging networks and partnerships across sectors and disciplines to share insights, resources, and strategies for dealing with uncertainty.

### Module 2.2.4 Understanding the effects of emerging technologies on government work

S  
P  
F

- > Understand how technologies affect both the public services offered and the way the public interacts with them.
- > Understand how public values are affected by technological and societal shifts.
- > Understand how technological innovation such as digitalisation, AI, advanced robotics, platform technologies challenge the status quo.
- > Shifting towards a more ex ante, real-time and iterative policy making to address the challenges and influence the design of solutions.



## Course 2.3 Innovation for resilient and effective policies

This course aims to enable participants to become more strategic in their planning and practice and to find more innovative, and inclusive approaches to addressing current and future challenges. It introduces the key elements of strategic planning and how to be strategic by considering diversity, complexity, and uncertainty in envisioning the future. It explores the role of senior leaders in embedding innovation, creativity, and experimentation in their organisations. It outlines key elements of an 'innovation driven environment' including challenging organisation assumptions, vested interests, and biases; promoting openness, transparency, and collaboration in policy formulation; creating incentives and encouraging values, behaviours, structures, systems and capabilities that allow for innovation.

This course is aimed primarily at senior leaders and policymakers.

### Learning outcomes

By the end of this course senior leaders and policymakers will know, understand, and apply:

- How to make strategic planning more inclusive, responsive, and innovative.
- How to embed a culture of innovation in policy making that seeks new opportunities.
- Effective collaboration and networking for innovative and resilient policies.
- The value of experimentation and testing as integral to policy making and implementation.

#### Module 2.3.1 Innovation in strategic planning

S  
P  
F

- > Defining the vision for the future (strategy) - whose future? What are the assumptions related to the future? Who is involved/consulted? What is different about this future?
- > Challenging assumptions, vested interests and recognising organisational biases in strategic planning and strategic decision making.
- > Key elements of an innovative approach to strategic planning - understanding what is changing.

#### Module 2.3.2 Fostering a culture of innovation and strategic foresight in policy making

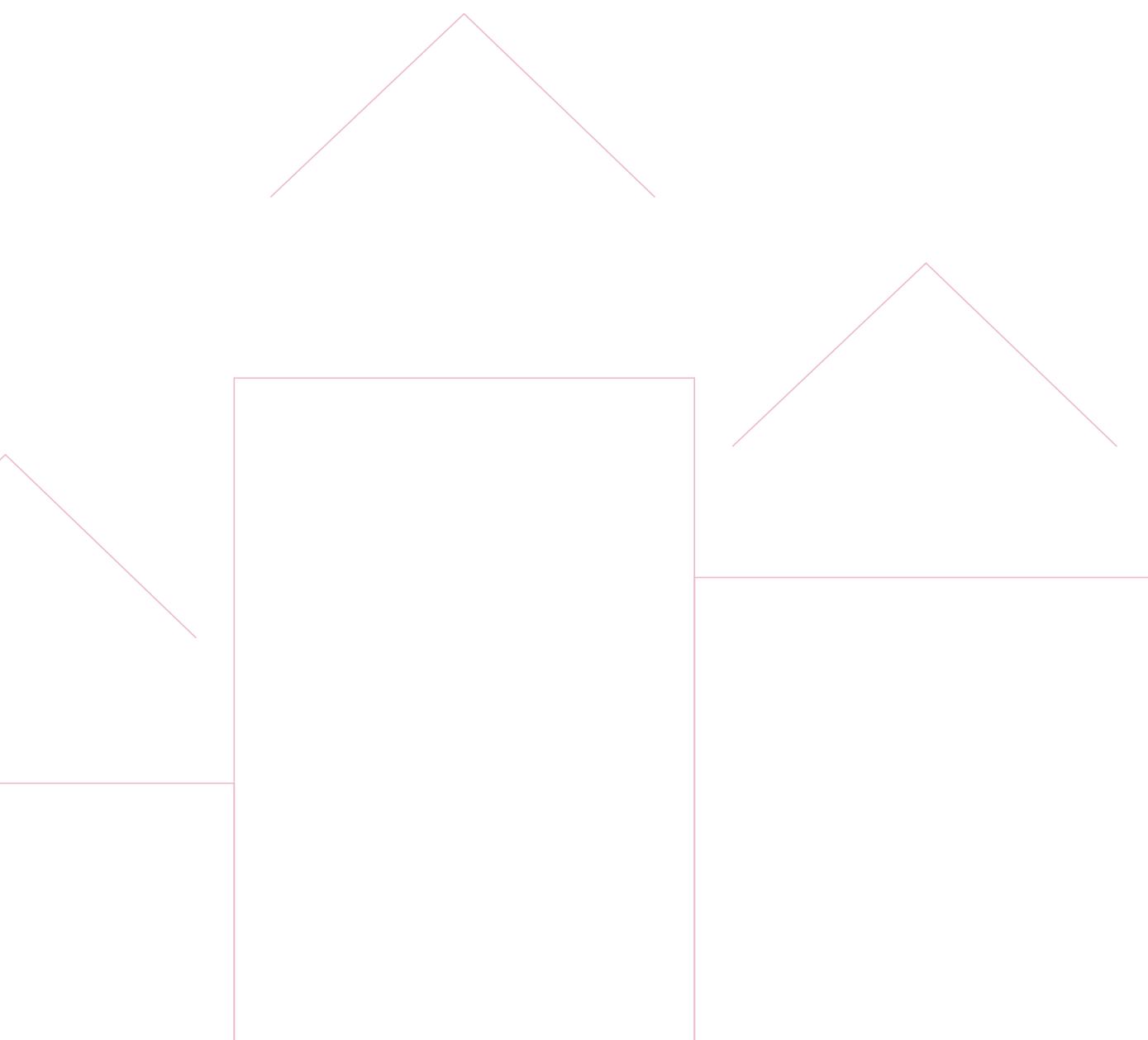
S  
P  
F

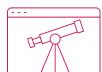
- > Creating the organisational incentives for innovation - who needs to do what to break the mould (hierarchy/ reward structure/ career structure/ organisational expectations/ legislation).
- > How to find new opportunities for innovation.
- > The role of leaders and champions to nurture and develop proactivity and innovation.
- > Using foresight in policy making to innovate and address change.

S  
P  
F

### Module 2.3.3 Experimentation and exploration as part of the job

- > Exploring scenarios, alternatives and options for longer term policy making
- > Testing options for better policy outcomes and experimenting approaches of policy implementation.
- > What it means to do things differently and why it is important for policy making and policy implementation.
- > The role of the senior leader in leading and fostering a culture of exploration and experimentation.
- > Fostering a culture of experimentation and exploration - time, money, values, incentives and systems.





## Course 2.4 Nurturing a cycle of continuous learning, adaptation and effective monitoring and evaluation in policy making

This course aims to enable participants in government to acquire those skills, knowledge, and values necessary to create a culture of continuous learning and adaptation, which is intrinsic to making and implementing relevant, resilient, and innovative policies. To this effect, the course explores the importance of the use of evidence, the type of evidence and the use of different kinds of data that underpin a credible approach to policy discussion, monitoring, and evaluation; how to nurture and develop diverse teams to enrich policy discussions by injecting new and innovative ideas and perspectives; and how embedding a learning loop of reflection, iteration, and adaptation results in policies that are relevant and able to address and anticipate national and global developments and challenges.

This course is aimed primarily at senior leaders and policymakers. However, foresight producers would benefit from attending module 2.

### Learning outcomes

By the end of this course senior leaders and policymakers will know, understand, and apply:

- How to find use and analyse high-quality evidence for innovative and experimental policy making.
- Communication skills and how to present futures evidence effectively to diverse audiences, fostering public engagement and debate.
- Evaluation and monitoring as tools for continuous learning, making policies more relevant and adaptive.
- Testing, iteration, and adaptation in achieving resilient and innovative policy outcomes.

### Module 2.4.1 Fostering an evidence based and forward-thinking approach in policy making

- > Find, use and analyse high quality evidence for innovative and experimental policy making.
- > How to collect information from a diverse range of sources
- > How to cover all relevant areas and different time horizons for resilient policies
- > How to present and communicate evidence underpinning innovative and experimental policy solutions

S  
P  
F

### **Module 2.4.2 Why data matters and what data matters for decision making**

S  
P  
F

- > Understand the role of quantitative and qualitative data in policy and decision making.
- > Learn to distinguish between different types of data and identify relevant sources for policy analysis.
- > Develop skills in detecting weak signals and emerging trends using data analytics.
- > Explore advanced methods for analysing data, including predictive analytics, scenario modelling, and systems dynamics.
- > Understand how to communicate data-driven insights to diverse audiences: developing visualisations, reports, and presentations that make complex data understandable and actionable for policymakers, stakeholders, and the public.
- > Understand ethical dimensions of using data in policy making, including privacy concerns, data security, and ensuring inclusivity and fairness in data collection and analysis processes.

### **Module 2.4.3 Evaluation, monitoring and adaptation for innovative and experimental policy making**

S  
P  
F

- > The purpose of evaluation and why evaluation matters - going beyond technical/financial/legal evaluation.
- > Why static policies fail in a dynamic environment - monitoring to learn what works and what does not work and improve.
- > Reflection and adaptation as part of the policy monitoring process - creating learning loops.
- > Engaging multiple stakeholders including users for effective monitoring.
- > Avoiding irreversible interventions to allow for continuous testing, iteration and adaptation.

# PROGRAMME 3

## STRATEGIC FLEXIBILITY FOR POLICY PROGRAMME

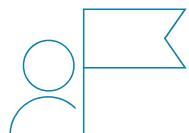
Programme 3 focuses on developing a deep understanding of the use of long-term planning and anticipation approaches in policy making in order to enhance strategic flexibility and develop an organisation's capacity to anticipate and navigate future complexities and risks.

The Programme aims to address challenges in government related to overreliance on traditional strategic planning and forecasting by deepening the understanding of innovative approaches to dealing with emerging opportunities and risks.

This Programme introduces the knowledge, skills, tools, and resources that participants need for improving the ability to plan for the long-term.

### Programme 3 audience by roles

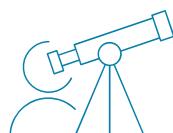
This Programme is aimed primarily at foresight producers and policymakers, who need to learn how to anticipate and navigate future complexities in policy planning and decision-making.



