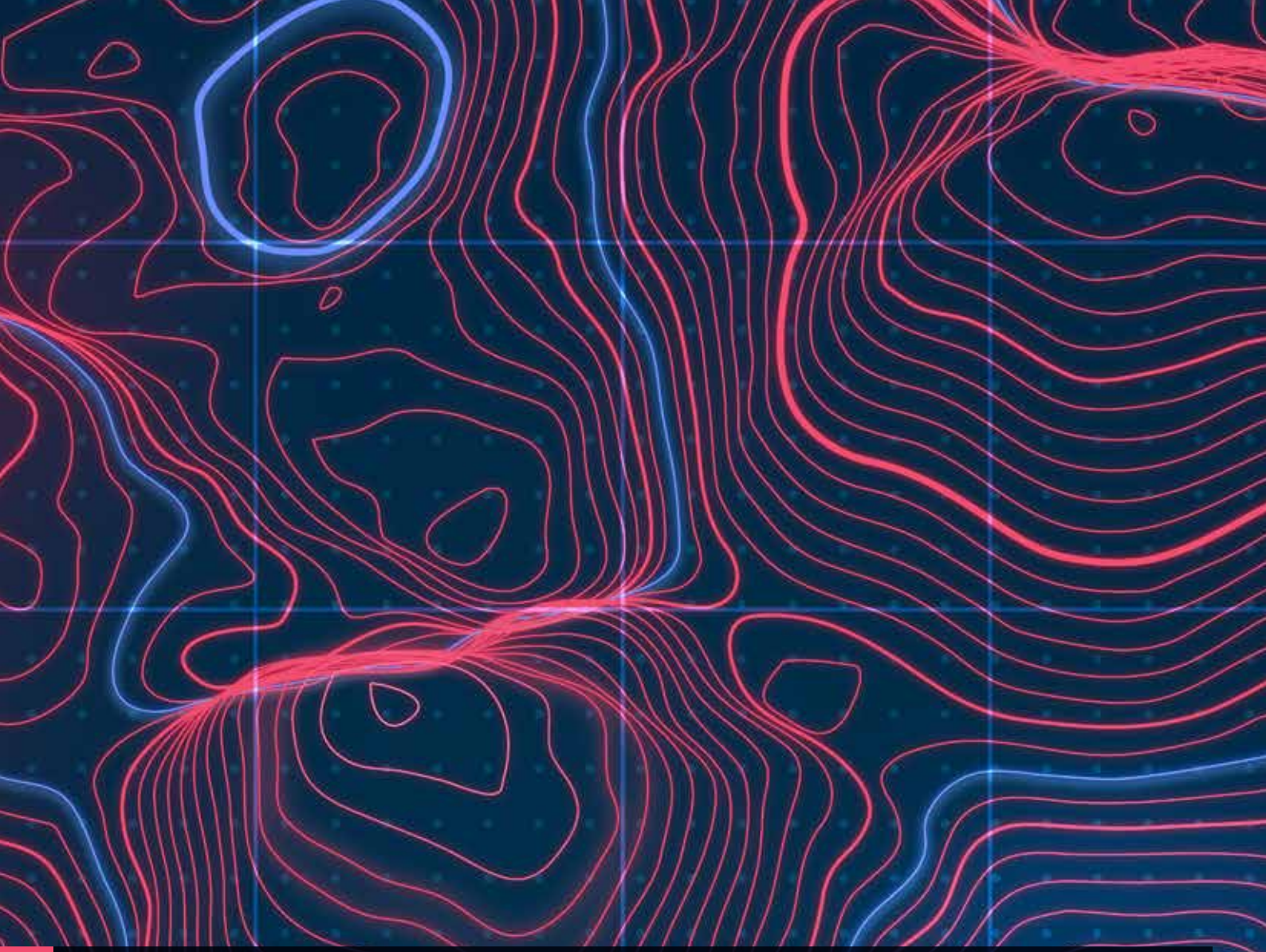

Towards an anticipatory innovation governance model in Finland

INTERMEDIATE REPORT

This report contains a preliminary assessment of the anticipatory innovation system in Finland as it emerges from the interviews and validations workshops carried out in Finland between October 2020 – April 2021. This work will be accompanied with a set of practical case studies and feed into a final OECD report to be completed in June 2022. This work has been supported by the Directorate General for Structural Reform Support (DG REFORM) of the European Commission under the grant REFORM/IM2020/04.

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EXECUTIVE SUMMARY

In today's environment, complex systems and problems have become the norm rather than the exception. Governments are struggling to make sense of and respond to them adequately not only in preparing for crises, but also considering future opportunities. Dividing responsibilities or allocating risks to specific policy areas have proved insufficient to address the scale and interrelatedness of emerging complex challenges. Traditional approaches are especially inadequate in coping with fast-paced change, uncertainty and unpredictable events as well as the cascading consequences that come with them.

In order to respond to these challenges, governments need to develop a capacity to actively explore possibilities, experiment, and continuously learn as part of a broader governance system. This broad-based capacity is referred to as anticipatory innovation governance. The OECD is working with the government of Finland and the European Commission to examine how the country's governance processes and mechanisms need to be transformed to deal with complex and future challenges in a systemic manner. The ultimate goal is to create a stewardship model in the government of Finland incorporating the anticipatory innovation function.

There is limited guidance and paradigms available to governments on how to develop anticipatory capacities to prepare for unknowable futures.[1] Governments' structures and operations are traditionally geared to respond to well identified and sequential challenges rather than tackling grand challenges of complex and uncertain nature. Classic steering mechanisms often fails to acknowledge the complexity and interdependence of policy issues. The future of climate change depends on a system of human and natural complexity that extends from the lifecycles of micro-bacteria, to scientific advancement, to elections across the world. Economic and social security futures hinge on climate change, global trade flows, and how quickly and effectively the global community responds to threats like pandemics. Anticipatory innovation governance can help national and international decision makers not only make sense of the ambiguity of future-oriented policy issues but also avoid being paralysed by them, and start working on them using a variety of tools and methods to explore and shape those futures.

The initial study provides an assessment of the current public policy steering system of Finland and its anticipatory capacity based on the OECD's anticipatory innovation governance model (*presented in Chapter 1*). Finland has been systematically developing its public governance system based on the aforementioned challenges over the last decade (*see overview in Chapter 2*) by building up its strategic foresight system, experimentation functions and developing coordination mechanisms that support the uptake of complex challenges.

The aim of the current assessment was to identify persisting gaps and barriers in the current system that may hinder the Finnish government from being future-ready. Between October 2020 and February 2021, the OECD carried out more than 50 semi-structured interviews with policy experts in the Finnish government, civil society and media about how the public sector addresses complex problems and deals with long-term challenges. Between February and April 2021 the findings of the interviews were validated in ten workshops. While all workshops discussed anticipatory innovation governance, most validation workshops were thematic (connected to areas that tend to influence anticipation the most) and covered the following topics: citizens, trust and participation; futures

1 Anticipatory capacity is defined as a "broad-based capacity to actively explore possibilities, experiment, and continuously learn as part of a broader governance system" (Tõnurist and Hanson, 2020).

and foresight; budget and resources; experimentation; individual and organisational capacity; policy cycles and continuity of reforms and coordination across government. One of the workshops tested general findings and ideas brought out of testing and one of the sessions was carried out as part of the Committee of the Future meeting on April 7th, 2021 with the particular focus on futures and foresight and the role of the Parliament.

THIS INITIAL RESEARCH IDENTIFIES SIX MAIN CHALLENGE AREAS FOR THE FINNISH GOVERNMENT TO CONSIDER:

- **Overcoming the strategic foresight impact gap by integrating futures and foresight with core strategic processes, innovation and experimentation.**
  The use of strategic foresight in government appear to suffer from a set of individual, collective, and institutional limitations that prevent the use of high-quality futures knowledge in policy making (i.e., the foresight impact gap). Overcoming this requires building up the government's futures literacy[2] and setting up appropriate structures to integrate strategic foresight within core strategic processes, innovation and experimentation. Furthermore, efforts could be directed to clarifying the roles and responsibilities of the different strategic foresight actors within the system (e.g., the role of ministries and their internal foresight activities compared to government-wide processes) in challenging existing policies or solutions.

- **Opening up the development of policy alternatives connected to future challenges by systematically involving citizens and other stakeholders in future-oriented policy creation.**
  This will require public servants to acquire facilitation skills to work with citizen input, and design open and inclusive policy processes to counter expert bias and groupthink. Bringing strategic foresight out of "narrow circles" and involving more outside and international experts in the work can help bring a diversity of perspectives and keep the focus on long term visions (instead of on reactive response to the crisis of the day). Furthermore, room for considering alternative solutions and experiment needs to be created in strategic policy making processes.

- **Strengthening the capacity of public servants to reflect and act on future policy challenges by increasing access to and experience with anticipatory innovation approaches and tools.**
  This requires going beyond the reliance on individuals for experimentation and innovation efforts in government and expanding the toolbox connected to anticipatory innovation in the Government of Finland. This needs to be coupled with developing leadership skills and capacities that create demand for anticipation and setting up additional support structures and practices in organisations to develop signal reading and anticipatory policy making skills. This includes also tackling issues connected to data access and interoperability that currently limit anticipatory, user-centric and preventive use of data and service development.

- **Ensuring that traditional government policy steering mechanisms – strategic, budgetary and legal – allows for (and do not inhibit) the exploration of policy alternatives and tackling complex problems.**
  Anticipatory capacity involves the ability to challenge current policies, stress-test them on an ongoing basis and actively explore a variety of future opportunities. The conducted research indicates that often strategic, budgetary and legal steering mechanisms act as challenges to future-oriented exploration and policy development in Finland. For example, the current budget emerges as one of the major drivers enforcing organisational silos and inhibits addressing policy phenom-

2 Futures literacy has been defined as the "capacity to explore the potential of the present to give rise to the future" (Miller, 2007), which means recognising that developments in the present are signals of what the future might hold.

ena as complex problems. Regulatory processes are perceived as limiting agile and iterative ways of experimenting with emerging issues, while strategic processes are seen as not offering enough actionable future-seeking moments or as overprescribing solutions up front.

- **Leveraging anticipatory governance mechanisms to allow for complex and long-term policy issues to be collectively understood and sustained across the policy cycle.**
  Most complex policy issues cannot be tackled in a 4-year government term and in some areas like climate change, natural resource management, socio-economic reforms etc. changes need to be considered decades in advance to make a real difference. The conducted research indicates a need to account for the chronological distance between developing visions for alternative futures and their implementation which often spans across several policy cycles. Anticipatory mechanisms could help bridge this gap by reducing time-to-implementation of policies (e.g. through constant iteration and testing). To assure the continuity in development, mechanisms are needed that allow to continue policy exploration and development across policy cycles supported by new evaluation and measurement procedures.

- **Countering governmental silos and creating new ways of collaboration to look at emerging problems in a cross-government manner.**
  The conducted research shows that organisational barriers are still a major obstacle for anticipatory innovation. Tackling this will require increasing mobility across silos and new collaborative architectures (e.g., phenomenon-based taskforces). Also a more unified approach to analyse new emerging problems, how to tackle and assign responsibility for them in government is needed – this would also help to incorporate anticipatory innovation approaches from the start to examine these issues in a more institutionalised manner.

In the following stage of the project, the OECD will support pilots in in Finland in four different areas (outlined in detail in Chapter 6): **(1) continuous learning**, **(2) carbon neutrality** and evidence about the future, (**3) children, youth and family policy**; and **(4) dialogues between politicians and leading civil servants on anticipatory innovation governance roles**. The aim of the pilots is to provide actionable tools and methods across the challenge areas identified in the current assessment and demonstrate the possibility routes to make the system more anticipatory in nature.

GLOSSARY OF TERMS

Agency denotes the tools, methods and information resources that enable public servants and organisations to anticipate and innovate in practice.

Alternatives exploration is the ability to consider different policies, service models or modes of intervention that may be in conflict with current strategic intent.

Anticipation is the act of creating actionable knowledge about the future drawin on the existing contextual factors, values and worldviews, assumptions, and range of emerging developments.

Anticipatory innovation is acting on the knowledge about the future by creating something novel that has impact to public values.