**Senior leaders** are expected to become familiar with selected content of this Programme because they are responsible for encouraging more rigorous data and measurement in government and society, which is most effectively done through adding foresight exploration and experimentation.



**Policymakers** need insights from foresight outputs and data in order to develop fair and robust policies, and to collaborate effectively with senior decision makers. Policymakers also need to ensure integration of foresight output in evaluating policy. To support policy development, they need to know how to apply strategic foresight in anticipatory policy making, adaptive policy making, risk management, and the development of innovative policy tools, such as design thinking. They also need to understand how bias and different mindsets can impact policy development, and how to use foresight to overcome bias.



**Foresight producers** need to gather and analyse the information and evidence about a specific policy topic through rigorous foresight and risk management processes. To do this effectively, they need to understand the foresight and risk management methods and tools, how to design a foresight process that will inform the policy and decisions being planned, and how to effectively communicate foresight outputs to policymakers and senior leaders.

### Suggestions for trainers

Trainers of this Programme require specialist knowledge in foresight, risk management, adaptive policy making, design thinking, and storytelling.

## PROGRAMME 3: STRATEGIC FLEXIBILITY FOR POLICY PROGRAMME

### Course 3.1 Policy making in uncertain contexts

<b>Module 3.1.1</b> Understanding complexity and uncertainty in policy making	<b>S P F</b>	<b>Module 3.1.2</b> Strategic foresight in policy making	<b>S P F</b>	<b>Module 3.1.3</b> Innovation, experimentation and creativity in policy making	<b>S P F</b>	<b>Module 3.1.4</b> Ethics, sustainability and fairness	<b>S P F</b>
--	--------------	---	--------------	--	--------------	--	--------------

### Course 3.2 Futures thinking: mindsets, behaviours and building futures literacy

<b>Module 3.2.1</b> Managing for the long-term: building a proactive and risk averse culture	<b>S P F</b>	<b>Module 3.2.2</b> Leveraging futures thinking to support policy making	<b>S P F</b>	<b>Module 3.2.3</b> Understanding behaviour, biases and assumptions about the future	<b>S P F</b>	<b>Module 3.2.4</b> Building futures literacy	<b>S P F</b>
---	--------------	---	--------------	---	--------------	--	--------------

### Course 3.3 Strategic foresight and systems application

<b>Module 3.3.1</b> Principles and use cases of foresight	<b>S P F</b>	<b>Module 3.3.2</b> Designing and tailoring foresight approaches	<b>S P F</b>	<b>Module 3.3.3</b> Thinking about different sources of change	<b>S P F</b>	<b>Module 3.3.4</b> Systems thinking and modelling	<b>S P F</b>	<b>Module 3.3.5</b> Imagining alternative futures: scenarios and visioning	<b>S P F</b>	<b>Module 3.3.6</b> Generating and acting on insights from foresight work	<b>S P F</b>
--	--------------	---	--------------	---	--------------	---	--------------	---	--------------	--	--------------

### Course 3.4 Effective communication and strategic engagement

<b>Module 3.4.1</b> Communicating uncertainty and insights from futures work	<b>S P F</b>	<b>Module 3.4.2</b> Storytelling and visualization	<b>S P F</b>	<b>Module 3.4.3</b> Strategic engagement to support anticipatory and adaptive policy making	<b>S P F</b>
---	--------------	---	--------------	--	--------------

Figure 7. Programme 3 courses and modules



## Course 3.1 Policy making in uncertain contexts

This course aims to enable participants to make more robust policies that are flexible and adaptable through developing a deeper understanding of key approaches that can be used to navigate uncertainty and complexity in policy making and strategy development. It provides an understanding of what strategic foresight is and the usefulness of its tools and methods for policy and strategy development. It addresses the pressing need for the development of more effective approaches to manage risks and challenges in both the immediate and distant future.

The course starts by building a deep understanding of how to conceptualise complexity and uncertainty in the context of policy making. The participants will then learn what frameworks might be most suited for anticipatory decision making in different contexts. These frameworks include strategic foresight, complex adaptive systems (CAS), decision making under deep uncertainty (DMDU), and decision-making in uncertain contexts.

This course is aimed at foresight producers and policymakers. Modules 1 and 4 are also aimed at senior leaders.

### Learning outcomes

By the end of this course, senior leaders, policymakers and foresight producers will know, understand, and apply:

- Foundational concepts of volatility, uncertainty, complexity, and ambiguity and their impact on policy environments.
- Frameworks and models to effectively analyse and categorise types of uncertainty in policy making and decision-making.
- Principles of strategic foresight in anticipatory policy making and planning.
- Innovative, experimental, and creative policy design methods for testing and refining policy interventions.
- Considerations of ethics, sustainability and intergenerational fairness in policy making to ensure sustainable and equitable outcomes.

By the end of this course, senior leaders will learn the value of strategic foresight in policy making under complex and uncertain conditions.

### Module 3.1.1 Understanding complexity and uncertainty in policy making

S  
P  
F

- > Define and differentiate between volatility, uncertainty, complexity, and ambiguity, and understand their significance in the context of policy and decision-making.
- > Explore cognitive tools and techniques to enhance decision-making within complex environments, addressing biases and fostering diversity in problem-solving approaches.
- > Understand strategies for engaging with complexity and uncertainty in policy design, implementation, and governance.
- > Learn the importance of strategic foresight, innovation and DMDU methods in developing adaptive policies.
- > Evaluate the strengths and limitations of different frameworks in addressing real-world policy challenges.
- > Develop skills to communicate the nature and implications of uncertainty to stakeholders and decision-makers.

### Module 3.1.2 Strategic foresight in policy making

S  
P  
F

- > Recognize the role of strategic foresight in navigating uncertainty and complexity, providing a foundational approach for anticipatory policy making.
- > Understand the application of strategic foresight in policy making to proactively address future challenges and opportunities.
- > Understand how to design policies that are flexible and adaptable, using foresight to anticipate changes and inform dynamic policy responses.
- > Explore the integration of strategic foresight with other innovative approaches, including participatory methods and digital tools, to enhance policy development and stakeholder engagement.

### Module 3.1.3 Innovation, experimentation and creativity in policy making

S  
P  
F

- > Learn approaches for designing adaptive and flexible policies, including policy innovation, experimental policy making, behavioural insights and design thinking.
- > Study successful examples of experimental policy design leading to scalable and impactful policy solutions.
- > Learn how to apply creative frameworks and tools to generate innovative solutions to policy issues.
- > Understand how design thinking principles can foster innovative solutions to complex policy challenges by prioritising user needs and experiences.
- > Understand the role and operational models of policy labs, including how they facilitate cross-disciplinary collaboration and stakeholder engagement.

### Module 3.1.4 Ethics, sustainability and fairness

S  
P  
F

- > Explore the ethical considerations and logistical challenges of conducting policy experiments in real-world settings.
- > Understand related concepts such as equity, equality, decolonization, well-being economics, and natural capital valuation, and their relevance to crafting future-oriented policies.
- > Understand the concept of intergenerational fairness and its importance in sustainable and equitable policy making.
- > Learn to evaluate policies through lenses of equity and broader societal and environmental impacts, incorporating diverse perspectives and values.
- > Develop frameworks for engaging with communities and stakeholders to incorporate a wide range of voices in policy making, ensuring policies are inclusive and values-driven.



## Course 3.2 Futures thinking: mindsets, behaviours and building futures literacy

This course aims to enable participants to develop anticipatory mindsets needed for strategic planning, creative problem solving and inclusive policy development. It emphasises the need to identify and mitigate cognitive bias in policy formulation and decision-making processes. It offers insight into the benefits of applying futures thinking and futures literacy in inclusive policy development.

The course starts from an introduction to the importance of mindset, culture and values in any foresight work. Building on this, the participants will learn how to apply foresight mindsets to their own critical and analytical thinking and thereby challenge underlying assumptions in policy debates and mitigate the impact of cognitive biases on policy development and decision-making. Finally, the participants will learn how to adopt and enhance futures literacy among various stakeholders.

This course is aimed at senior leaders, policymakers and foresight producers.

### Learning outcomes

The policymakers, foresight producers, and senior leaders will know/understand/apply:

- Futures thinking as a critical skill for effective policy making.
- Long-term mindsets essential for strategic planning and sustainable outcomes.
- Techniques to identify and challenge underlying biases and assumptions in policy making.
- Futures thinking and futures literacy to navigate political dynamics and foster inclusive policy development.

#### Module 3.2.1 Managing for the long-term: building a proactive and risk averse culture

S  
P  
F

- > Define long-term thinking and understand its critical role in strategic planning and policy development, especially in navigating future uncertainties.
- > Explore case studies where long-term thinking has led to sustainable and forward-looking policy outcomes.
- > Examine the psychological and societal barriers that often impede long-term thinking in individuals and organisations.
- > Develop skills to identify, articulate, and critically evaluate the underlying assumptions in policy debates and proposals.
- > Learn strategies to cultivate a long-term mindset, including techniques to extend time horizons in decision-making processes.

#### Module 3.2.2 Leveraging futures thinking to support policy making

S  
P  
F

- > Recognize futures thinking as both a politically safe space for open-ended exploration and an arena where differing visions of the future can clash. Analyse how these dynamics influence policy debates and strategic planning.

- > Explore the unique challenges associated with thinking about the future, including the inherent uncertainty, the risk of reinforcing existing power dynamics, and the difficulty of engaging with complex, long-term issues.
- > Explore the concept of 'images of the future,' understanding how prevailing visions shape current policy directions and societal expectations.
- > Examine 'used futures' as pre-existing narratives that may limit innovative thinking and discuss strategies for identifying and moving beyond them.
- > Learn how to leverage futures thinking as a tool for crafting policies that are both politically viable and capable of driving transformative change.
- > Explore techniques for engaging diverse stakeholders in constructing shared visions of the future that are inclusive and equitable.
- > Learn to differentiate between genuine future-oriented strategies and superficial future-washing tactics where futuristic rhetoric is used to obscure current issues or postpone meaningful action in policy making.

### **Module 3.2.3 Understanding behaviour, biases and assumptions about the future**

S  
P  
F

- > Gain insights into common cognitive biases, how they affect decision-making and policy formulation and how to mitigate the impact of cognitive biases on individual and collective decision-making processes.
- > Understand methodologies for challenging and updating assumptions in policy making.
- > Learn to apply tools and techniques to enhance critical thinking and objective decision-making in complex policy environments.
- > Master the application of behavioural science insights to policy design, focusing on how behaviour and decision-making can be influenced by policy interventions.
- > Understand how to effectively incorporate cognitive and behavioural science insights into participatory and deliberative governance models to enhance stakeholder engagement and policy co-creation processes.

### **Module 3.2.4 Building futures literacy**

S  
P  
F

- > Understand the concept of Future Literacy and its significance as a crucial competency in anticipatory innovation governance.
- > Learn why the capacity to imagine and make sense of the future is essential for addressing global challenges and seizing opportunities.
- > Gain an understanding of how exploring different types of futures enables individuals to challenge and move beyond dominant narratives about the future.
- > Learn how to empower individuals and communities with the tools and confidence to experiment, innovate, and diversify their approaches to future challenges, enhancing their agency and capacity for transformative action.
- > Develop strategies to promote and enhance future literacy among various stakeholders, including policymakers, business leaders, educators, and the community at large.
- > Understand the role of education, communication, and participatory processes in building a shared capacity for future-oriented thinking.



## Course 3.3 Strategic foresight and systems application

This course explains what foresight is and situates it within the broader context of anticipatory policymaking, as well as exploring how foresight supports public policy making, planning and practice. The participants will develop an understanding of how foresight supports positive outcomes in public policy especially in relation to preparing for future risks and challenges.

The course starts with a comprehensive overview of strategic foresight, including theory, methods, and application. In deepening the understanding of foresight application, it offers practical insights into designing and tailoring foresight approaches, including working with different sources of change, systems thinking and modelling, and developing alternative futures through scenarios and visioning approaches.

### Learning outcomes

Foresight producers and policymakers will know, understand, and apply:

- Principles of strategic foresight in anticipatory policy making and planning
- Foresight processes to respond to organisational or policy making challenges, exploring diverse methodologies and tools.
- How to spot different sources of change to inform future-oriented policy landscapes.
- Systems thinking to identify leverage points and interdependencies in policy and organisational contexts.
- How to use scenarios and visioning processes to generate actionable policy insights.
- Approaches for generating insights from foresight activities to drive actionable strategies, support adaptive policymaking, and enhance policy resilience.

### Module 3.3.1 Principles and use cases of foresight

S  
P  
F

- > Develop a comprehensive understanding of strategic foresight, including theory, methods, and application.
- > Explore the application of foresight in various sectors, understanding its role in anticipatory policy making, strategy, risk management, (including emerging and experiential risks) and planning.
- > Explain how foresight can be used to create change including the importance of values, participation and action.
- > Critically evaluate real-world case studies to identify best practices and lessons learned in applying foresight.

### Module 3.3.2 Designing and tailoring foresight approaches

S  
P  
F

- > Understand how to scope, frame, and design foresight work to meet specific strategic objectives, considering organisational or policy making contexts.
- > Gain knowledge of diverse foresight methodologies and tools, including their strengths and applicability to different contexts
- > Develop the skill to design and tailor foresight processes that address specific organisational or policy making challenges.
- > Practice using foresight to explore a particular policy question or issue.
- > Evaluate the effectiveness of different foresight approaches in various organisational and policy contexts, developing criteria for success and methods for continuous improvement.

### Module 3.3.3 Thinking about different sources of change

S  
P  
F

- > Describe different models of change and how they can be used to deepen understanding of topical issues.
- > Use frameworks to identify drivers of change, emerging issues, acute, systemic and existential risks and disruptions and explore their impacts over time.
- > Cultivate an appreciation for the diversity of perspectives on the future and learn to harness this diversity to enrich foresight processes.
- > Practice identifying and analysing key drivers of change, including emerging trends in technology, society, economy, and the environment.
- > Develop critical thinking skills to evaluate how different sources of change might interact and impact future scenarios and policy landscapes.

### Module 3.3.4 Systems thinking and modelling

S  
P  
F

- > Understand the principles of systems thinking and its critical role in identifying complex interdependencies and feedback loops in policy and organisational contexts.
- > Use systems mapping to identify and explore key relationships between drivers of change and identify leverage points.
- > Create systems maps that visualise interdependencies and predict how systemic changes could influence future outcomes, facilitating a deeper understanding of potential challenges and opportunities.
- > Apply systems thinking tools and concepts to enhance the depth and breadth of foresight exercises, enabling a more holistic view of potential futures.
- > Incorporate systems thinking into scenario planning to anticipate unintended consequences and identify leverage points for transformative change.

### Module 3.3.5 Imagining alternative futures: scenarios and visioning

S  
P  
F

- > Gain an overview of different scenarios and visioning methodologies and understand when to use them.
- > Develop the creative and analytical skills necessary to construct detailed scenarios and vivid visions that capture a wide range of possible futures.
- > Practise the process of developing alternative scenarios and creating challenging alternative futures and exploring these.
- > Appreciate the role of storytelling, worldbuilding and narrative futures in developing and communicating compelling future scenarios.
- > Learn to engage stakeholders in the scenario and visioning processes, fostering inclusive and participatory approaches to future planning.

### Module 3.3.6 Generating and acting on insights from foresight work

S  
P  
F

- > Learn to synthesise insights from foresight activities into actionable intelligence for policy and strategy development.
- > Systematically think about how you need to act, now or in the future, to create change and prepare for different futures.
- > Explore alternative pathways and prepare contingency plans for monitoring and course corrections.
- > Use methodologies for integrating foresight insights into ongoing strategic and policy development processes, ensuring adaptability and long-term relevance.
- > Understand the principles and how to use insights from strategic foresight to support adaptive policy making.
- > Tailor communications to diverse audiences, effectively communicating insights about the future to inform policy making, strategy and decision-making.



## Course 3.4 Effective communication and strategic engagement

This course aims to enable participants to effectively communicate foresight outputs to different audiences. It focuses on communication, such as storytelling, and visual skills, which are needed to communicate and present foresight outputs.

The course starts with an introduction of various techniques for effectively communicating foresight outputs. It then delves into the storytelling, visualisation, and communication skills needed to do that.

### Learning outcomes

Senior leaders, policymakers and foresight producers will know, understand, and apply:

- Techniques for effectively communicating uncertainty and foresight insights to inform policy decisions.
- Storytelling and visual communication strategies to articulate complex policy narratives and future scenarios.
- Strategic engagement practices that support anticipatory and adaptive policy making, ensuring policies are responsive and relevant.

### Module 3.4.1 Communicating uncertainty and insights from futures work

S  
P  
F

- > Learn techniques for communicating uncertainty, insights, and implications of future work.
- > Frame and present insights from foresight activities in ways that resonate with diverse stakeholder groups.
- > Understand and apply ethical considerations in the communication of futures works, focusing on avoiding bias and ensuring inclusive representation of future possibilities.
- > Develop approaches to convey the importance and relevance of foresight findings, encouraging informed decision-making and proactive policy responses.
- > Learn strategies to maintain transparency about the limitations and assumptions inherent in foresight work, fostering trust and credibility.

### Module 3.4.2 Storytelling and visualisation

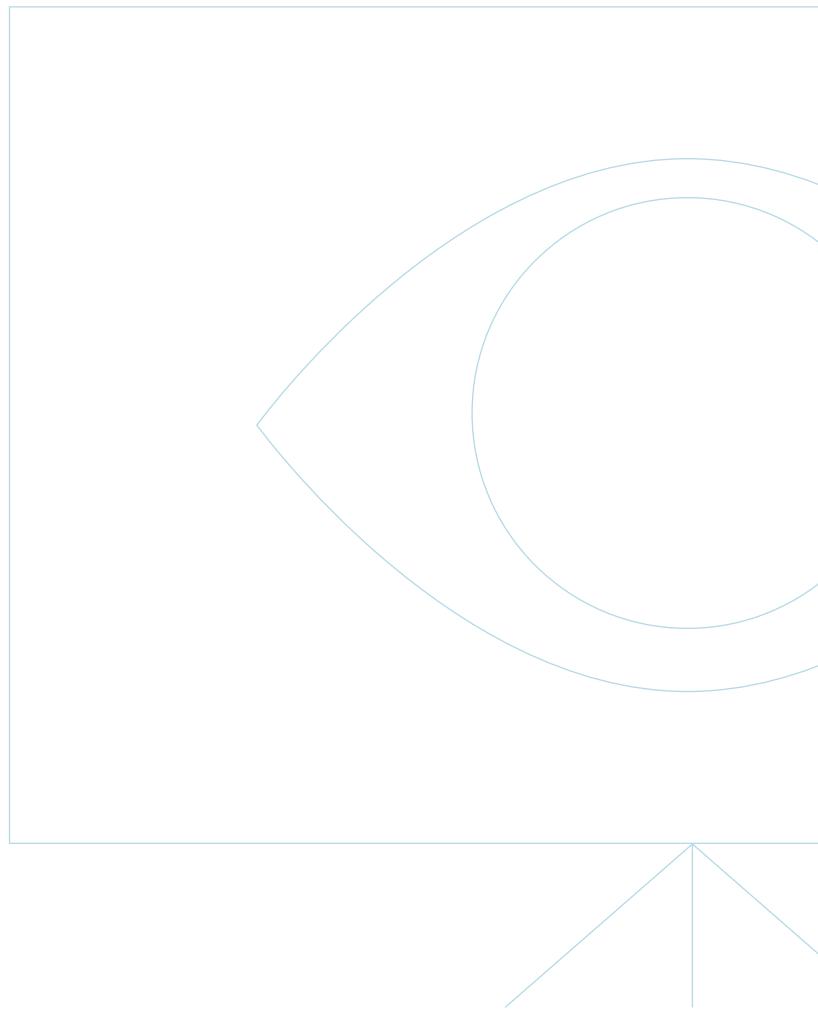
S  
P  
F

- > Understand how to choose the most effective communication format based on the target audience, message content, and desired outcomes.
- > Understand how narratives and data can influence perception, decision-making, and motivation.
- > Practise the art of storytelling and world building as powerful tools to communicate complex policy landscapes.
- > Explore the use of artefacts, infographics, data visualisation, and emerging methods for simplifying and communicating foresight insights.

S  
P  
F

### Module 3.4.3 Strategic engagement to support anticipatory and adaptive policy making

- > Techniques for engaging a diverse range of stakeholders in the policy design process to gather a wide array of perspectives and insight.
- > Building consensus among stakeholders with varying interests and for fostering an environment of collaboration and mutual respect
- > Using digital tools and platforms for real-time feedback collection, analysis, and integration into policy development processes
- > Adjusting policies based on feedback, ensuring they evolve to remain relevant and effective over time.