Anticipatory innovation governance relates to the structures and mechanisms in place that allow and promote anticipatory innovation to occur alongside other types of innovation.

Authorising environment is the system within the public sector that validates anticipatory innovations – provides feedback that there is demand, value, and use for the work.

Complexity in policy making outlines the dependence of systems of people, institutions and dynamic environmental factors that all tend to influence eachother making it difficult to acertain the nature of policy problems and therefore also how to manage them.

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.

Futures literacy is capacity to explore the potential of the present to give rise to the future.

Impact gap lack of use of high-quality futures knowledge in policy making, innovation and strategy due to individual, collective, and institutional limitations.

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.

Public sector innovation is a novel approaches that is implemented and aimed to achieve impact (such as change in public values).

Phenomenon-based policy making means addressing phenomena (e.g., climate change, social disintegration, urbanisation, and immigration) for which no single part of the system holds full responsibility for and which require the collaborative interaction of different parts of a system.

Sense making is the act of uncovering underlying assumptions about the future and making sense of signals and trends.

Strategic foresight is structured, participatory and inclusive exercise about plausible futures that deals with the medium to long-term future and helps wit riority-setting and steering policies.

Systems thinking denotes a broad range of methods that help to demonstrate how systems are structured and how they operat

Systems approaces help to refect 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.

Uncertainty denotes a situation where risks connected to policy problems cannot be calculated (whereas with risk the probability distribution is known or predictable).

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Need for a new future-oriented model of governance

NEED FOR A NEW FUTURE ORIENTED MODEL OF GOVERNANCE

Today the need for governments to respond to emerging challenges is particularly acute. More of these widespread events connected to climate change, migration, pandemics and other quickly developing issues are likely to emerge. In this environment, where complex systems and the problems they contain have become the norm rather than the exception, a reactive approach to setting policy is proving increasingly inadequate. Waiting until crises strike to respond has far less value than anticipating and responding innovatively before issues have emerged. Governments need both the ability to respond to unforeseen challenges in an expedient manner – adapt – but also to anticipate different (probable, plausible and possible) futures and prepare for these realities. This is not about introducing more strategic foresight or innovation into government, but building a system that helps policy makers learn from both approaches.

BASED ON A REVIEW OF EXISTING RESEARCH (TÕNURIST AND HANSON, 2020), THE POLICY ENVIRONMENT TODAY IS CHARACTERISED BY:

- **Complexity.** In the policy context, complexity can derive both from underlying characteristics of wicked problems, and also due to competing interests in a policy area (Peters, 2005). Wicked problems are characteristically open-ended, inter-connected and without clear, pre-determined pathways to solutions (Rittel and Webber, 1973).

- **Multi-causality.** Policymakers often rely on simulations and predictions based on linear causality, drawing on the dominant pattern within the policy field. This makes futures "closed" as they are extrapolated from past events and continuation of specific values and norms. This does not have to be the case and often is also not desirable, when transformation is actually deemed desirable, necessary or unavoidable. Here multi-causality means that there are many future possibilities and they are layered. This starting point enables policy makers to consider "open futures," i.e. a multiple and open-ended understanding of future possibilities (Bussey, 2014).

- **Uncertainty.** Uncertainty stems from the fact that policy problems and their solutions are often unquantifiable and their risks cannot be calculated (whereas with risk the probability distribution is known or predictable) (OECD, 2017). When faced with uncertainty, not taking action is in some cases easier than intervention: it frees authorities from having to justify risky or uncertain interventionist policies until the future catches up with policy makers and negative outcomes arrive (Guler and Demir, 2020).

- **Diverging pace of change.** Governments are often slow to respond to changed circumstances in their environments and face a 'pacing problem' (Marchant, 2011): given the speed of innovation, challenges can evolve and change at unexpected points during the policy cycle. Traditional policymaking often involves making decisions and judging priorities based on past information and existing evidence, and thus responds reactively to rapid change and unexpected events. Not all developments can be predicted or reduced to manageable practices within a single policy field; they must be continuously explored in real-time and in an iterative manner.

- **Technological change.** The far-reaching impacts of technological change tend to be unpredictable. The Collingridge Dilemma captures this challenging trade-

off between clearly understanding the impact a given technology will have on society, and the ease with which interested parties are able to influence the social, political, and innovation trajectories of this technology. When change is easy (at early development stage of a technology), the need for it cannot be foreseen; when the need for change is apparent (when technologies have already diffused), change has become expensive, difficult and time consuming (Morozov, 2012).

- **Crises and short-termism.** Policymakers today are often driven by events rather than visionary or forward-looking practices (Burrows and Gnad, 2018). Crises can sometimes act as 'focusing events' – as is the case with Covid-19 – which can allow for major policy resets. Yet, this way of making policy depends on chance rather than an intentional process; it is an ad hoc and not a systematic practice. There is a continuous pressure to seek out quick wins towards political imperatives and manage crises rather than preparing for uncertain futures. Meanwhile, governments defer decisive action on long-term trends such as climate change, rising world population, demographic changes, urbanisation, and unsustainable consumption patterns.

- **Risk avoidance.** Governments are generally known to be risk-averse, rule-driven, based on stable structures and predictable decision-making (Brown and Osborne, 2013). This is also known as 'minimal squawk' behaviour' (Leaver, 2009) – trying to avoid drawing attention to rising issues if there is no immediate pressure to do so. Avoiding risks is often justified for political and reputational reasons; however, it means that by design, governments are not able to take action quickly when confronted with new challenges or to act proactively in the face of new opportunities. Governments' response to transformative change has generally been reactive at best. From the position of 'wait and see', governments are pushed to act when hazards (moral, ethical or even physical) materialise, or they are called upon to resolve issues arising between industry incumbents and new business models.

Recent OECD work laid out a principled framework on how governments can start addressing these challenges by integrating anticipatory capacities into public governance and policy steering (Tõnurist and Hanson, 2020). Research shows that simplifying these issues into discrete models does allow governments to take decisive action, but often creates blind spots. Adequate action starts with the willingness to embrace radical uncertainty and complexity, and to put forward the right tools to make sense of new developments as they emerge.

OECD research indicates that government responses to these challenges increasingly depend on its ability to harness future thinking, anticipation and innovation. While strategic foresight can help governments understand the possibility spaces within which to take action, there is no way to actually determine the most effective responses to a problem without actually testing them out in practice (innovating). It is important to learn from innovation and then use the feedback gathered from this active process to set policy. Thus, effective government action increasingly depends on the ability of the public sector to harness futures thinking and anticipation, and to test innovations on the ground. This is at the core of the anticipatory innovation governance model which is described in the next section.

ANTICIPATORY INNOVATION GOVERNANCE

The anticipatory innovation governance model sets up government combined capacity to anticipate emerging changes, set up visions for desired futures, and develop innovative solutions to achieve those futures. The model is based on the OECD's public sector innovation model. The theoretic framework underpinning the OECD Declaration on Public Sector Innovation[3] is based on the notion of innovation facets (Figure 1.1) which recognises the need to put forward different innovative responses according to the type of problem at hand. The facet model identifies two central characteristics affecting the type of innovative response. These are the degree of uncertainty surrounding the problem, and the level of command over the response of the response.

THE MODEL OUTLINES WHY GOVERNMENTS INNOVATE:

- To reach their goals and solve problems (mission-oriented innovation)
- Adapt to their citizens' needs and changing environments (adaptive innovation)
- Run their current systems more effectively and efficiently (enhancement-oriented innovation)
- Address future challenges, risks and opportunities (anticipatory innovation)

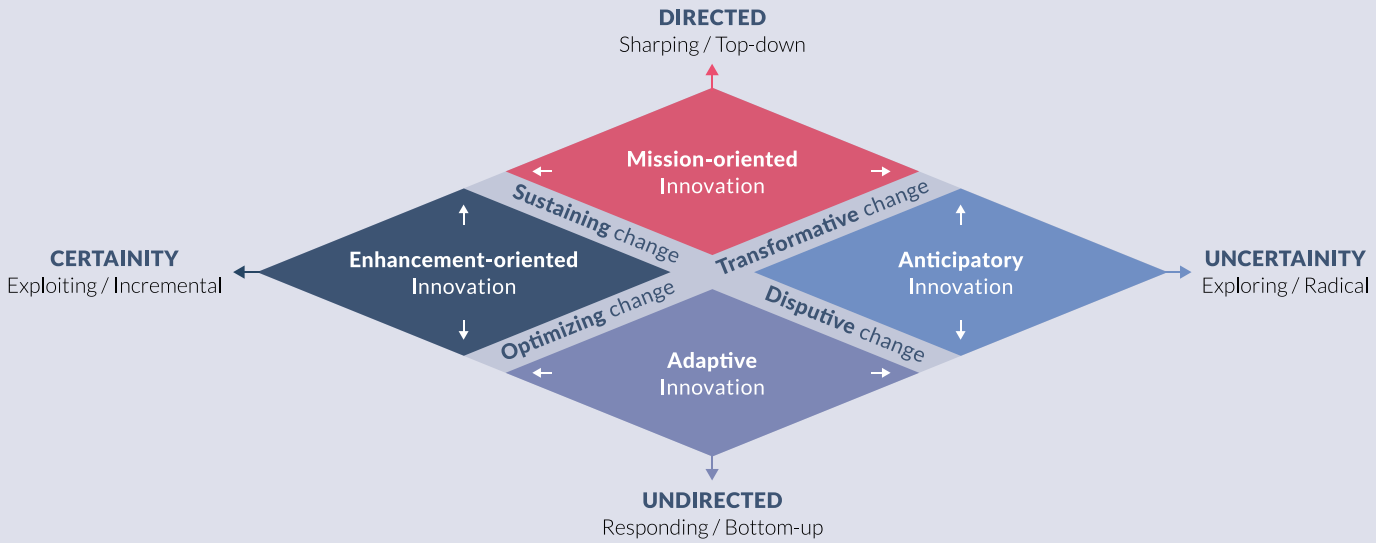


Figure 1.1. Public sector innovation facets model

3 OECD Declaration on Public Sector Innovation. Available at: https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0450

Anticipatory innovation embraces uncertainty and experimentation to explore possible futures and steer towards preferred ones. Yet, it is difficult to create space for anticipatory innovation in government contexts. Evidence and literature indicates this is often due to a number of reasons (Tõnurist and Hanson, 2020). First, there is a tendency of governments to focus innovation efforts to present issues based on existing tools and mechanisms rather than engaging with future issues which require a change of paradigms. Second, even when policy makers talk about future issues, they tend to reduce them to categories of the present and to project present-day solutions to address them. Third, anticipatory innovation is often conflated with adaptive innovation, while the latter is directed to respond to the changes in the government environment that manifest today and not those that can potentially impact the future (see figure 1.1 above).

As defined earlier, anticipatory innovation governance is a broad-based capacity to actively explore possibilities, experiment, and continuously learn as part of a broader governance system (Figure 1.3). The model is *anticipatory* in that the frame of interest is uncertain futures. *Innovation* is both the process and the strategy to explore these futures. Typically, OPSI defines innovations as implementing something novel to the context that has impact (positive or negative) such as the change in public value (OECD, 2017). This becomes core to the anticipatory innovation governance model when governments develop a portfolio of innovation projects designed to work together to probe potential futures, with feedback loops that generate organisational learning.

BOX 1.1
BALANCING ANTICIPATION WITH ADAPTION

There tends to be some confusion between the anticipatory and adaptive innovation (see figure 1.1) especially in dealing with crises. Adaptive resilience or anti-fragility is meant to address the unexpected in the world as we know it, while anticipatory innovation focuses on preparing for and shaping the unexpected world (Nordmann, 2014). In reality, governments need both: resilience and quick action when the current system experiences a shock (short-term, quick responses that help respond to crises with available means); but also anticipation, preparing for cascading effects, potentially transforming the system quickly to respond to new realities. This can be understood in simple terms as the difference between tactical and more strategic long-term responses to prevailing, complex issues. Hence, anticipatory innovation is more prospective and proactive than adaption; it invites governments to explore and take action towards desired futures.

Anticipatory innovation governance should consider uncertainty (not risk) over extended timeframes, and develop the capacity to mitigate uncertainty by changing actions today. There is a connection between anticipatory innovation governance and adaptive management, as there will always be risks that suddenly emerge, requiring government response. While adapting to changes in the current system, anticipatory innovation must explore options that may also challenge the current system and how it functions.