# PROGRAMME 4

## PROACTIVE LEADERSHIP PROGRAMME

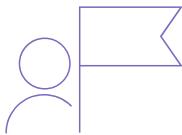
Programme 4 focuses on leadership in stakeholder engagement and forward-looking capability in policy development. There is a growing need to incorporate foresight and stakeholder engagement in policy processes and cycles to ensure legitimacy in policies, it offers insights into where foresight can be meaningfully integrated in the policy cycle and how to build political leadership and awareness in relation to emerging challenges and future opportunities.

The Programme addresses the need to align policies with the realities, needs, and values of different stakeholders, as well as to build robust policies that will meet upcoming challenges. Meeting these challenges requires fostering leaders' understanding of the benefits of leveraging contextual and forward-looking knowledge. Creating a culture of openness and awareness, along with implementing robust communication channels with key stakeholders, plays a pivotal role in addressing these pressing issues.

The Programme equips participants with the essential tools and understanding needed for anticipatory innovation governance. It encourages meaningful stakeholder engagement and management and emphasises the need for building capability for adaptive policy making and to support cutting-edge anticipatory intelligence across governments.

### Programme 4 audience by roles

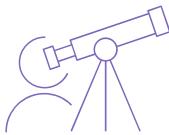
This Programme is aimed at senior leaders and leadership among policymakers and foresight producers.



**Senior leaders** are responsible for providing direction and need to learn how to improve their forward-looking capability on emerging challenges and future opportunities, so they can foster a culture of anticipation and proactive planning. They also hold the agency and responsibility for creating and enabling an environment for change and championing innovative approaches for decision-making, and for building political and leadership awareness. They play a crucial role in creating a culture of openness and awareness that is based on frequent meaningful communication with key stakeholders.



**Policymakers** are responsible for designing and setting the agenda throughout the policy cycle. They need to learn how to integrate futures approaches and outcomes in decision making throughout the policy cycles, to facilitate informed and contextually aware decision-making and proactive planning. To achieve this goal, policymakers need to be aware of the value and practicalities of regular stakeholder collaboration.



The Programme is also important for **foresight producers**, who need to learn how to lead in generating forward-looking insights through stakeholder engagement and desk research. They also need to learn how to process the forward-looking data outputs to establish contextual intelligence, and ultimately to inform policies and decision-making processes.

### Suggestions for trainers

Trainers of this Programme require specialist knowledge in horizon scanning, participatory foresight approaches, building political and leadership awareness, and in systems thinking.

## PROGRAMME 4: PROACTIVE LEADERSHIP PROGRAMME

### Course 4.1 Building political buy-in and anticipatory leadership

<b>Module 4.1.1</b> Leadership as a key skill for anticipating, shaping and planning for an emerging future	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.1.2</b> Understanding the political environment	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.1.3</b> Integrating futures into decision-making	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.1.4</b> Ethics, accountability and governance	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.1.5</b> Communication and influence	<b>S</b> <b>P</b> <b>F</b>
--	----------------------------------	--	----------------------------------	---	----------------------------------	--	----------------------------------	--	----------------------------------

### Course 4.2 Identifying emerging challenges: harnessing data and building contextual intelligence

<b>Module 4.2.1</b> Building contextual intelligence	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.2.2</b> Signal detection and horizon scanning	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.2.3</b> Forecasting, foresight, and scenario planning	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.2.4</b> Anticipatory Intelligence	<b>S</b> <b>P</b> <b>F</b>
---	----------------------------------	--	----------------------------------	--	----------------------------------	--	----------------------------------

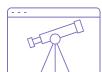
### Course 4.3 Stakeholder management, participation and engagement

<b>Module 4.3.1</b> Policy co-creation and engagement	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.3.2</b> Stakeholder mapping and management	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.3.3</b> Participation and citizen engagement	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.3.4</b> Participatory futures	<b>S</b> <b>P</b> <b>F</b>
--	----------------------------------	---	----------------------------------	---	----------------------------------	--	----------------------------------

### Course 4.4 Adaptive policy making

<b>Module 4.4.1</b> Foundations of adaptive policy making	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.4.2</b> Implementing, monitoring, and evaluating adaptive policies	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.4.3</b> Foresight in adaptive policy making	<b>S</b> <b>P</b> <b>F</b>	<b>Module 4.4.4</b> Building collaborative networks	<b>S</b> <b>P</b> <b>F</b>
--	----------------------------------	---	----------------------------------	--	----------------------------------	--	----------------------------------

Figure 8. Programme 4 courses and modules



## Course 4.1 Building political buy-in and anticipatory leadership

This course aims to enable participants to embed the forward-looking capability needed for proactive leadership in understanding emerging challenges and future opportunities. This includes developing knowledge about key foresight approaches such as horizon scanning and scenario planning, as well as knowledge on how to build and lead robust anticipatory systems.

The course starts by teaching leadership as a skill for anticipating, shaping, and planning for an emerging future. It then teaches the skills needed for developing an understanding of the political environment and integration of strategic foresight into decision making. It introduces the need for ethical and accountable leadership and governance. It concludes with an overview of effective communication techniques.

This course is aimed at senior leaders, policymakers, and foresight producers.

### Learning outcomes

By the end of this course, senior leaders, policymakers and foresight producers will know, understand, and apply:

- Approaches for aligning policy initiatives with political priorities, navigating dynamics to advance strategic goals.
- Strategies for integrating futures into decision-making processes to balance short-term needs with long-term objectives, enhancing resilience and adaptability.
- Ethics, accountability, and governance in leadership practices to ensure decisions are ethical and accountable, fostering a culture of integrity.
- Communication and influence to articulate visions, engage stakeholders, and advocate for transformative policies.

### Module 4.1.1 Leadership as a key skill for anticipating, shaping and planning for an emerging future

S  
P  
F

- > Understand the role of leadership in fostering a culture of anticipation and proactive planning.
- > Learn to inspire and mobilise teams and stakeholders around a shared vision for the future.
- > Develop skills to inspire and drive organisational change that aligns with future opportunities and risks.
- > Gain insights into integrating forward-thinking into organisations strategies and practices.

### Module 4.1.2 Understanding the political environment

S  
P  
F

- > Develop the ability to align organisational or policy initiatives with political priorities and agendas.
- > Understand how to navigate political dynamics and power relations to advance

strategic goals.

- > Learn strategies for engaging with policymakers, political stakeholders, and influencers.
- > Understand the importance of aligning innovation initiatives with political priorities and communicating their value effectively to policymakers.
- > Strategies for ensuring that leadership practices are inclusive, considering diverse perspectives and the broader impact on society and the environment.

S  
P  
F

#### **Module 4.1.3 Integrating futures into decision-making**

- > Understand how to incorporate strategic foresight and future scenarios into decision-making processes.
- > Learn to balance short-term needs with long-term objectives for sustainable outcomes.
- > Develop skills in scenario planning and futures thinking to enhance organisational resilience and adaptability.
- > Gain insights into creating decision-making frameworks that are flexible and responsive to future uncertainties.

S  
P  
F

#### **Module 4.1.4 Ethics, accountability and governance**

- > Understand the importance of ethical leadership and governance in ensuring accountability and trust.
- > Learn to establish and uphold ethical standards and accountability mechanisms within organisations.
- > Develop strategies for ethical decision-making that considers the long-term impacts on society and the environment.
- > Gain insights into fostering a culture of integrity, transparency, and responsibility in leadership and governance.

S  
P  
F

#### **Module 4.1.5 Communication and influence**

- > Master effective communication strategies to articulate visions, influence stakeholders, and advocate for change.
- > Understand the dynamics of influence and how to build alliances and consensus among diverse groups.
- > Learn techniques for persuasive communication, including storytelling and public speaking.
- > Develop the ability to negotiate, mediate, and lead collaborative efforts towards shared goals.



## Course 4.2 Identifying emerging challenges: harnessing data and building contextual intelligence

This course aims to enable participants to build trust and legitimacy through meaningful engagement with stakeholders, and effective stakeholder management. It offers practical insights into co-creation of policy through stakeholder and citizen engagement. It also highlights how to identify and map relevant stakeholders for different policy issues, as well as how to manage stakeholders to sustain long-lasting and meaningful relationships.

The course starts with an introduction to building contextual intelligence and then zooms into the skills for identification and collection of emerging signals, trends, and challenges. It then teaches the participants how to make sense of the identified trends through forecasting, foresight, and scenario planning. Finally, the participants will learn how to design and maintain an anticipatory intelligence system to support policy making, anticipation, resilience and agility.

This course is aimed at policymakers and foresight producers; it equips them with techniques for participatory foresight and stakeholder engagement. The first module of this course is also aimed at senior leaders.

---

### Learning outcomes

The senior policymakers, project managers, and foresight developers will know, understand, and apply:

- Contextual and Interdisciplinary analysis to develop policies that are informed by a comprehensive understanding of global trends and local contexts.
  - Signal detection and horizon scanning to identify early indicators of change across various domains.
  - Forecasting and scenario planning approaches to anticipate future challenges and their policy implications, ensuring strategic responses are informed and robust.
  - Systems thinking and modelling in policy development to understand and navigate complex systems and their interdependencies.
  - Anticipatory intelligence systems to continuously monitor and analyse data to support agile and informed decision-making.
- 

### Module 4.2.1 Building contextual intelligence

S  
P  
F

- > Apply interdisciplinary analysis in the development of policy and strategic planning, ensuring decisions are informed by a comprehensive understanding of issues that span across social, economic, environmental, and technological domains.
- > Understand the importance of cross-cultural perspectives and global interconnectivity in building contextual intelligence.
- > Leverage diverse perspectives and datasets to enhance contextual intelligence. This includes understanding how different fields interpret data and trends, thereby enriching contextual intelligence.
- > Learn to apply contextual intelligence in policy, strategic planning and decision-making processes, ensuring responses are both globally informed and locally applicable.

### Module 4.2.2 Signal detection and horizon scanning

S  
P  
F

- > Identify early signals of change and potential future developments across various domains.
- > Using horizon scanning tools and methodologies to systematically explore and evaluate future possibilities.
- > Models for distinguishing between noise and meaningful signals.
- > Developing horizon scanning capabilities.

### Module 4.2.3 Forecasting, foresight, and scenario planning

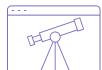
S  
P  
F

- > Use quantitative and qualitative forecasting methods to predict future trends and assess their potential impact on policy and strategic planning.
- > Learn the fundamentals of systems thinking, learning to identify interdependencies, feedback loops, and leverage points within complex systems.
- > Learn the art of scenario planning, including how to create, analyse, and apply scenarios to explore a range of future possibilities and their implications.
- > Develop the skill to integrate forecasting and scenario planning outcomes into policy and strategic decision-making, enhancing organisational for future challenges.
- > Understand the use of software tools in forecasting, systems modelling and scenario creation to support data-driven decision-making, strategic planning and policy development.

### Module 4.2.4 Anticipatory intelligence

S  
P  
F

- > Learn how anticipatory intelligence supports civil preparedness, disaster reduction and resilience.
- > Understand how to use anticipatory intelligence systems to support policy making, anticipation, resilience and agility.
- > Learn how to continuously monitor, analyse, and interpret data to support decision-making.
- > Design and implement anticipatory intelligence systems.



## Course 4.3 Stakeholder management, participation and engagement

This course explores leadership skills needed for integrating futures-thinking into political decisions and planning and thereby building the capacity for anticipating emerging challenges and future opportunities. It also provides insight into developing an organisational culture of anticipation and stakeholder engagement.

The course starts with an in-depth introduction to principles of co-creation in policy development and then looks into the practicalities of stakeholder mapping and management. Then, techniques for citizen engagement are introduced. Finally, the concept of participatory futures is explained theoretically and pragmatically.

The course is aimed at policymakers and foresight producers because it teaches them how to integrate cutting-edge anticipatory intelligence and future insights into their policy planning and decision-making. The first module of this course is also aimed at senior leaders.

### Learning outcomes

Foresight producers, policymakers and senior leaders will know, understand, and apply:

- Participatory policy making to engage a diverse range of stakeholders in the policy development process, enhancing policy relevance and resilience.
- Advance stakeholder mapping and management to identify and engage key actors effectively, building trust and support for policy initiatives.
- Ethical considerations to maintain public trust and ensure the legitimacy of the policy making process.
- Citizen engagement techniques to involve the public in policy making, leveraging digital platforms for broader and more interactive engagement.
- Participatory futures to co-envision and shape future possibilities with stakeholders, fostering a shared sense of ownership and commitment.

### Module 4.3.1 Policy co-creation and engagement

S  
P  
F

- > Understand the principle of co-creation in policy development, focusing on collaboration with stakeholders.
- > Learn strategies for effectively engaging diverse stakeholders in the co-creation processes.
- > Understand the ethical dimensions of stakeholder engagement and the importance of maintaining public trust.
- > Gain insights into integrating forward-thinking into organisational strategies and practices.
- > Develop strategies for enhancing transparency, accountability, and legitimacy in engagement processes.

### **Module 4.3.2 Stakeholder mapping and management**

S  
P  
F

- > Master techniques for comprehensive stakeholder identification, mapping, and analysis.
- > Understand how to prioritise stakeholders based on their influence, interest, and needs.
- > Learn to design and implement tailored engagement strategies for different stakeholder groups.
- > Develop skills in managing stakeholder relationships over time to build trust and support.

### **Module 4.3.3 Participation and citizen engagement**

S  
P  
F

- > Explore a range of techniques for engaging citizens in policy making, from traditional public consultations to digital platforms.
- > Develop the ability to facilitate constructive dialogue and consensus-building among stakeholders.
- > Understand how to design engagement processes that are inclusive, accessible, and effective.
- > Learn to leverage digital tools and social media for broader and more interactive citizen engagement.
- > Develop the ability to analyse and incorporate citizen input into policy decisions and actions.

### **Module 4.3.4 Participatory futures**

S  
P  
F

- > Understand the concept of participatory futures and its role in empowering stakeholders to co-envision and shape futures.
- > Learn to facilitate future workshops and other participatory activities that stimulate creative and forward-thinking insights.
- > Develop strategies for integrating participatory futures into long-term planning and decision-making.
- > Gain insights into leveraging participatory futures to build a shared sense of ownership and commitment among stakeholders.



## Course 4.4 Adaptive policy making

Course 4.4 aims to enable participants to build resilient and adaptable policies, capable of evolving with future conditions and supported by risk management and foresight strategies. This course is focused on how to address uncertainty, critical risks, and significant challenges in both the short- and long-term.

The course starts by introducing key concepts, characteristics and approaches of adaptive policy making and proceeds with pragmatic information about the techniques for implementing, monitoring, assessing, and evaluating risks, including scenario development and participatory foresight (stakeholder engagement).

This course is primarily for policymakers and foresight producers. However, senior leaders would also benefit from the knowledge about key principles of adaptive policy making and risk management.

### Learning outcomes

Policymakers and foresight producers will know, understand, and apply:

- Principles of adaptive policy making and comprehensive risk management to support flexible decision-making.
- Approaches to implement, monitor, and evaluate adaptive policies, to improve policy effectiveness.
- Approaches to integrate foresight in adaptive policy making to ensure policies are resilient and capable of evolving with future conditions.
- Approaches to build collaborative networks to enhance policy adaptability and manage shared risks, fostering cross-sectoral innovations.

### Module 4.4.1 Foundations of adaptive policy making

S  
P  
F

- > Understand the concept and importance of adaptive policy making in uncertain environments, distinguishing it from traditional approaches.
- > Explore the characteristics of adaptive policies and how they differ from traditional policy making approaches.
- > Understand comprehensive risk management processes, including identification, analysis, prioritisation, and the development of mitigation strategies.
- > Learn about the use of risk management tools and frameworks that support adaptive decision-making.

#### **Module 4.4.2 Implementing, monitoring, and evaluating adaptive policies**

S  
P  
F

- > Learn the key steps and challenges in implementing adaptive policies, including stakeholder engagement and resource allocation.
- > Harness techniques for monitoring policy effectiveness and leveraging feedback for policy adaptation.
- > Explore methodologies for evaluating the impact of foresight activities on policy making and adaptation strategies.

#### **Module 4.4.3 Foresight in adaptive policy making**

S  
P  
F

- > Understand the role of foresight and scenario planning in adaptive policy making, with an emphasis on resilience and flexibility.
- > Gain practical skills in using scenarios to evaluate policy options under various future conditions.
- > Learn to build adaptive policies by embedding adaptability and scalability, ensuring long-term policy relevance.

#### **Module 4.4.4 Building collaborative networks**

S  
P  
F

- > Explore strategies for building and maintaining cross-sectoral collaborations to support adaptive governance.
- > Develop approaches for engaging stakeholders in the co-creation of policies and in managing shared risks.
- > Understand how collaborative networks can foster innovation and enhance the adaptability of policies.

# PROGRAMME 5

## STRATEGIC GOVERNANCE AND COLLABORATION PROGRAMME

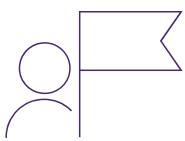
Programme 5 focuses on 'future oriented' practices and collaboration in policy development. The learning content of this Programme addresses the growing need for governments to become more forward looking, strategic and visionary to handle more effectively long-term global and international trends and complex multidimensional challenges in policy making.

The Programme aims to address specific challenges in government such as the 'pull of short termism' at the expense of a more strategic and future proof policymaking process; a prevailing silo mentality and lack of cross sectoral collaboration; ad hoc decision-making; a poor understanding of international commitments and legislation and how this lack of understanding impacts national policies and decision making; limited practices of analysing global trends and technological innovations as integral components of policymaking processes; underdeveloped networks weaving and system stewardship.

The Programme equips participants with the essential tools and understanding needed for anticipatory innovation governance aimed at inclusive, representative, innovative, and forward-looking policies. It enhances experimentation, collaboration and shared learning across sectors and government functions, integration of international policies within the national policy frameworks, and the use of emerging technologies and the creation of a culture of long termism and futures-thinking to understand global trends and prepare for an uncertain future. It underscores the critical need for governments to embed anticipatory innovation governance capabilities, to develop systems thinking and stewardship, to weave networks and to foster innovative ecosystems in order to prevent crises and increase legitimacy.

### Programme 5 audience by roles

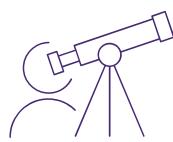
This Programme is aimed primarily at **senior leaders** and **policymakers**.



The content of this Programme is important for **senior leaders** in government because they hold the agency and responsibility for setting a vision, creating and enabling an environment for change, specifically breaking silos and encouraging cross sectoral interconnectedness and collaboration, making executive decisions and reviewing organisational mandates, allocating resources and modelling values and behaviours.



**Policymakers** play a key role in engaging the whole of government across sectors and organisations, promote a culture of interconnection and collaboration in policy making and collective problem-solving, analyse international policies and global trends that affect national priorities, weave networks and promote system thinking and forward looking across government. Hence, policymakers need to be familiar with and use the knowledge, tools, and skills necessary to produce more collaborative, innovative, and resilient policies that serve the government and the public.



**Foresight producers** will need to understand what is required from them to support policymakers and senior leaders to foster foresight and future-proofing capabilities across government and public sector organisations and provide subject matter expertise throughout the prioritisation, the problem solving and decision-making processes.

## Suggestions for trainers

Trainers of this Programme require a good knowledge of anticipatory innovation governance as it relates to innovative, experimental, collaborative and iterative policy making. Trainers would also need to be familiar with international policies and global trends that are relevant to government work; network weaving methods and tools; and the understanding of how institutions and organisations evolve and change. The use of case studies, action learning and peer to peer learning should be considered among the methods to transfer knowledge and create capability.