Source: OECD; Nordmann, 2014.

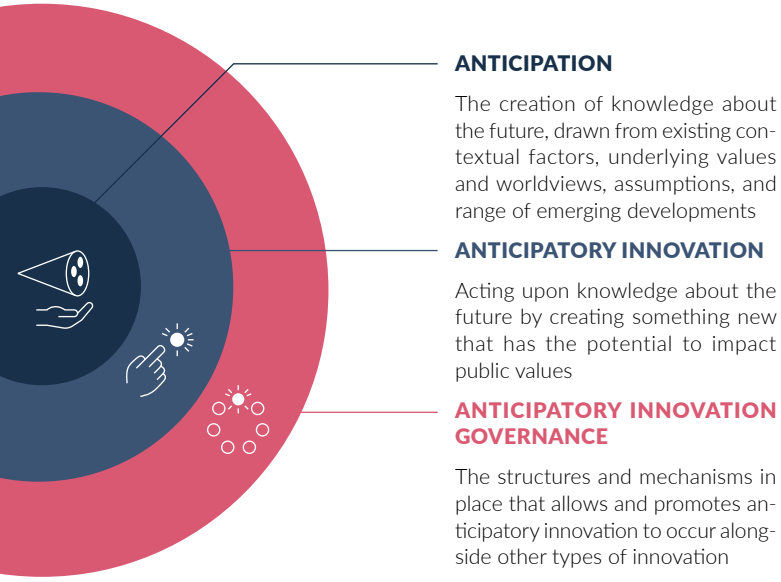


Figure 1.3. Anticipation, anticipatory innovation, anticipatory innovation governance, Source: Tõnurist and Hanson, 2020.

This governance model requires innovation to be built-in to the administrative system. This means developing a governance system to continuously identify, test and disseminate innovations especially with a particular aim of spurring on innovations connected to uncertain futures in the hopes of shaping the former through the innovative practice. Anticipatory innovation governance needs to be ingrained into the everyday practices of government so that policy reforms and structural changes can benefit from this capacity. It requires governments to steward innovation processes and policymaking differently (see comparison of traditional and anticipatory innovation governance in table 1.1 below). Rather than policy determining the activities of individuals and groups within a system, policies are shaped by the results of observations/experiments in a real-world environment – ideally with a subset of the individuals or groups that would be affected by government intervention – in order to determine effective policy and its potential unforeseen side-effects. This approach allows governments to move towards their ideal future not by simply anticipating potential outcomes and

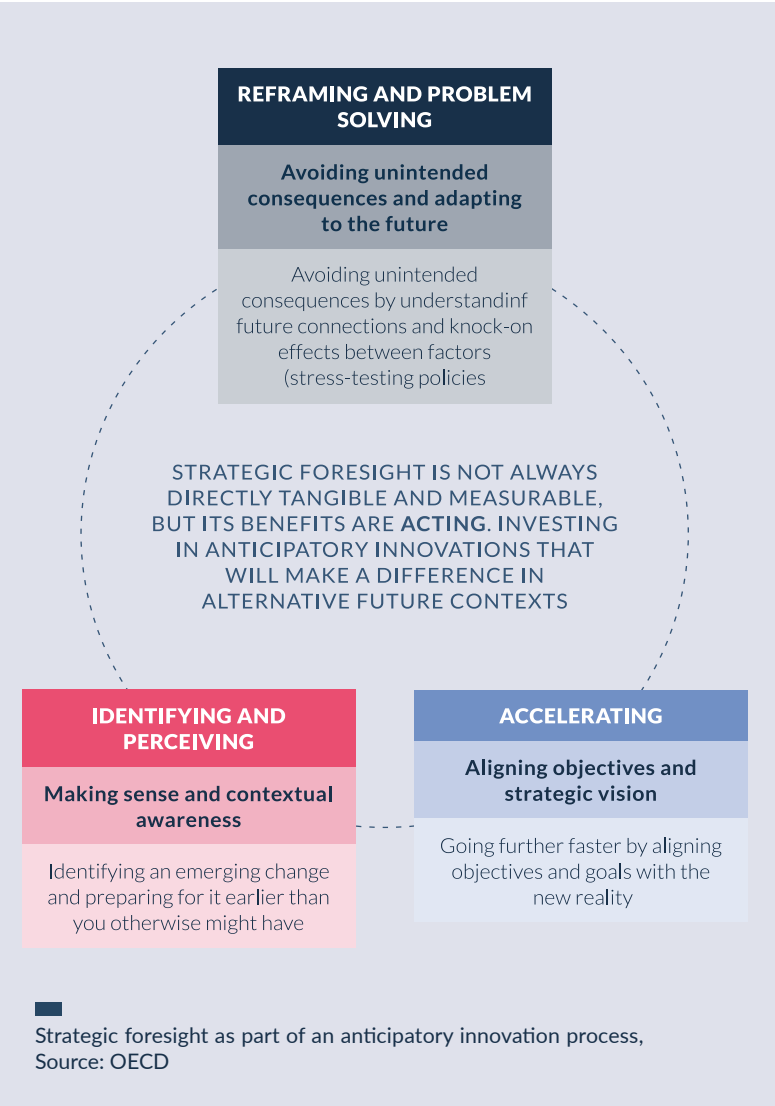
	Traditional policymaking	Anticipatory innovation governance
Evaluation approach	Evaluation as the last stage in an often multi-year policy cycle	Continuous evaluation and assessment; exploring future effects (e.g., changes in public values, ethics, intergenerational fairness)
Policy cycle	Long research and drafting cycles, with policy implemented accordingly	Recognition that cause-effect relationships are impossible to know in advance, and that the policy implementation itself changes the problem space
Research and analysis approach	Exploring the problem space through research and analysis	Exploring the problem space through small-scale real-world experiments and innovation
Research and analysis focus	Research and analysis focused on what has happened	Research and model development focused on a range of possible futures

Table 1.1. Comparison between traditional policymaking and anticipatory innovation governance, Source: OECD

developing innovative policy approaches to address them, but by taking action to ensure that these policy approaches work.

Anticipation is more about practising, rehearsing, or exercising a capacity in a logically, spatially or temporarily prior way than it is about divining a future (Guston, 2014). Anticipation does not mean predicting the future; it is about asking questions about plausible futures, so that we may act in the present to help bring about the desired futures. It is a capacity to generate and engage with alternative futures, based on sensitivity to weak signals, and an ability to visualise their consequences, in the form of multiple possible outcomes. The main contribution of anticipation lies in the ability to shape people's perceptions about the future and develop their capacity to make sense of novelty (see the difference with traditional policymaking in Table 1.1 above). The important follow-up is to take that into practice – innovate based on the knowledge created through anticipation. This can involve future-proofing or making current policy systems more resilient to potential change, but it can also involve more transformative shifts in government and testing them out in practice (e.g., how would a public sector organisation work if 20%, 30% or 40% of current tasks were no longer required?). However, often governments are facing an 'impact gap' connected to strategic foresight: the individual, collective, and institutional limitations that prevent the use of high-quality futures knowledge in innovation, policy, and strategy.

Strategic foresight is used to create functional and operational views of possible futures and the possibilities that exist within them in order 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 (OECD High Level Risk Forum, 2017). However, foresight approaches have not been systemically integrated within government contexts and there is an overall lack of awareness and capacity for strategic foresight. Because the common tools and structures developed to create and implement policy were designe- primarily to react to past events, they are often ill-equipped to value and leverage the insights developed through foresight practice. Strategic foresight can inform decisions, but cannot tell whether these decisions will be successful in the future or how the context will respond or evolve in real life. Thus, the link between foresight, planning and systemic, continuous policy change is missing. Anticipatory innovation governance takes strategic foresight closer to acting (Figure 1.3 below). This involves identifying contextual awareness, sense making, reframing and problem solving, and ultimately acting and learning.



Strategic foresight as part of an anticipatory innovation process, Source: OECD

ANTICIPATORY INNOVATION GOVERNANCE MECHANISMS

Recent OECD research has pointed to the enabling environment and conditions for government to embrace anticipatory innovation governance. Anticipatory innovation governance operates within established government core architectures and acts on a variety of inputs to manage emerging challenges. It is enabled by a set of mechanisms related to the following mechanisms (see Figure 1.4):

- **Agency** defines the tools, methods and information resources that enable public servants and organisations to anticipate and innovate in practice.
- **Authorising environment** is the system within the public sector that validates anticipatory innovations – provides feedback that there is demand, value, and use for the work.

The categorisation is based on an extensible literature review of different core components and factors associated with transformative change from organisational studies, innovation and futures thinking literature. These are presented in the working paper attached to this policy brief.

Figure 1.4. Anticipatory innovation governance mechanisms, Source: Tõnurist and Hanson, 2020.

To operationalise anticipatory innovation governance, it is key to explore how changes in authorising environments and officials' agency can create opportunities and habits for experimentation, learning and innovation. Governments seeking to authorise anticipatory innovations can create learning loops, evidence and evaluation, legitimacy, networks and partnerships and that will address vested interests and cognitive biases, public interest and participation. Public servants need to have agency to work with anticipatory innovation on the ground: the tools and methods, institutional structures, and organisational capacity to support this work. This would require examining the traditional functions of government, including human resources, budgeting, decision-making processes, strategic planning and working methods, etc. The anticipatory innovation mechanisms are summarised in Table 1.2. These mechanisms often intersect and interact with traditional government functions (human resources, budeting, procurement, evaluation etc.). More case-based research is needed to explore in depth the functioning of the enablers of anticipatory innovation governance and their relationship with established function to assess which ones act as enablers and which as barriers.

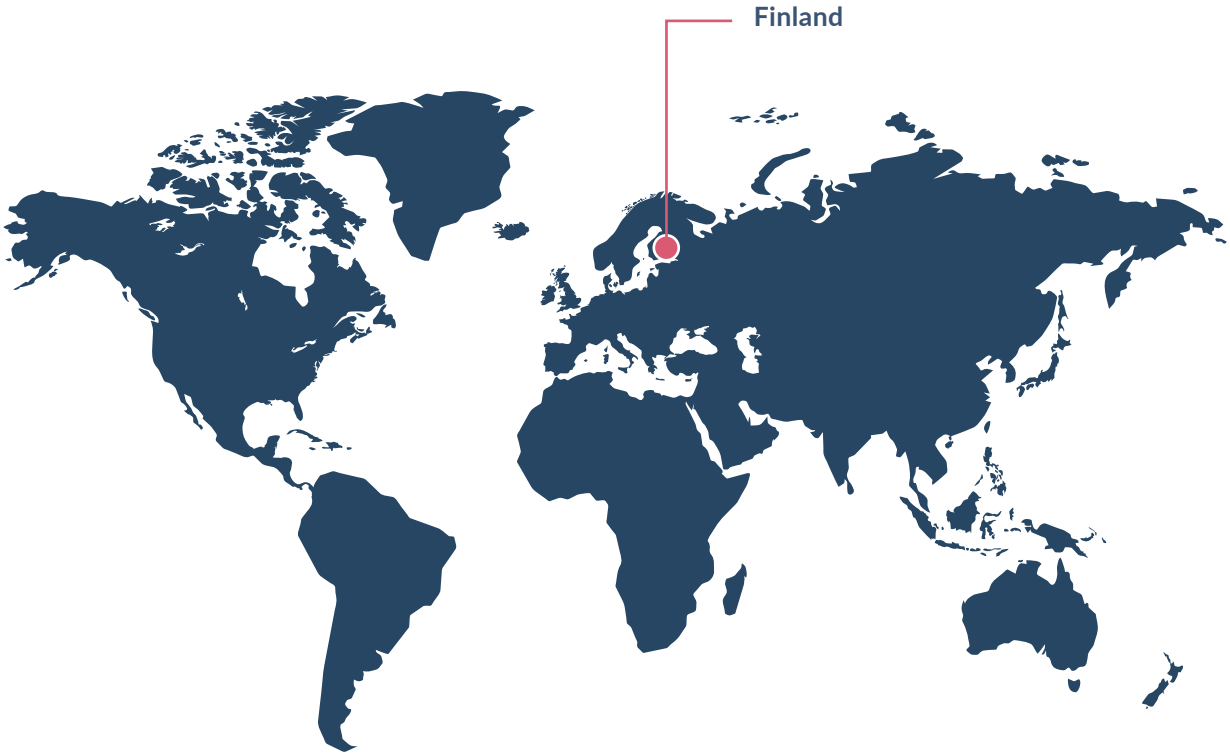
Mechanisms of agency	Mechanisms of authorising environment
Alternatives exploration and experimentation Ability to consider different alternatives that may be in conflict with current strategic intent	Vested interest and cognitive biases Ways to address incumbents' interests and biases in thinking about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

Table 1.2. Agency and authorising environment in the anticipatory innovation governance framework, Source: OECD

Agency – the capacity to act and reflect on potential for future actions – is partially based on actual competencies available (e.g., tools and methods used; skills and capabilities present), but also on the collective belief in the usefulness of these skills and methods in specific situations. It is not only about the individual agents, but the processes and structures that support their actions. Agency is often dependent on constraints, resources and opportunities in a given setting, but also on public servant's belief that they are able to act. For such agents to engage with the future in a productive way, it is important to look at how organisations and teams explore alternatives, which tools and methods they use, and which structures and resources are in place to support taking action.