## PROGRAMME 5: STRATEGIC GOVERNANCE AND COLLABORATION PROGRAMME

### Course 5.1 Breaking silos and building collaboration

<b>Module 5.1.1</b> Understanding silos and their impact	<b>S</b> <b>P</b> <b>F</b>	<b>Module 5.1.2</b> Engaging across the system	<b>S</b> <b>P</b> <b>F</b>	<b>Module 5.1.3</b> Tools for enhancing teamwork and breaking silos	<b>S</b> <b>P</b> <b>F</b>	<b>Module 5.1.4</b> Leading diverse and cross-functional teams	<b>S</b> <b>P</b> <b>F</b>
---	----------------------------------	---	----------------------------------	--	----------------------------------	---	----------------------------------

### Course 5.2 Designing robust policy frameworks aligned to national, organisational and global priorities

<b>Module 5.2.1</b> Challenging the pull of 'short-termism' in your organisation	<b>S</b> <b>P</b> <b>F</b>	<b>Module 5.2.2</b> Integrating international priorities and commitments and addressing global challenges in national policy making	<b>S</b> <b>P</b> <b>F</b>	<b>Module 5.2.3</b> Aligning long term priorities	<b>S</b> <b>P</b> <b>F</b>
---	----------------------------------	--	----------------------------------	--	----------------------------------

### Course 5.3 Strengthening anticipatory innovation governance

<b>Module 5.3.1</b> Understanding AIG: agency and authorizing environment	<b>S</b> <b>P</b> <b>F</b>	<b>Module 5.3.2</b> Building and nurturing anticipatory culture, skills, and organizational capacity	<b>S</b> <b>P</b> <b>F</b>	<b>Module 5.3.3</b> Innovative ecosystems and foresight integration	<b>S</b> <b>P</b> <b>F</b>
--	----------------------------------	---	----------------------------------	--	----------------------------------

### Course 5.4 Network weaving and systems stewardship

<b>Module 5.4.1</b> Introduction to network weaving	<b>S</b> <b>P</b> <b>F</b>	<b>Module 5.4.2</b> Building collaborative networks and developing a networks mindset and culture	<b>S</b> <b>P</b> <b>F</b>	<b>Module 5.4.3</b> Systems stewardship in the public sector	<b>S</b> <b>P</b> <b>F</b>	<b>Module 5.4.4</b> Techniques for effective public engagement	<b>S</b> <b>P</b> <b>F</b>
--	----------------------------------	--	----------------------------------	---	----------------------------------	---	----------------------------------

Figure 9. Programme 5 courses and modules



## Course 5.1 Breaking silos and building collaboration

This course aims to enable participants to address complex multisectoral and multidimensional challenges in policy making by exploring strategies to break prevailing silos within government and its organisations; enhancing policy coherence and effectiveness through cross-sectoral and cross-systems collaboration and the creation of cross-functional teams and mindsets; adopting flexible and strategic communication that adapts to changing internal and external environments; promoting a systems-thinking mindset to understand and address complex challenges through a holistic lens; understanding and using those tools that support participation, cross-sectoral learning and ideas sharing.

This course emphasises the urgency and importance for governments to adopt a holistic approach to policy making and to transform the way government business is conceived and conducted by embracing innovative practices, values, culture, and systems that increase its capability to address multidimensional and complex national and global challenges.

This course is aimed primarily at senior leaders and policymakers.

### Learning outcomes

By the end of this course senior leaders and policymakers will know, understand, and apply how to:

- Analyse silos and their impact on organisational performance and innovation, exploring strategies to overcome them.
- Engage across sectors/systems to foster cross-sectoral collaborations and partnerships, enhancing policy coherence and effectiveness.
- Enhance teamwork and collaboration, breaking silos and fostering a culture of cooperation.
- Lead diverse and cross-functional teams to address complex policy issues, valuing diversity and cross-functional expertise.

### Module 5.1.1 Understanding silos and their impact

S  
P  
F

- > Recognize the structural and cultural factors that lead to silo formation in organisations.
- > Assess how silos impact organisational performance, innovation, and employee morale.
- > Explore strategic approaches to creating a unified vision to overcome silos, drawing on real-world examples.
- > Analyse the effectiveness of different strategies in breaking down silos through case studies.

S  
P  
F

### Module 5.1.2 Engaging across the system

- > Master cross-sector communication techniques to bridge organisational divides and foster external collaborations.
- > Understand how to map and leverage networks and ecosystems.
- > Explore how to craft engagement strategies that bridge functional divides within organisations and foster collaborations with external partners, stakeholders, and sectors.
- > Learn to design flexible and adaptive strategic communication plans that can evolve in response to changing organisational and external environments.
- > Cultivate a systemic thinking mindset that encourages looking beyond immediate functional silos to understand and address complex challenges through a holistic lens.
- > Develop leadership skills that are pivotal for navigating and managing cross-sectoral collaborations, including effective negotiation, consensus-building, and conflict resolution techniques.

S  
P  
F

### Module 5.1.3 Tools for enhancing teamwork and breaking silos

- > Discover and apply tools and methodologies that enhance teamwork and collaboration, such as project management software and collaborative platforms.
- > Learn to design and facilitate effective meetings and workshops that encourage participation and idea sharing.
- > Implement collaborative project management techniques that ensure alignment and accountability.

S  
P  
F

### Module 5.1.4 Leading diverse and cross-functional teams

- > Build a collaborative organisational culture that values diversity and cross-functional teamwork.
- > Understand the dynamics of cross-functional teams and how to effectively assemble, lead and manage them.
- > Develop strategies for managing diverse teams, including conflict resolution and motivation techniques.
- > Develop leadership skills for motivating diverse teams, resolving conflicts, and managing team performance.
- > Measure the impact of collaborative efforts, using metrics and KPIs, to guide continuous improvement.



## Course 5.2 Designing robust policy frameworks aligned to national, organisational and global priorities

This course aims to enable participants to make government policies more resilient, innovative and relevant through: tackling the pull of 'short termism' and promote long-term forward looking policies; aligning long-term priorities across the policy and political spectrum; aligning national policies with international commitments; understanding and analysing global issues and global trends and integrating them into national policies and strategies.

This course emphasises the urgency and importance for governments to adopt innovative practices, values, culture, and systems to increase its ability to be strategic, forward looking, and responsive to national, international and global priorities.

This course is aimed primarily at senior leaders and policymakers.

### Learning outcomes

By the end of this course policymakers, senior leaders, and foresight producers will know, understand, and apply how to:

- Challenge the pull of 'short-termism' to prioritise long-term sustainability and resilience in policy making.
- Integrate international priorities and commitments into national policy frameworks, ensuring policies are globally informed and locally relevant.
- Address global challenges in national policy making by incorporating global perspectives and trends into strategic planning.
- Align long-term priorities across the political and policy spectrum, building consensus for sustainable, resilient and future-oriented policy initiatives.

#### Module 5.2.1 Challenging the pull of 'short -termism' in your organisation

S  
P  
F

- > Critically identify and address the underlying causes of 'short-termism' within the policy making process at individual, team, and organisational levels.
- > Design and implement policy processes promote sustainable, long-term outcomes engaging with forward-looking advice and leveraging leadership commitment to enact policy interventions, incentive structures, and performance metrics).
- > Use frameworks and tools that facilitate a comprehensive understanding of an organisation's readiness and capacity for future-oriented thinking.
- > Understand how to create policies and strategies that proactively address long-term trends and potential disruptions.
- > Explore effective communication and engagement techniques to build consensus around the value of long-term goals, ensuring policies are robust, resilient, and aligned with national and international priorities.

S  
P  
F

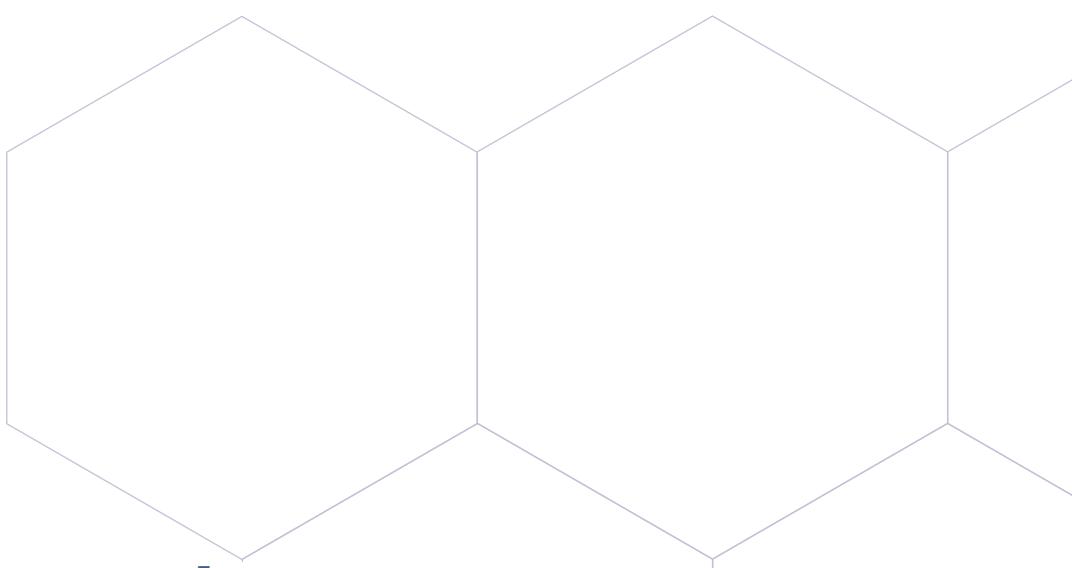
### **Module 5.2.2 Integrating international priorities and commitments and addressing global challenges in national policy making**

- > Understand and analyse the impact of international politics and long-term commitments, such as the SDGs, on national policy making and frameworks in the short, medium, and long-term, focusing on alignment and integration challenges.
- > Develop strategies to harmonise national policies with international commitments, considering policy content, impact assessment, and financing.
- > Explore practical examples of successful integration of international priorities into national policy making.
- > Learn to address current global and societal challenges, evaluating their effects on national policies across different time horizons.
- > Understand the role of mission-oriented innovation and missions in addressing complex societal challenges, and how to govern, manage, monitor and evaluate missions.
- > Understand how to analyse and address global issues and trends as integral components of national policy making processes.

S  
P  
F

### **Module 5.2.3 Aligning long term priorities**

- > Engaging across the political spectrum for more resilient policy making
- > Exploring and supporting the wider demand side to create space for political and financial commitment over time.
- > Build and sustain alignment across various policy areas and timeframes, ensuring coherent and future-oriented policy making.
- > Communicate the benefits of long-term policy approaches to stakeholders, including citizens and youth, to garner broad support.





## Course 5.3 Strengthening anticipatory innovation governance

This course aims to enable participants to strengthen anticipatory innovation governance within their government structures through: effective institutionalisation of anticipatory governance skills, culture and capability across government; continuous exploration of innovation and future readiness in anticipatory policy making including technological innovations; amplifying anticipatory and innovation capabilities through collaboration and foresight integration in government business.

This course emphasises the urgency and importance for governments to adopt practices, values, culture, and systems to increase its anticipatory innovation governance capability across government thereby increasing its resilience, inclusivity and responsiveness to national and global priorities.