The authorising environment sets the legitimate limit of autonomy to shape the future (e.g., what is meant by public value), and thus, can constrain what is possible in terms of anticipatory innovation in the public sector. The authorising environment influences accountability and trust in public organisations and indicates the legitimate limits of the public manager's autonomy, set by individual and collective values of the multiple stakeholders (Benington and Moore, 2010). Authorising environments can be internal or external to the organisation, formal or informal, and in many cases they overlap and interact to produce authority and legitimacy in complex ways. An authorising environment is needed to fulfil the innovation potential and guarantee buy-in to anticipatory innovation. The need for authorisation is especially pronounced during priority setting, as decisions tend to carry considerable emotive and political weight (Williams, 2015). It is also important during funding allocation where strong justifications are needed to shield them from competition over funding. After initial funding decisions have been made, anticipatory innovation tends to be slightly shielded from broader communities inside and outside the organisation in practice (thus the efforts to create structural ambidexterity – the ability to explore and exploit knowledge at the same time – in organisations). Together with agency, the authorising environment determines which types of anticipatory innovations get explored, and how the overall governance system works.

The OECD's initial work across different country projects shows several issues and challenges for anticipatory innovation in the public governance system (see box 1.2). The following work in Finland helps to explore how anticipatory innovation governance could be incorporated with a broader government system and which challenges need to be overcome in a practical setting to make things work.



BOX 1.2. HOW ANTICIPATORY INNOVATION GOVERNANCE CAN CHALLENGE TRADITIONAL GOVERNANCE FUNCTIONS AND STRUCTURES

These areas include, but are not limited to:

Human resource planning. Allowing diverse sets of skills and capacities to enter the public sector. Building up teams with multi-disciplinary skillsets and supporting competencies in futures thinking and foresight to accompany innovation capacities. In smaller governments, this may involve more mobile movement of anticipatory innovation capacities between teams.

Strategic planning. Strategic planning is traditionally based on past actions and linear models of change. There is a need to counter the linear and closed idea of the future. Allowing a variety of futures and possible scenarios to co-exist in strategic plans and continuously stress-testing approved strategies against alternative future contexts. Accounting for long-term visions and intergenerational fairness, but allowing for flexible changes when conditions alter. Signal and trend detection should be integrated as core tasks of strategic planning and should be upheld continuously. Anticipatory innovation governance mechanisms should help balance directionality and potential lock-in in strategic planning, in order to read and capture weak and strong signals of new paths and models. This is crucial because, in fast-changing environments, targets may change so rapidly that traditional instruments could lag behind and become irrelevant.

Structures of government. Creating competence centres for anticipatory innovation governance building capacity for futures thinking and radical innovation, but also allowing for decentralised alternatives exploration. Creating autonomy for anticipatory innovation with time, space, and resources to explore different ideas on the ground, so that business as usual and short-term goals do not overshadow anticipatory needs.

Budgeting. Resource planning that allows for testing and experimentation beyond traditional fiscal structures, countering short-termism, but also allowing challenges to existing strategic aims.

Risk management. Governments tend to file new developments under threats and do not see them as opportunities. Having a closer connection to strategic futures, risk and innovation approaches in government could broaden this approach and also help take into account uncertain scenarios where risks are incalculable.

Procurement. The possibility to create partnerships, building networks within the ecosystem from common future narratives, and building testbeds for new ideas. While the possibilities to support early innovations exist in international procurement regulations, they are far from commonly used.

Evaluation and auditing. As anticipatory innovations are uncertain by nature, it makes sense to evaluate the practice of government from a portfolio perspective: allowing for failure, but also expecting successes. Anticipatory innovation may also require longer time frames than the current government evaluation and audit models allow. Audits should also take into account the cost of not following opportunities to encourage more experimentation and risk taking in the public sector.

Open government and participation. Governments should include the future (of policies, services) as a subject/area of engagement with the public. This can help incorporate public values and concerns, mitigating potential public backlash against new developments, or making the various value trade-offs visible. This can also help set better boundaries for technological development and discuss ethical and moral issues in a democratic manner.

Source: OECD; Tõnurist and Hanson, 2020; OPSI 2021.

2

Finland – a country where governance matters

FINLAND – A COUNTRY WHERE GOVERNANCE MATTERS

Finland – a relatively small country with a population of 5.5 million with one of the most sparsely populated territories in Europe (next to Iceland and Norway) – is internationally recognised for its achievement in public sector reform and for its focus on constant enhancement of its public governance (e.g., European Commission, 2020; Economist Intelligence Unit, 2020). Historically, the Finnish administration and government has gone through the traditional paradigms from classical public administration, to New Public Management (NPM) to a move towards a more participatory, new public governance approach (Lähteenmäki-Smith et al. 2021). The country is known for high respect for the rule of law, high levels of administrative ethics (Salminen and Ikola-Norrbacka, 2010; Transparency International, 2020) and high trust in government (OECD, 2021). While Finnish society and public governance are known for leading the way in numerous international comparisons, successive governments in Finland have focused on the challenges they face in steering strategy setting and implementation effectively. One of the areas where the Finnish government considers that it needs to improve is connected to anticipation and systems approaches to complex problems (Anttila et al., 2018).

In previous public governance reviews, the OECD (2010; 2015) noted that the government had lost some of its strategic agility and that governance was too fragmented between silos, lacking adequate co-operation models between ministries (Määttä, 2011). The 2010 OECD review also highlighted the need to show more attention to strategic foresight and its role in policy making as the function was not integrated with the traditional policy making system. Since then and especially in recent years, a the government has invested heavily in renewing its strategic foresight system (discussed in more detail in the following chapter). The 2015 joint public governance review with Estonia shed light on the need to institutionalise whole-of-government approaches and increase resource flexibility (OECD, 2015). For example, the Prime Minister's Office often shares the whole-of-government leadership role with the Ministry of Finance, whose minister is usually a leading figure in a different party to the Prime Minister in the coalition government. This can sometimes lead to fragmented strategic decision making (ibid.). Based on these insights, successive governments have kept focusing on improving the public governance system in particular introducing mechanisms to increase government agility and capacity to steer the system towards an effective implementation of the government strategy. Taking these and additional insights from the reviews into account, the government has launched several systematic projects and programmes to examine the role of different functions in government over the last decade (see table 2.1 below). This has also led the Finnish government to look at ways to anticipate better, learn continuously and integrate evidence-informed approaches into its government. The current Government Programme has recognised the need for systemic change within Finnish society[4] which can only be achieved through a rethinking of how government functions and interact with other institutional actors in the system. Among others, the Government

Programme explicitly pledges:

- "for **continuous learning** in government amid constant changes, we do not imagine we know in advance what will work and what will not. Instead, we will seek out information and conduct experiments so that we can act in ways that will benefit our citizens."
- "for **long-term policy-making**. We commit to taking account of long-term objectives and to engaging in systematic parliamentary cooperation between the Government and Parliament. We can reach our long-term objectives by introducing new practices for co-operation between Parliament and the Government."

4 The Programme of Prime Minister Sanna Marin's Government "Inclusive and competent Finland – a socially, economically and ecologically sustainable society" was submitted to Parliament in the form of a Government statement on 10 December 2019. After the resignation of the Prime Minister Antti Rinne's Government on 10 December 2019, the Prime Minister Marin's Government has adopted the same programme 'Inclusive and competent Finland – a socially, economically and ecologically sustainable society' as its Government Programme. Available at: http://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161935/VN_2019_33.pdf?sequence=1&isAllowed=y

- "for **knowledge-based policy-making**. Legislative preparation of a high quality is a key condition for the credibility and legitimacy of policy-making. We commit to knowledge-based policy-making and systematic impact assessment in all legislative preparation. We will engage in deeper cooperation with the scientific community."

Governance is also one of the strategic themes within the Programme with some key operational action points including:

- *Management of the strategic Government Programme*, with among others, includes the creation of parliamentary committees that were appointed to carry out the preparations of long-term reforms extending across parliamentary terms. These were supported by strategic ministerial working groups, and by strategic agreements with the ministries under the leadership of the Prime Minister's Office. [5]

- The creation of strategic ministerial working groups for the duration of a parliamentary term to support the Government Session Unit of the Prime Minister's Office to draw up a description of the current situation, assign specific tasks, perform impact assessments and develop indicators suitable for monitoring the measures contained in the programme.[6]

- Commitment to become the best public administration in the world. For this the Government has prepared the public governance strategy[7] which will guide and strengthen the renewal of public governance as a whole from 2020 to 2030. The strategy seeks to strengthen the presence of public administration in the daily life of the Finnish people across the country. As part of its strategy work, the Government will improve risk management in public administration and reinforce the public administration's ability to respond to crises that occur in normal conditions. The strategy pledges to: "make systematic foresight and future thinking a key part of management and also of policy preparation and decision making processes."[8]

These elements fit into a central governance steering system where the Prime Minister's Office and the Ministry of Finance act as the main cross-government steering bodies. Known for coalition governments, the Prime Minister tends to take the overall lead for whole-of-government activities and cross-cutting topics; while the Minister of Finance tends to lead through fiscal planning, public service development, and digitalisation.

5 See further: https://valtioneuvosto.fi/en/marin/government-programme/management-of-the-strategic-government-programme

6 See further: https://valtioneuvosto.fi/en/marin/government-programme/strategic-ministerial-working-groups

7 Strategy for Public Governance Renewal. Available at https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/162573/Public_governance_strategy_2020.pdf?sequence=1&isAllowed=y

8 Ibid.

BOX 2.1. RECENT PUBLIC GOVERNANCE REFORM PROJECTS IN THE GOVERNMENT OF FINLAND

KOKKA Project for Monitoring the Government Programme (2010-2011)

The project was launched to reform the centre of government steering functions to improve the translation, implementation and monitoring of the Government Programme. The recommendations of the project draw attention to government silos, resource allocation rigidity and the need for evidence- informed decision making.

Governments for the Future (2012-2014)

The project was launched by the Ministry of Finance and the Prime Minister's Office in partnership with Sitra (the fund for innovation operating directly under the Finnish Parliament) to discover new ways to execute significant state administration reforms. In particular the work concentrated on the need to increase the use of systems approaches in the Government of Finland.

OHRA project (2014-2015)

The project was based on a steering framework that was tasked to prepare recommendations for the next parliamentary term after the elections in the first quarter of 2015, in order to improve the impact and effectiveness of government actions. The OHRA activities identified the horizontal nature of many new policy problems, the lack of an evidence base in policy making, and the gap in the feedback loop within the policy-making system from policy implementation to policy design. Finland was seen as a "legalistic society" where regulation was used as the main vehicle of change. The final report proposed that a major part of the research funding supporting government decision making (the so-called TEAS function) should be allocated to the needs of the Government Action Plan.

Experimental Finland project (2016-2019)

Experimental Finland project (2016-2019). The project designed by the Prime Minister's Office involved a dedicated Experimental Finland Team in the organisation engaged with three types of experiments: strategic experiments (policy trials), pilot pools/partnerships (regionally relevant or sector-specific experiments) and grassroots-level experiments (municipalities, regions, academics, charities, etc.). The results of the project are covered in more detail in Chapter 3 of this report.