This course is aimed primarily at senior leaders and policymakers.

### Learning outcomes

By the end of this course policymakers, senior leaders, and foresight producers will know/understand/apply:

- anticipatory innovation governance and its significance for proactive and resilient public services, including the role of agency and authorising environments.
- How to build institutional structures and organisational capacity to support innovation and future readiness, integrating anticipatory practices into governance.
- The role of technology and innovation in supporting anticipatory innovation governance.
- How to nurture an anticipatory culture, including the skills, and capacity within organisations to embrace change and prepare for future challenges.
- How to foster innovative ecosystems and foresight integration to encourage collaboration, experimentation, and shared learning, amplifying anticipatory and innovative capabilities.

### Module 5.3.1 Understanding anticipatory innovation governance: agency and authorising environment

S  
P  
F

- > Define anticipatory innovation governance and its importance in creating proactive and resilient public services.
- > Explore the role of agency and the significance of an authorising environment in fostering innovation within public sector organisations.
- > Analyse frameworks and strategies for establishing supportive governance structures that enable anticipatory innovation.

### Module 5.3.2 Building and nurturing anticipatory culture, skills, and organisational capacity

S  
P  
F

- > Understand the components of effective institutions and governance systems that support anticipatory innovation and future readiness.
- > Develop strategies for enhancing organisational capacity to address emerging challenges and leverage new opportunities.
- > Learn techniques for integrating and cultivating an anticipatory culture within organisations, emphasising openness to change and future preparedness.
- > Identify key skills and capacities needed for effective anticipatory innovation governance and learn strategies for their development.

### Module 5.3.3 Innovative ecosystems and foresight integration

S  
P  
F

- > Explore the concept of building innovative ecosystems and their role in supporting anticipatory governance.
- > Learn methods for embedding foresight and future-proofing capabilities across government and public sector organisations.
- > Develop strategies for orchestrating ecosystems that encourage collaboration, experimentation, and shared learning.



## Course 5.4 Network weaving and systems stewardship

This course aims to enable participants to make government policies more responsive, innovative and sustainable through: building and managing networks across sectoral and organisational ecosystems; co-creating policies and promoting collaborative problem solving through effective public and stakeholders engagement; and strengthening system stewardship for delivering inclusive and sustainable solutions.

This course emphasises the urgency and importance for governments to adopt innovative practices, values, culture, and systems to manage complexity, interdependencies and systemic challenges in supporting positive policy outcomes and meeting societal goals.

This course is aimed primarily at senior leaders and policymakers.

### Learning outcomes

By the end of this course senior leaders, policymakers, and foresight producers will know, understand, and apply:

- Network weaving and its critical role in facilitating collaborative and innovative ecosystems across organisations and sectors.
- How to Identify, establish, and nurture productive relationships and networks that support policy objectives and societal goals.
- Principles of systems stewardship as a means of guiding complex systems towards sustainable outcomes, emphasising the stewardship role in managing interdependencies and systemic challenges.
- How to develop a networks mindset and culture within organisations, promoting interconnectedness, collaboration, and collective problem solving to address public policy and governance challenges.
- Application of systems thinking and network theories to enhance the effectiveness of public engagement strategies, ensuring policies are co-created with communities and stakeholders for better outcomes.

### Module 5.4.1 Introduction to network weaving

S  
P  
F

- > Define network weaving and its principles, understanding its role in facilitating collaboration and innovation within and across organisations.
- > Learn to identify key actors and relationships that form the basis of effective networks.
- > Develop skills in weaving networks that enhance information flow, collaboration, and resource sharing.

#### **Module 5.4.2 Building collaborative networks and developing a networks mindset and culture**

S  
P  
F

- > Understand the dynamics of building and managing collaborative networks, including trust-building, communication, and the maintenance of shared goals.
- > Explore tools and platforms that support network management and enhance collaborative efforts.
- > Learn and implement strategies for fostering a culture within organisations that supports network thinking and collaborative problem solving and innovation.
- > Analyse case studies where a network's mindset has led to breakthrough outcomes in public policy and governance.

#### **Module 5.4.3 Systems stewardship in the public sector**

S  
P  
F

- > Understand the concept of systems stewardship and its importance in guiding complex systems towards desirable outcomes.
- > Learn to apply systems thinking in the stewardship role, managing interdependencies, and navigating systemic challenges.
- > Develop competencies in engaging stakeholders in systems stewardship, ensuring inclusive and sustainable solutions.

#### **Module 5.4.4 Techniques for effective public engagement**

S  
P  
F

- > Explore the key elements for Effective Public Engagement such as inclusivity; transparency, two-way communication, feedback loops; conflict resolution, accountability; accessibility and educational activities.
- > Explore methodologies for effectively involving citizens and communities in the policy making process, enhancing democratic participation and legitimacy.
- > Understand the benefits of participatory governance models in building public trust and co-creating more responsive policies.
- > Learn to leverage digital and traditional platforms for community engagement, ensuring broad and inclusive participation in governance processes.

## NEXT STEPS

Here are a few resources to help as you set out to design and implement your curriculum. We have focused on key texts that help you to understand more about what anticipatory innovation governance is and the role of strategic foresight.

It is not intended to be a comprehensive set of materials for curriculum, so please reach out to the OECD OPSI team if you are looking for additional support or to connect with potential specialists or training providers who might be able to support you in designing and implementing a curriculum based on your needs.

Building capability takes time and anticipatory innovation governance as an ongoing practice requiring continuous investment and reflection rather than a set of isolated efforts. This requires a commitment to iterations and adjustments in the approach and towards better decision making and politics.

To dive deeper into developing capability and skills for anticipatory innovation governance, reach out to the OECD OPSI team for further guidance via this email [opsi@oecd.org](mailto:opsi@oecd.org). Additional reading resources can be found on [OPSI's webpage](#).

### Essential reading resources on the use of anticipatory innovation governance and in policy making

OECD (2020) Anticipatory Innovation Governance: Shaping the future through proactive policy making ([Report link](#)).

OECD (2021) Towards an Anticipatory Innovation Governance Model in Finland ([Report link](#)).

OECD (2023) The public governance of anticipatory innovation ecosystems in Latvia: Exploring applications in key sectors ([Report link](#)).

OECD (2023) Supporting decision making with strategic foresight ([Report link](#))

Jeo, K. and Seo, Y.(2021) Anticipatory governance for newcomers: lessons learned from the UK, the Netherlands, Finland, and Korea European Journal of Futures Research 9:9

School of International Futures (2021) Features of effective systemic foresight in governments around the world ([Report link](#)).

### Introductions to strategic foresight in policy making

Brooks Masters, S. (2022) Imagining Better Futures for American Democracy. Democracy Funders network.

Craig, C. (2018) How does government listen to scientists? Palgrave

Mintzberg, H. and Jorgensen J. (1987) Emergent Strategy for Public Policy, Canadian Public Administration 30 (2) pp 214-229 (15p) Wiley

Mulgan, G. (2021) Gathering rigorous evidence to inform policy decisions

OECD (2019) Strategic Foresight for Better Policies. Building Effective Governance in the Face of Uncertain Futures

Scoblic, P. (2020). Learning from the Future. [online] Harvard Business Review

Slaughter, R. (n.d.). Developing and Applying Strategic Foresight

Tully, C., and Quaggiotti, G. (2022) Public Sector Innovation has a First Mile Problem Apolitical

# GLOSSARY

<b>Agency</b>	Agency denotes the tools, methods and information resources that enable public servants and organisations to anticipate and innovate in practice. <sup>1</sup>
<b>Alternatives</b>	Alternatives exploration is the ability to consider different policies, service models or modes of intervention that may be in conflict with current strategic intent. <sup>1</sup>
<b>Anticipation</b>	Anticipation is the act of creating actionable knowledge about the future drawing on the existing contextual factors, values and worldviews, assumptions, and range of emerging developments. <sup>1</sup>
<b>Anticipatory Culture</b>	An organisational culture that emphasises looking forward and preparing for future challenges and opportunities.
<b>Anticipatory Innovation</b>	Anticipatory innovation is acting on the knowledge about the future by creating something novel that has an impact on public values. <sup>1</sup>
<b>Anticipatory Innovation Governance</b>	Anticipatory innovation governance relates to the structures and mechanisms in place that allow and promote anticipatory innovation to occur alongside other types of innovation. <sup>1</sup>
<b>Authorising Environment</b>	Authorising environment is the system within the public sector that validates anticipatory innovations – providing feedback that there is demand, value, and use for the work. <sup>1</sup>
<b>Cognitive Biases</b>	Tendencies to perceive and process information from an individual's 'subjective reality' - rather than objective input - that can lead to systematic deviations from standard rationality or good judgement.
<b>Collaborative Networks</b>	Groups or systems of interconnected people or organisations working together towards common goals across various sectors.
<b>Community of Practice</b>	A group of people who share a concern, passion, or goal for a practice that seeks to improve through knowledge sharing and regular interaction.
<b>Complex Adaptive Systems (CAS)</b>	Complex systems, composed of individual agents, that interact and adapt in response to shifting conditions. The sum of the system is greater than the parts, making the system difficult to predict. <sup>2</sup>
<b>Complexity</b>	Complexity in policy making outlines the dependence of systems of people, institutions and dynamic environmental factors that all tend to influence each other making it difficult to ascertain the nature of policy problems and therefore also how to manage them. <sup>1</sup>

<b>Cross-Sectoral Collaboration</b>	Cooperation between different sectors of society, including public, private, and non-profit, to achieve common objectives.
<b>Data Analytics</b>	The science of analysing raw data to make conclusions about that information, used extensively in policy making for evidence-based decisions.
<b>Decision Making Under Deep Uncertainty (DMDU)</b>	Approaches and methodologies used when decision-makers face profound unknowns and cannot rely on past data alone.
<b>Design Thinking</b>	A human-centred approach to design that integrates the needs of people, challenges assumptions, and explores innovative solutions. <sup>3</sup>
<b>Experimental Policy Design</b>	Systematic experimentation in the policy design process to test and measure the efficacy and cost-effectiveness of policy interventions. <sup>4</sup>
<b>Experimentation</b>	Experimentation means creating new knowledge by putting the approach in place with the necessary structures to find out if it works. There are a wide range of experimental methods suited to different purposes from randomised control trials (RCTs) to A/B tests. <sup>1</sup>
<b>Futures Literacy</b>	Futures literacy is the capacity to explore the potential of present conditions to give rise to multiple, diverse futures. <sup>1,5</sup>
<b>Futures Thinking</b>	The capacity to explore, envision, and anticipate possible futures to guide present-day decisions and actions.
<b>Global Challenges</b>	Broad, interconnected, and complex issues that transcend national borders and require collective action to address.
<b>Horizon Scanning</b>	The systematic detection of early signs of potential threats, opportunities, and important developments that could occur in the future.
<b>Innovation in Policy Making</b>	The introduction of improved or novel methods, ideas, or products to improve policy effectiveness and address complex issues.
<b>Innovative Ecosystems</b>	Networks of diverse stakeholders that facilitate the development of capabilities, knowledge, and innovative solutions and services.
<b>Intergenerational Fairness</b>	The principle of ensuring that policy decisions meet the needs of the present without compromising the ability of future generations to meet their own needs. <sup>6</sup>
<b>International Commitments</b>	Obligations or pledges made by countries to adhere to international standards or agreements, such as the SDGs.