Pakuri project (2019)

The one-year project of the Prime Minister's Office and the Ministry of Finance, and supported by a parliamentary group, was put together to provide recommendations for the Government. The goal was to improve the coordination of policymaking and resource processes, make the coordination and implementation of government policy more effective, strengthen the joint government communications and ensure policy preparation that extends across parliamentary terms.

Source: OECD, 2017; PMO, 2011.

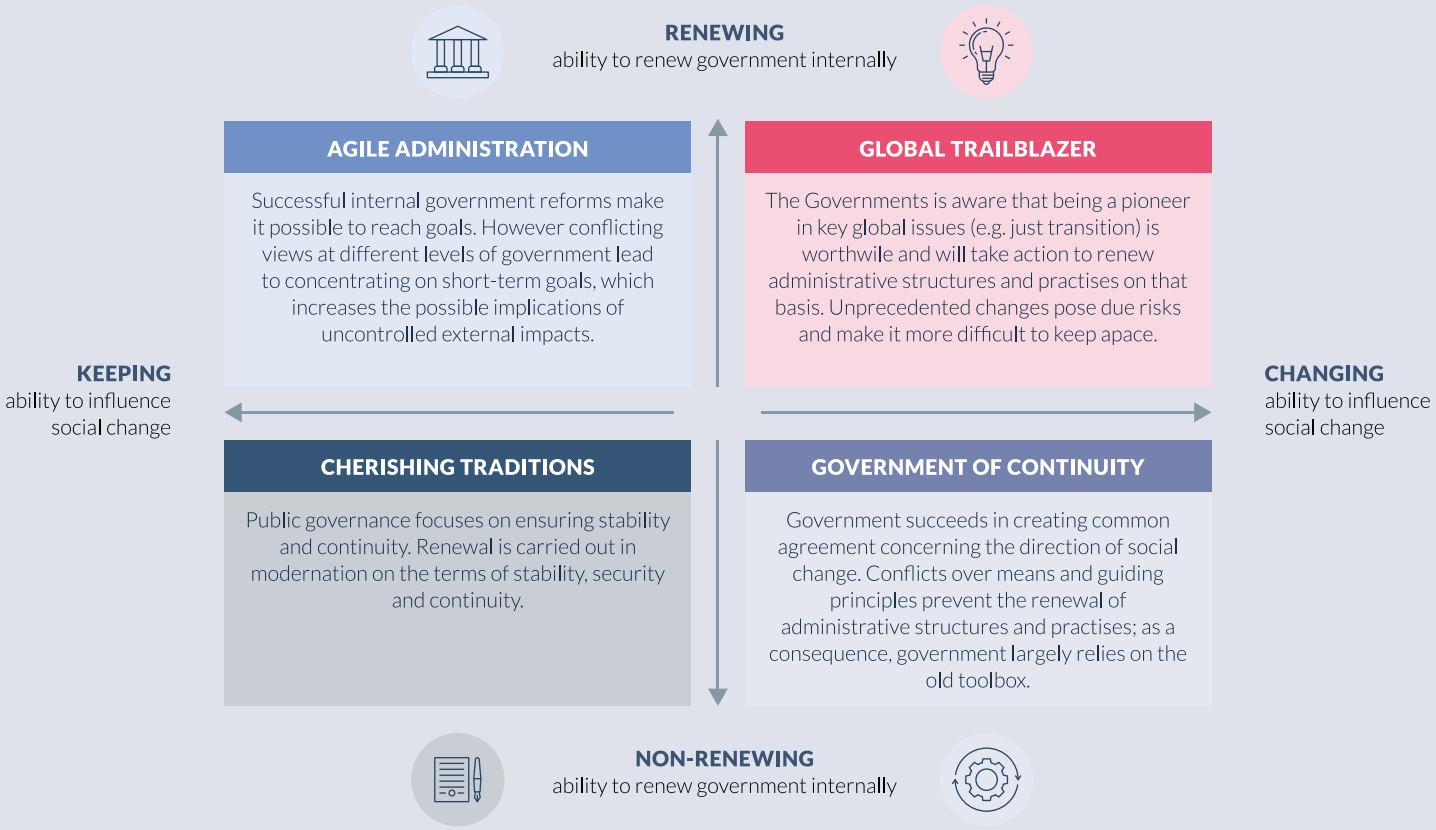


Figure 2.1. Future scenarios of the capabilities of public governance for change in 2030, Source: Strategy for Public Governance Renewal. Available at: https://julkaisut.valtioneuvosto.fi/

Looking ahead for the next decade (Figure 2.1) the Finnish government aims to identify areas where government can be renewed to reach ambitious goals while maintaining the values of stability and continuity in policy making.

The recent Steering2020[9] work revealed that the major elements for an anticipatory approach in the Finnish governance system already exist, but they are rarely put into practice in concrete day-to-day work and implementation (Lähteenmäki-Smith, 2020; Lähteenmäki-Smith et al., 2021).

An example of how elements of an anticipatory government function have started to be introduced in the public governance system in Finland is the growing interest in a 'phenomenon-based' approach to policy making (Sitra, 2018; see Box 2.2.). Phenomenon-based policy making means addressing phenomena (e.g., climate change, social disintegration, urbanisation, and immigration) for which no single part of the system holds full responsibility for and which require the collaborative interaction of different parts of a system. This often requires establishing cross-ministerial policy networks and the ability of government to aggregate financial and human resources from across individual entities to cross-administrative objectives to achieve higher impact. The main idea is that societal problems (e.g., climate change, social disintegration, urbanisation, and immigration) tend to get lost in

9 Government of Finland has a tradition to support research in core governance areas through the research and assessment activities (VN TEAS, https://tietokayttoon.fi/en/putting-knowledge-to-use). Previous studies have included deep-dives into experimentation, innovation and other issues. The recent Steering2020–project was undertaken below the same framework with the aim to provide an overall picture of the development and current state of governance, in its societal context, in Finland.

government silos and 'projectification' of government action (Hodgson et al., 2019), meaning that the money in government is divided into small projects that do not sufficiently follow cross-administrative objectives and needs and their combined impact remains unclear. Actors across the government have drawn attention to this issue, in particular, the Committee of the Future in the Parliament and also the National Audit Office (e.g., Eduskunta, 2018; Varis, 2020a). This has led to pilot research in phenomenon-based budgeting connected to child budgeting and the adjustment of the Government's rules of procedure, requiring Permanent Secretaries to be responsible for cross-sector coordination (200/2018, Government Rules of Procedure). A working group in the Ministry of Finance addressed phenomenon-based budgeting in 2018–2019 and also presented the findings to the Parliament of Finland. Yet, it is still unclear if new models around phenomenon-based policy making and budgeting will only describe government action towards phenomena or steer the budget allocation and use of appropriations (Varis, 2020b). A phenomenon-based approach to policymaking could also be used as a lead-in to mission-oriented innovation and policy approaches (see box 2.2).

With the afore-described ambitious agenda to upgrade public administration to 21st century challenges and lead the way in governance in the world, the Government of Finland turned to the European Commission to support the building of a model that would incorporate anticipation into the broader public governance system. Taking into account all of the developments described above, the OECD has undertaken an initial assessment of the system and how it deals with uncertainty and complexity.

BOX 2.2. FROM PHENOMENON-BASED POLICY MAKING TO MISSIONS

What are phenomena?

Societal problems, such as climate change, social inequality, urbanisation, future of work etc., that are complex and interdependent that need to be examined in a comprehensive and systemic manner.

How does phenomenon-based policy making challenges the public sector?

Current public administration structures do not correspond with 21st Century phenomena. Hence, a single administrative branch cannot deal with these issues. Furthermore, existing silos in government with their corresponding responsibilities and budget structures may actually impede a cross-administrative, comprehensive approach to phenomenon-based strategic policy making and implementation of reforms.

Could phenomenon-based policy making be linked to mission-oriented innovation?

The European Commission has been supporting a mission-driven approach to upcoming and evolving socio-technical challenges connected to the European Green Deal, Europe's Beating Cancer Plan as well as the Sustainable Development Goals. While phenomenon-based policy making seeks to understand cross-cutting societal challenges, a mission-driven approach sets out to develop bold, inspirational and widely relevant missions for society that can be clearly framed, targeted and measured in concrete timeframes. Hence, a phenomenon-based understanding of systemic issues could be used as an antecedent approach to setting missions.

Source: OECD; Sitra 2018; https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/

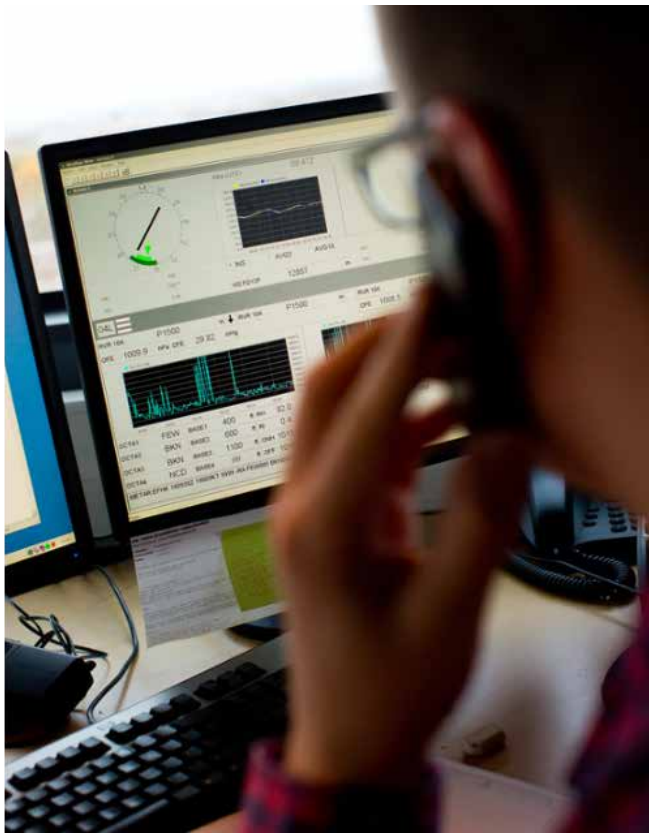
3

Methodology and purpose of the assessment

METHODOLOGY AND PURPOSE OF THE ASSESSMENT

The OECD Observatory of Public Sector Innovation together with the Government of Finland and the European Commission, is developing an innovation governance model. The aim of this initial assessment report is to analyse the preconditions and gaps within the wider public sector policy making and steering system in Finland that may stand in the way or help implement an anticipatory innovation approach in the Finnish context. The assessment will be followed up by an action research phase in which 3-4 pilot case studies will be selected to develop anticipatory innovation capacity or structures within the Government of Finland. Action research is especially well suited to work in public sector anticipatory contexts, where complex challenges, institutional dynamism and rapidly shifting priorities compel researchers to ground their general theories in practitioners' daily reality in order to produce knowledge that is both relevant and readily useful.

The findings of the assessment report draws on the triangulation of data emerging from semi-structured interviews, workshops, and desk research to understand how the public sector responds to complex challenges and uncertainty. The work is supplemented by comparative analysis from the OECD's relevant body of research and country work.



In Finland, the OECD triangulated data from the following sources:

- **Desk research**, including previous OECD reports on public governance in Finland, grey literature (policy brief, reports etc.) on public sector innovation and innovation systems, and Finnish government reports.

- **Semi-structured interviews with over 50 public sector leaders, policy makers, experts, media representatives, and key stakeholders** across jurisdictions and sectors to understand the system elements, key challenges, and experiences of actors within the system (see list in Annex A). The interviews took place between November 2020 and February 2021 and were all conducted virtually. The interviews were recorded, transcribed, anonymised and coded in NVivo. All the interviews were coded following the coding scheme in table 3.1 covering first level primary codes. In total, 177 codes over three different levels were created. The coding scheme was developed in an inductive, iterative way, by first testing initial codes on five interviews and then expanding on the scheme based on new topics uncovered in the process in a reflexive manner. Codes that proved to be specific to single interviews were merged with other relevant findings or moved to the category "other" (see table 3.1). In total 1368 observations were coded, with an average of 27.4 per interview.

Code	Description
Governance model	Examples of different forms of governance with sub-codes denoting market-based, network-based and whole of government governance mechanisms.
Governance challenges	Structural/organisational, coordination, implementation, individual/psychological, collaboration, political, procedural and process challenges connected to the difficulty to anticipate and deal with complexity.
Policy challenges	Substantive policy challenges including climate chance, ageing, democracy, food security etc. connected to the need for anticipation.
Innovation	Innovative activities in government with sub-categories on causes for differences among organisations, most innovative organisational examples, situations when government acts as an enabler or where the innovation is led by the private sector.
Capacity	Capacities connected to anticipatory innovation governance that were either demonstrated or expected to be needed.
Tools and methods	Tools and methods that were either needed or demonstrated based on their aims (behavioural insights, collaboration, experimentation, foresight, human centred design etc.).
Decision making	Findings highlighting the premise of how decisions are made in the public sector of Finland based on evidence, political calculations, timeframes and demand for anticipation.
Institutional actors	Findings connected to specific institutional actors on an agency, oversight, local government, ministry, parliament, PMO or National Audit Office level.
Cases	Cases highlighting either successes, failures or windows of opportunity for anticipatory innovation based on past, planned or underway examples.
Other	Unclassified, but interesting contextual findings tied to either specific institutions, situations or individuals.

Table 3.1. High level coding scheme, Source: OECD

Presented are first level codes; additional send and third level codes were created depending on need.

- **Ten different validation workshops** with a cross-section of public sector innovation leaders, experts and practitioners to corroborate and substantiate the preliminary findings were held between January and April 2021. All workshops were virtual and had between 7 and 15 participants with the exception of the general findings workshop, which had higher number of participants. The first validation session was carried out with the high-level advisory board of the project composed of senior government leaders (state secretaries, heads of agencies and constitutional bodies) to test initial findings and the methodology for the following validation workshops. While all subsequent workshops discussed anticipatory innovation governance, most validation workshops where thematic (see figure 3.2 below) and covered the following topics: citizens, trust and participation; futures and foresight; budget and resources; experimentation; individual and organisational capacity; policy cycles and continuity of reforms and coordination across government. One of the workshops tested general findings and ideas brought out of testing; and one of the sessions was carried out as part of the Committee of the Future meeting on April 7th, 2021 with the particular focus on futures and foresight and the role of the Parliament. All the workshops followed a similar approach with a presentation of general findings and insights specific to the topic of the workshop followed by clarifications and

1 **PUBLIC INTEREST AND PARTICIPATION**
How to make anticipatory innovation more democratic?

2 **FUTURES AND FORESIGHT**
How to pass the impact gap of strategic foresight and align futures with strategic planning and needs of decision-makers and vice versa?

3 **BUDGET AND RESOURCE ALLOCATION**
How to align budgetary steering processes with anticipatory innovation and complex challenges?

4 **ALTERNATIVES EXPLORATION**
How to create more room for sense-making, experimentation, innovation and iterative development in policymaking processes?

5 **INDIVIDUAL AND ORGANISATIONAL CAPACITIES, SKILLS AND FACTORS**
Which capacities and skills are needed for anticipation in different government roles? Which biases need to be countered?

6 **POLICY CYCLES AND CONTINUITY OF REFORMS**
How to address complex policy issues beyond 4-year government terms?

7 **COORDINATION ACROSS GOVERNMENT CHALLENGES**
How different policy steering system need to adapt to make working on complex challenges

Figure 3.1. Topics of thematic validation workshops

Note: Seven of the ten validation workshops were topical and followed the following themes and questions.

questions from the participants. Following this, the participants had the opportunity to individually and anonymously comment and rate all the main findings on a 1-5 point Likert scale, followed by discussion. The ratings are not considered statistically valid, but were used to establish areas of disagreement between participants that were taken up during the discussion. Additional ideas for improvement from all participants were collected at the end of the session.

- **Two additional workshops** were held: the first in December with the Steering2020 project team to compare initial findings and the second in February 2021 with the OECD's open government and trust teams that are conducting scans and cases studies in parallel in Finland. The first workshop highlighted issues picked up by the teams that could be changed with minor changes within the Finnish government (things to be tweaked), that needed a more systematic transformation (things to reconsider) and challenges that cannot be tackled within the current government model (things to cope with). The aim of the second workshop was to uncover overlapping issues and possibilities for change between the areas of anticipatory innovation, open government and trust (see Figure 3.2). Senior officials from the Ministry of Finance in Finland participated in both workshops.

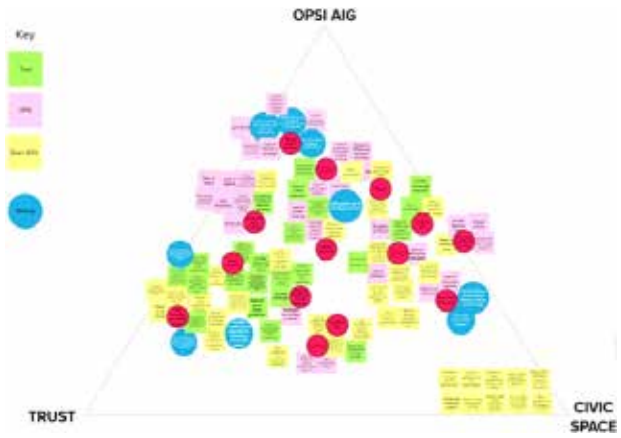


Figure 3.2. Trust, civic space, and anticipation - three perspectives on systems change in Finland

Note: The insights come from a joint OECD workshop with the OPSI, Open Government and Trust teams held on 4th of February 2021. More insights can be found here: https://oecd-opsi.org/trust-civic-space-and-anticipation-in-finland/ Source: OECD.

4

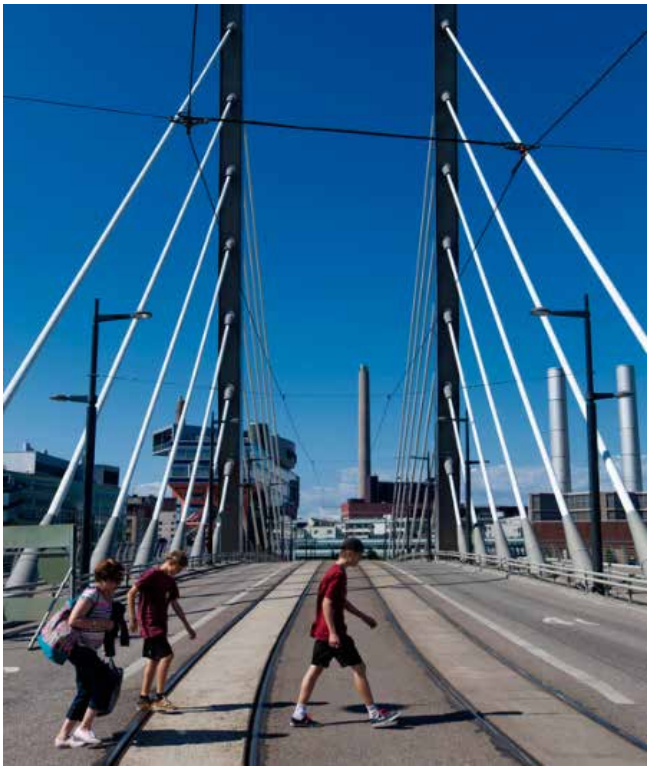
Research findings

RESEARCH FINDINGS

Overall, the research, workshops and interview findings echoed the positive assessment that Finland is among the high ranking countries when it comes to measuring the performance of its government.[10] Most interviewed experts agreed that the government was one of the highest-functioning governments in the world. However, this consensus was also seen as a potential danger that could lead to complacency and avoiding change, while the potential in the governance system is much higher.

> **"I think there is complacency in the sense that we are kind of saying, well, you know, we were pretty good, and we don't have to do change that much. And of course, because change is always painful, as we know, on many levels, so then it's easier to say that we don't have to change so much. We're kind of trying to tinker with small things, and maybe trying to sometimes change the structures, rather than actually changing how people think or how people work or what instruments our leaders use, or how they relate to their work in their organisational surroundings."**

There was a general consensus that there is a need to continue developing the public governance system in a systemic manner and integrate anticipatory practices into policy steering and implementation. Interviewees highlighted a variety of areas where anticipatory action was crucial (figure 4.1), led first and foremost by the cascading effects of the Covid-19 pandemic and the expansionary measures the government has taken (OECD, 2020), but closely followed by challenges presented by technology, climate change, and democratic crisis (increasing populism, polarisation, misinformation and decreasing trust in government). At the same time, the Finnish society has been relatively successful in containing SARS-CoV-2, flattening the epidemiological curve and avoiding



overwhelming hospital capacity (OECD, European Union, 2020). Similar to other Nordic countries (except Sweden) the government was especially successful in acting early (ibid.).

Other issues where an anticipatory lens can bring value (identified through interviews) were connected to economic effects, migration, unemployment, health and social security and ageing. These are structural challenges that over time the Finnish government needs to address. Finland for example is a rapidly ageing society and the share of people over 65 is forecast to increase from the current 22% to 26% by 2030 and to 29% by 2060 (THL, 2021). These challenges resonate with the issues identified by the Eurobarometer (2019). Other interviewees also highlighted characteristics of wicked problems, complexity, and speed of change that needed attention across specific policy areas. Especially when it comes to technology, the overemphasis of caution and stability in administrative functions has previously been seen as a threat to Finnish society in the long run (Ministry of Finance, 2018).

10 See a comprehensive overview of these here: https://www.stat.fi/tup/satavuotias-suomi/suomi-maailman-karjessa_en.html

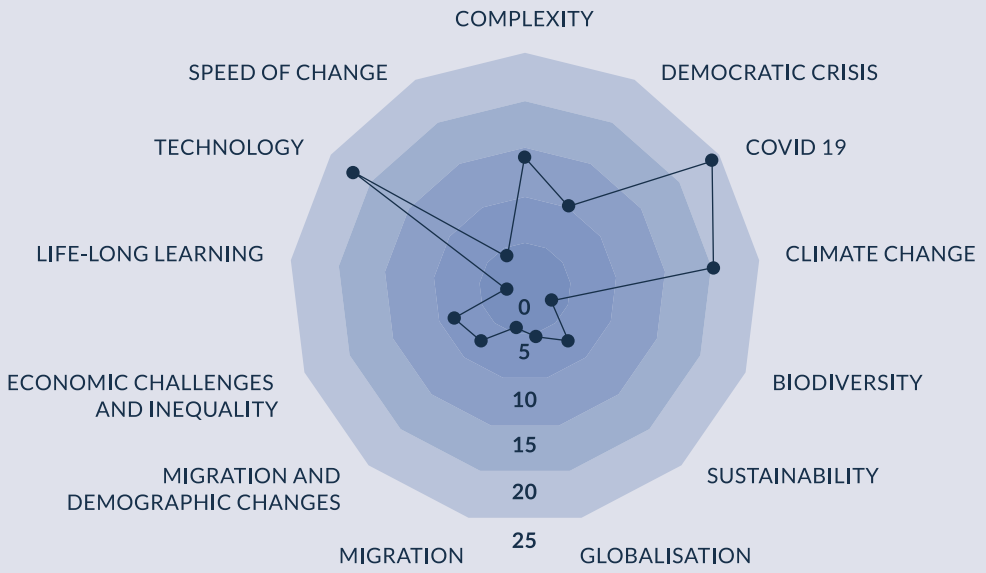


Figure 4.1. Substantive policy challenges needing anticipation, Source: OECD based on conducted interviews.

Note: The statistics are provided by individual interview mentions, not by frequency of mentions overall.

The interviews and validation sessions pointed to a variety of challenges that need to be addressed to make anticipatory innovation and systemic approaches to policy problems possible. These are outlined in table 4.1 below and categorised according to the type of anticipatory innovation governance mechanism illustrated in chapter 1 (the report will highlight these in more detail later on in the analysis based on topical clusters). Many of the findings are interconnected and dependent on each other within the broader policy making system. For example, many anticipatory tools and methods are dependent on the availability of the right data and measurement.