<b>Network Weaving</b>	The act of connecting individuals and organisations in meaningful ways to facilitate information flow and collaboration.
<b>Organisational Capacity</b>	The capabilities and resources that organisations possess to effectively implement their strategies and policies.
<b>Participatory Futures</b>	Methods that engage a broad and diverse group of people in imagining and exploring future possibilities to inform current decisions.
<b>Participatory Policy Making</b>	The inclusion of a wide range of stakeholders in the policy making process (including proposition, debate, and vote) to ensure policies are relevant and resilient.
<b>Policy Adaptation</b>	Adjustments or changes made to policies in response to new information, feedback, or changing circumstances.
<b>Policy Co-Creation</b>	Collaborative policy development that involves stakeholders from various sectors in the design and implementation of policies.
<b>Policy Cycle</b>	Policy cycle includes 1) identifying policy priorities 2) drafting the actual policy document, 3) policy implementation; and 4) monitoring implementation and evaluation of the policy's impacts. <sup>1</sup>
<b>Policy Frameworks</b>	Structured plans or guidelines that outline the policies, procedures, approach, and regulations for achieving policy objectives.
<b>Proactive Culture</b>	An organisational or societal culture that prioritises anticipatory actions to address future challenges efficiently.
<b>Public Sector Innovation</b>	Public sector innovation is a novel approach that is implemented and aimed to achieve impact (such as change in public values). <sup>1</sup>
<b>Risk Aversion</b>	The tendency to avoid risk, preferring to avoid losses over acquiring equivalent gains; it can stifle innovation and proactive policy making.
<b>Risk Management</b>	The process of identifying, assessing, and managing threats to an organisation's or policy's success.
<b>Scenario Planning</b>	A strategic planning method that organisations use to make flexible long-term plans based on exploring multiple uncertain futures.
<b>Signal Detection</b>	The practice of identifying early indicators of potential trends or changes that might impact future policy or strategic directions.
<b>Stakeholder Engagement</b>	The process of proactively involving individuals, groups, or organisations in the policy cycle who may be affected by or can influence a decision or policy. This can include exchanging knowledge, expertise, and experience.

<b>Strategic Foresight</b>	Strategic foresight is an established practice of an organisation to constantly perceive, make sense of, and act upon the future as it emerges in the present. <sup>1</sup>
<b>Strategic Planning</b>	The process of defining an organisational strategy or vision for the future and making decisions on allocating resources and taking action to achieve it.
<b>Systems Thinking</b>	Systems thinking denotes a broad range of methods that help to demonstrate how systems are structured and how they operate. Systems approaches help to reflect on how best to use this knowledge to take action (i.e. design and design thinking) by devising proposals to be tested and implemented as system interventions. <sup>1</sup>
<b>Uncertainty</b>	Uncertainty denotes a situation where risks connected to policy problems cannot be calculated (whereas with risk the probability distribution is known or predictable). <sup>1</sup>
<b>Values, Attitudes, and Incentives</b>	Core organisational elements that influence behaviour, priorities, and decision-making within policy making contexts.
<b>Weak Signals</b>	Early indications of potentially important shifts in trends or behaviours, which may indicate future events or changes.

## **ACKNOWLEDGEMENTS AND CONTACT INFORMATION**

This guidebook has been developed on initiative from the OECD Observatory of Public Sector Innovation and designed in collaboration with the School of International Futures team Caterina Alari, Catarina Zuzarte Tully, Darja Vrščaj, Dawson Markle and Peter Glenday. The guidebook has been developed within the context of the LIMinal project, which seeks to strengthen strategic foresight and anticipatory governance practices in the public sector, in collaboration with Lithuania, Italy, and Malta

Thank you to Jack Orlik, Joshua Polchar, Emily Bakos, Rafal Kierzenkowski, Naoko Kawaguchi, Dexter Docherty, Rodrigo Dal Borgo, Piret Tõnurist, Daniel Gerson, Toby Baker, and Heather Buisman, for contributing and reviewing. Thank you also to peers from Ireland, Finland, Norway, and Wales, for feedback and inspiration.

The LIMinal project is funded by the European Commission Technical Support Instrument.

### **Contact information**

[Angela.Hanson@oecd.org](mailto:Angela.Hanson@oecd.org)

## **ANNEX 1: SUMMARY OF CHALLENGES IDENTIFIED IN THE LIMINAL PROJECT**

- Reliance on external analysis not tailored to our context and futures. Undeveloped capacity for evaluation and evidence use reduce ability to explore and operate flexibly in uncertain situations.
- Recent examples of crises have prompted a recognition of the need to prepare for future risks and challenges that needs to be addressed.
- Limited and inconsistent understanding of the approaches of strategic foresight. Many have the perception that the main application of foresight is for strategic planning. While training modules that focus on quantitative approaches to forecasting and prediction exist, not much exist on qualitative approaches of foresight that consider uncertainty or stress-test strategies against a wide range of future changes.
- Short political cycles mean that most policies have a limited time horizon to produce results and are likely to prioritise economic growth over other objectives such as the SDGs. There is a lack of long-term financial planning. Mechanisms for continuity across policy cycles are few, to hindrance of the promotion of long-term exploration, futures-thinking & learning.
- Silo mentality persists, limited cross-sectoral coordination, hindrance to ensuring foresight can be applied to address horizontal issues.
- Better listening to the key stakeholders about what they feel is working well (to collect future signals and build trust in future visions) and is not working well to understand gaps, what is possible where. Identifying what will be the future challenges to adopt more of a preventive approach rather than a reactive approach.
- The innovative potential of government institutions seems to be limited by a punitive culture which seeks to blame when new ideas do not respond to expectations and interests, which is hindering promotion of proactivity and encouragement of a more adaptive attitude towards change.
- Public consultation is rare and has limited impact on decision-making, so remains undeveloped as a source of legitimacy and intelligence for policy making.
- A strategic foresight community of practice which can help disseminate capabilities create government-wide capacity and increase strategic foresight demand is lacking.
- Efforts to enhance networks and partnerships can help break down silos and disseminate futures knowledge, capabilities and skills across government\
- Previous foresight processes have dealt with political scepticism and reluctance to use foresight, due to a lack of understanding of what strategic foresight is and the usefulness of its tools and methods for policy and strategy development, and leadership not having been communicated on regarding the value of strategic foresight.
- Initiatives with collaborative governance approaches have existed, however, citizen participation in foresight processes is limited and can be disconnected from government action.
- Predominance of public servants with a legal background inhibits innovation, and there is low and poorly distributed awareness of the value of foresight in the public service. Problem solving skills requiring creative thinking are lacking.

- Networks and partnerships with external expertise are underdeveloped or disconnected from public administration. Academics and think tanks are not systematically engaged.
- There is a lack of cross sectoral and vertical coordination to explore synergies, trade-offs, and preferred futures.
- Processes for evidence collection, monitoring and evaluation to adapt and adjust policies are underdeveloped, learning loops are not well established. Monitoring of policies is largely seen as a formal reporting activity.
- There is a perceived overall challenge to ensure an authorising environment to iterate existing strategies across ministries, and without mechanisms for continuity of ministerial strategies across political cycles promotion of long-term exploration, futures thinking & learning is hindered.
- Where strategic foresight will sit in government is currently not clear, the strategic foresight ecosystem is forming but underdeveloped and requires further institutional discussions for legitimacy.
- Foresight lacks the legitimacy of high-level engagement, top-level awareness of the value of foresight is limited, resulting in a lack of engagement and legitimacy, even if recent crises have fostered a recognition of the value of foresight as a discipline to improve preparedness, to adopting new ways of working to explore and address uncertainty.
- A predominantly legal and compliance-oriented approach to policy making obstructs new approaches, and decision making.
- Processes are predominantly top-down and reactive. Decision-makers are strongly attached to certainty, routine and compliance. Strategic planning remains undeveloped in government and administration.
- Evaluation aiming to assess impacts of policy is common, but largely technical and not informed by in depth evaluation and public debate.
- The influence of international engagement and the EU is likely to increase the need for futures capabilities, such as participation in European projects and adoption of EU policies, providing impetus and inspiration for futures thinking.
- Such legislation that could have long-term effect on economy has prompted exploration of future impacts.
- Evaluation is largely focused on legal aspects.
- Continuous, not one-time efforts, are needed to ensure collaborative policymaking with foresight

## ENDNOTES

1. OECD (2022), "Glossary of terms", in Anticipatory Innovation Governance Model in Finland: Towards a New Way of Governing, OECD Publishing, Paris, <https://doi.org/10.1787/of301418-en>
2. Sullivan, T. (2011, September). Embracing Complexity. Harvard Business Review. Retrieved March 25, 2024, from <https://hbr.org/2011/09/embracing-complexity>
3. Interaction Design Foundation - IxDF. (2016, May 25). What is Design Thinking (DT)?. Interaction Design Foundation - IxDF. <https://www.interaction-design.org/literature/topics/design-thinking>
4. Centre for Public Impact. (2018). A brief introduction to policy experimentation. Centre for Public Impact. <https://www.centreforpublicimpact.org/assets/documents/CPI-A-brief-introduction-to-Policy-experimentation.pdf>
5. (n.d.). Futures Literacy. Retrieved March 25, 2024, from <https://futuresliteracy.net/>
6. School of International Futures. (n.d.). Intergenerational Fairness Collaboratory - Putting fairness into practice through assessment. School of International Futures. Retrieved March 25, 2024, from <https://soif.org.uk/igf/>