The findings above indicate that many coordination and steering challenges exist that affect the ability of the public service to anticipate, propose and discuss transformative change needs in an open and participatory way. The system seems to prime compliance with existing rules with limited possibilities to challenge them. User-centricity in addressing present and future policy issues remains a secondary rather than a systematic driver. Strong sectoral specialisation of ministries and not well-aligned steering mechanisms make it difficult to deal with cross-cutting and complex challenges.

More dominant steering systems in government – strategic, budgetary and judicial policy steering – do not always align in timelines or intent. The strategy process primarily led by the Government Programme tries to bring up challenges and phenomena that the government needs to tackle, while the budgetary process functions in an organisation-based logic with clear structural boundaries. This makes it difficult to plan for cross-sectoral interventions, integrate a variety of inputs into planning processes (e.g. knowledge resulting from agile processes and futures thinking), and establish organisation accountability for shared outcomes.

Cross-cutting governance challenges are predominantly tackled through a network approach by transversal working groups. However, these structures are mostly consultative and rarely enjoy formal decision-making powers. When conflict arises the responsibility to make decisions falls back onto more traditional structures. Consequently, policy makers are continually challenged by governmental silos and incentive systems. Furthermore, in coalition governments, common in Finland, the ability of centre-of-government steering bodies to directly negotiate across the public administration and direct change tend to be weakened (for example, the Prime Minister may have to broker a political agreement with heads of coalition parties).

On the whole, interviewees highlighted various clusters

Agency	
Mechanism	**General finding**
Sense making Uncovering underlying assumptions and making sense of trends	• Sense making and signal collection is not an institutionalised practice in public organisations of Finland • Few organisations have structured signal reading and sense making processes/teams • Existing sense making practices are quantitative (macro-economic) data centric if carried out at all • 'Foresight by number' – preference for highly probable futures aligned with existing plans; risk of "institutionally-bounded futures that limit the range of possible alternatives and solutions
Tools & methods Approaches to create new knowledge about possibilities, creativity of thought, and operationalisation of innovations	• Regulatory instruments such as legal acts are still the most common tools for policy making at the central government level • There is a systemic lack of strategic foresight, systems thinking, design, and experimentation knowledge. If these tools and methods are used, they are usually adopted by single individuals, rather than being part of an institutionalised practice
Data & measurement Reading and interpreting signals in time	• Data interoperability is an increasing issue that limits users centricity and anticipatory innovation: data sources are usually known, but legislation often hinders the use of data for alternative purposes than those indicated by the law. • There is a lack of user- and problem-centricity in collecting data and measuring policy progress limiting how problems can be addressed in a preventing, anticipatory manner and which signals of change are collected
Organisational capacity Organisational structures that give autonomy and resources to explore transformative ideas	• Organisational capacity for anticipatory innovation (both demand and supply for future-oriented knowledge and action) exists only in a few cases and mostly on an agency level • Specifically, lack of time and other dedicated resources (incl. funding and expertise) are cited as the biggest barriers to anticipatory innovation. Policy and organisational development responsibilities fall on few people with very full portfolios • There is a lack of capacity and futures literacy[11] at both individual and organisational levels • There is an unequal spread of transformative leadership capabilities (aimed to encourage, inspire and motivate employees to innovate and create change) both in public administration and politics

11 Futures literacy has been defined as the "capacity to explore the potential of the present to give rise to the future" (Miller, 2007), which means recognising that developments in the present are signals of what the future might hold.

Alternatives exploration and experimentation Ability to consider different alternatives that may be in conflict with current strategic intent	• Experimentation is well known in the public sector of Finland through awareness raising and broad efforts to socialise experimentation undertaken by previous governments, but it is not yet a mature practice. Most experiments are dependent of individual expert advocates and pioneers in public sector organisations. Practical knowledge and expertise about setting up experiments has not diffused widely in the public sector • Existing strategic planning processes and legal barriers are not conducive to exploring alternatives
Institutional structures Institutions that make room for experimentation and testing	• Outside of the preparation of the Government Programme every four years and the Government Report on the Future, there is little structured 'future seeking' and few experimental moments in policy reform • Three major governance steering systems – strategic/political, budgetary, and legal – are not well aligned and at times have conflicting timelines. Budgetary steering processes precede strategic steering and are not in line with futures and foresight • Institutional settings tend to enforce silo mentality (especially the budgetary process). Money does not follow problems: budget allocations are not phenomenon-based or user centric nor are allocations holistically aligned with the challenges involved • There is difficulty to align anticipatory action with ongoing strategic planning and political decision-making processes • Performance management systems do not support cross-government aims and anticipation/innovation • The role of public administration and politicians in complex and long-term policy issues is unclear and subject to (hidden) power relations • There is a lack of continuity between policy cycles: lack of formal transition procedure between administrations and difficulty to plan for long-term, transformative change
Learning loops Creating feedback loops from experimentation to dynamically inform policy choices	• Effective learning loops between strategic foresight, strategic planning and implementation are still fragmented or missing • Implementation for many is a core challenge. Government is able to generate ambitious goals, but lacks clear levers to learn from implementation and often goal-setting becomes a technocratic exercise. Time allocated to implementation is often too short and does allow reflexive practice, develop theories of change and evaluate the impact of changes on the ground. • Futures and foresight are not feeding into innovation and experimentation • Political cycles cut continuity of reforms and learning from previous efforts
Evidence and evaluation Evaluating future options based on value and accounting for opportunity costs	• Evaluation is widely numerical, does not consider competing values, future-orientation and is not often timely to the political process • Solutions are defined too early in regulation-driven policymaking processes. There is a lack of agile and iterative policy design and evidence generation

Legitimacy Creating trust in government, experimentation and explored futures	• Internal legitimacy (acting in accordance with rules and procedures) is often valued more than external legitimacy (reaching outcomes for citizens) • There is a fear of making mistakes • Experiments/innovation/foresight and their role are still not understood by leadership
Vested interests and biases Ways to address incumbents' interests and biases in thinking about the future	• Concentrating on short term policy issues and immediate goals contributes to various biases in policy making (recency bias, allocation of attention, confirmation bias and illusion of control to name a few) • Short-term tasks override long-term thinking • A pervasive myth of implementation not being part of strategic policymaking and should only be done by agencies stands in the way of experimentation and agile/iterative policymaking • Quantitative data fallacy (McNamara fallacy): strong belief in numbers and devaluation of other data sources
Public interest and participation Involving a variety of stakeholders and new perspectives, and facilitating discussions around values	• Lack of institutionalised citizen participation methods early on to consider policy alternatives • Closed culture (involving stakeholders once the solution has been already reached), lack of facilitation skills within government and overly large influence of think thanks and politically affiliated lobbies cited as barriers to participation • More acute public interest and media attention is seen in a negative light due to fear of negative perception of innovation • Lack of deliberative processes in futures and foresight exercises outside of more consultative dialogues
Networks and partnerships Working together with leading organisations and individuals with transformative ideas	• Foresight happening in narrow circles and problems with transparency and timely sharing of results • R&D (and to an extent, experimentation) is often outsourced through waterfall processes with little iterative learning

Table 4.1. General findings based on the anticipatory innovation governance model, Source: OECD

of challenges connected to governance and its ability to deal with complexity and change (see figure 4.2) directly impacting the anticipatory innovation capacity of the Government of Finland.

The most frequently mentioned clusters were associated with:

• Procedural issues (nature of the budget and legislative processes, how evaluation and strategic planning was conducted and openness, flexibility and user-centricity of these processes);

• Organisational challenges (culture, effect of silos, difference between ministries, human resource planning);

• Policy implementation (lack of continuity and available policy mechanisms, influence of foresight on decision making, alternatives exploration and experimentation and connections between strategies and action);

• Policy coordination (fragmentation, lack of coordinated action and discussion of trade-offs among others).

• Resourcing (lack of time and dedicated funding for anticipatory innovation and dominance of outsourcing development work and R&D);

• Individual factors (linear decision making, expert bias, fear of making mistakes and risk aversion, lack of open-mindedness etc.).

The interview findings presented in table 4.1 were grouped in more general topic clusters and tested with experts and stakeholders in valuation workshops (see Chapter 3 on methodology). The level of consensus on findings is presented in table 4.2 below. The results show strong agreement on the high-level findings with some exceptions based on individual stakeholder roles and perceptions of the system. There was least agreement about organisational and individual capacities to anticipate future changes and deal with complex policy problems. This is understandable as in many cases the perceptions are based on experiences in one or two public sector organisations and it is difficult to form an overall picture. Also, there may be conflicting issues connected to the findings: for example, many interviewees stressed the influence of an "engineering mind-set" and a technocratic approach to policy making as the cause for lack of anticipation. At the same time, recent examples of innovative leadership in the Finnish government that participants in validation workshops discussed were connected to people with digital skill-sets and more iterative approaches to reform. Hence, a conflicting understanding about the usefulness and influence of technology skills emerged especially as the influence of old engineering mentality versus new technology-oriented skills was deemed different. In other areas (e.g., performance management, research and development outsourcing) issues had not been connected to anticipatory practices before.

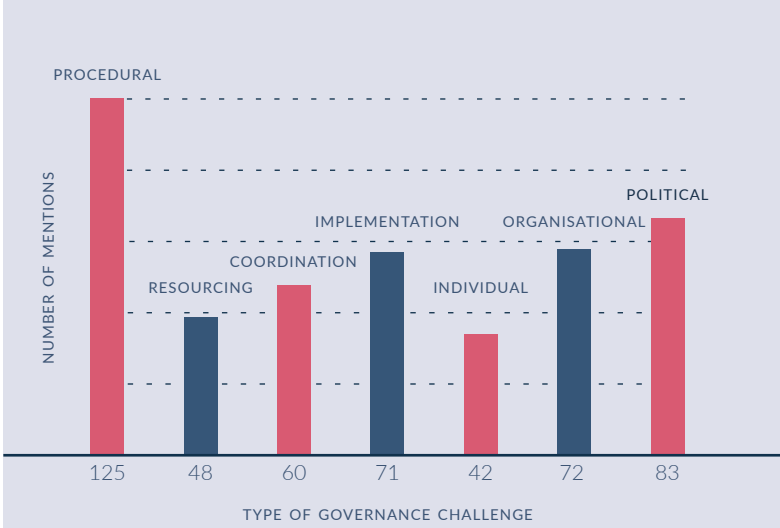


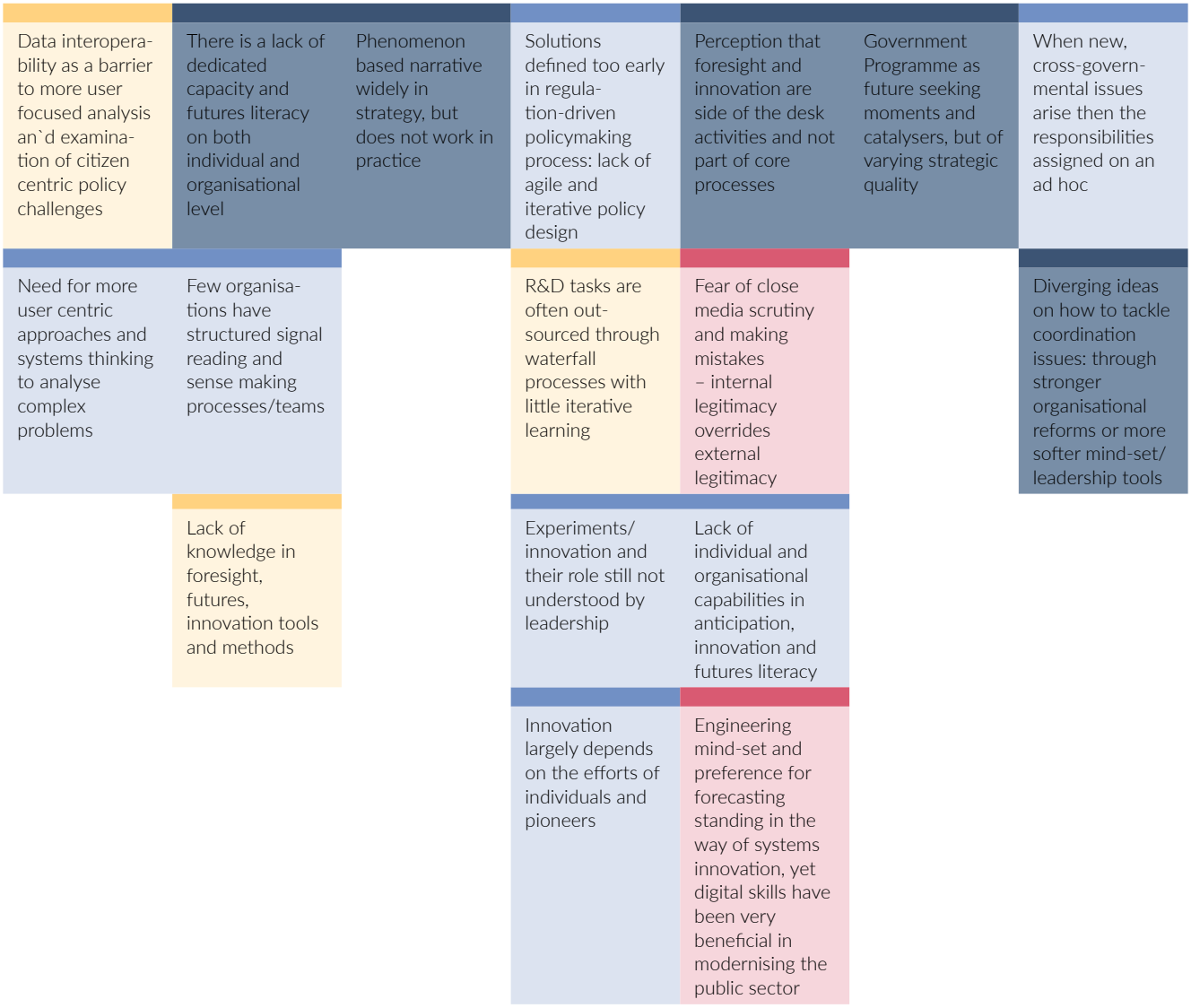
Figure 4.2. Identified governance challenge clusters, Source: OECD.

Note: The numbers are based on frequency of mentions across 53 coded interviews. Multiple mentions of a challenge within any given interview account for the frequencies shown exceeding 53.

Table 4.2. Heat map of validation results, Source: OECD based on 10 different validation sessions held between January-April 2021.

Agreement with findings was measured on a 1-5 Likert scale, where the higher score denotes a higher level of agreement.
- Dark blue – denotes a calculated average score on agreement between 4.5-5 across validation sessions;
- Light blue – average score on agreement between 3.5-4.4;
- Yellow – average score on agreement between 2.5-3.4;
- Light red - average score on agreement 1.5-2.4;

Participation	Futures and foresight	Budget and resource allocation	Exploration of alternatives	Individual and organisational capacities	Policy cycles and continuity of reforms	Coordination
Lack of institutionalised citizen participation methods early on to consider policy alternatives	'Foresight by numbers' – preference for highly probable futures aligned with existing plans, institutionally bounded futures	Budgetary steering processes precede strategic steering and are not in line with futures and foresight	Experimentation is talked about, but rarely done beyond agencies: handful of pioneers, but little true high-level support	Short-term tasks override long-term thinking	Lack of formal transition procedure between administrations	Budget, judicial and strategic steering enforce different aims: strategic vs organisational
Closed processes and lack of facilitation skills	Difficulty to align with ongoing strategic planning and political decision-making processes	Money does not follow problems: budget allocations are not phenomenon/ user centric nor are allocations holistically aligned with the challenges involved	Experimentation is not always timely in policymaking processes	Development responsibilities fall on few people with very full portfolios: lack of dedicated resources with right skills, capacities and resources (incl. time	Role of public administration and politicians in complex and long-term policy issues unclear and subject to (hidden) power relation	Budgetary steering process precedes strategic steering and are not in line with futures and foresight
Lack of deliberative processes in futures and foresight exercises outside of more consultative dialogues	Foresight happening in narrow circles and problems with transparency and timely sharing of results	Ability to make agile and iterative changes to projects once the situation develops	Outside of the Government Programme preparation every 4 years and the Government Report on the Future, little structured 'future seeking' and experimental moments in policy reforms	Unequal spread of transformative leadership capabilities both in PA and politics	Strategies do not lead to action – time for proper implementation is too short to develop theories of change, operationalise and evaluate changes on the ground	Very strong governmental silos
Data sources are usually known, but legislation often hinders the alternative use of data.	Futures and foresight not feeding into innovation and experimentation	Aligning commitments across organisational budgets at the same time is very difficult	Regulations as gate keepers of experimentation: experimental law on employment services experiment in municipalities	Performance management systems do not support cross-government aims and anticipation/ innovation	Myth of implementation not being part of strategic policymaking – stands in the way of experimentation and agile/ iterative policymaking	Trade-offs between different policy areas are not visible nor are investments across government based on societal challenges (budgeting through excel



Note: Same statements were validated at least across two different validations sessions, the scores were averaged and added to the heat map. For brevity, not all findings tested across validation sessions are represented.

The following analysis in this report will focus on the clusters of findings that emerged during the validation sessions including: futures and foresight; public interest and participation; alternatives exploration and experimentation; individual and organisational capacities; budget and resource allocation; policy cycles and continuity of reforms and coordination across government challenges. Other relevant anticipatory innovation governance mechanisms such as sense making, tools and methods and vested interest will be covered under individual and organisational capacities; while additional mechanisms including data and measurement, institutional structures, evidence and evaluation, learning, legitimacy and networks and partnerships are strongly intertwined with the above-mentioned topic clusters.

FUTURES AND FORESIGHT

As outlined in previous chapters, strategic foresight is a critical driver of insight to inform experimentation and anticipatory innovation, however it needs to be more closely linked to decision making to make insights about the future actionable in the present (Tõnurist and Hanson, 2020). Strategic foresight also acts as a driver for other core values in government: for example, government's capacity to plan ahead and minimise uncertainty is an important driver of trust in government and the civil service (OECD, 2021).

Finland has one of the most highly developed strategic foresight systems – see figure 4.3 – which comprises various institutions with formal and informal roles related fostering anticipatory governance.

These include:

- Sitra[12], an innovation fund which reports to the Finnish Parliament, has been conducting foresight studies of Finland and spearheading the use of foresight and futures tools in the Finnish public sector for decades (e.g., they recently released the Futuremakers Toolbox, a guide for organisation to integrate futures thinking to their operations). [13]

- The Committee for the Future established in 1993 by the Parliament of Finland. The Committee has been a key forum for raising awareness and discussing long-term challenges related to futures, science and technology policies in Finland (an overview of the committee's activities is included in Aunesluoma and Kansikas, 2018; Linturi and Kuusi, 2018).[14] The Prime Minister is a counterpart to the Committee of the Future, which draws members across all parliamentary parties and thus helps to diffuse the knowledge about future challenges and strategic foresight methods in political circles. The committee prepares the Parliament's response to the Government Report on the Future every four years and since 2017, also supervises the implementation of the Agenda 2030 for Sustainable Development (CoF, 2019). While the committee has members across all parliamentary parties, there is a potential to do more, as interviewees outlined that as committee members change after elections some of the expertise has to be built anew and there could be more connections to other permanent committee work on substantive reforms.

- The Prime Minister's Office houses the Strategic Department which includes the coordinating function for national strategic foresight. The Prime Minister's Office coordinates the Government Foresight Group which brings together strategic foresight experts. The Government Foresight Group also has a high level steering group with five State Secretaries from ministries representing all five coalition parties. The steering group sets the direction of the work.

- In addition to the national level foresight work, regions and municipal associations have their own foresight practices and agencies (like Business Finland, Tekes) conduct their own technology assessment and strategic foresight (e.g., Jäppinen and Pekola-Sjöblom, 2019).

- Most of the foresight work in the public sector takes place at project-level or is done with the support of internal networks. Some strategic foresight is also outsourced to external actors (Pouru et al., 2020). The National Foresight Network and community events like Foresight Fridays, led once a month by the Prime Minister's Office (see box 4.1 below), help to share knowledge across different entities including regional councils and organisations such as Sitra. Interviews indicate that cities and municipalities' direct participation in the network activities is less frequent. This has

12 Sitra is a Finnish Innovation Fund, which is an independent public foundation operating directly under the supervision of the Finnish Parliament. In 1967, the Finnish Parliament established Sitra as a gift to celebrate the 50th anniversary of the country's independence. The Bank of Finland granted approximately 84 million euros to Sitra as endowment capital to generate future profits to finance future-oriented projects. At the end of 2020, the endowment was valued at market value of 976MEUR. See further: https://www.sitra.fi/en/topics/sitra-as-an-investor/#what-is-it-about

13 See further: https://www.sitra.fi/en/projects/toolbox-for-people-shaping-the-future/

14 Committee of the Future, 2018; see further: https://www.eduskunta.fi/EN/valiokunnat/tulevaisuusvaliokunta/Pages/default.aspx

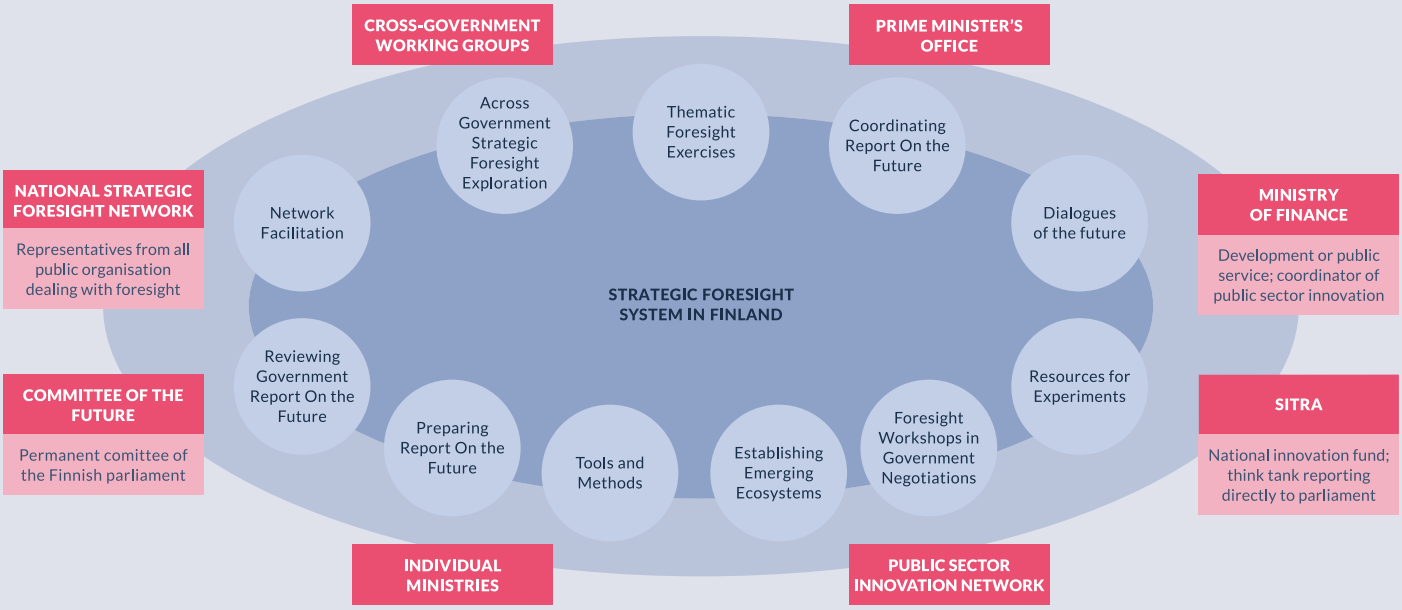


Figure 4.3. Futures and foresight activities in the Government of Finland on the national level, Source:OECD.

led to a slight fragmentation and confusion among experts on which scenarios and signals to consider as municipalities (depending on size and available capacity) tend to also conduct their own strategic foresight activities.

The coordination leaver in which the government is investing most heavily is is connected to the Government Report on the Future. The Prime Minister's Office is responsible for coordinating the preparation of the Government Report on the Future, which traditionally proceeds national elections and raises long-term future prospects for the country. The previous reports highlighted the need for reforms in the life-long learning system and in the social system (Valtioneuvoston kanslia, 2018).

"The aim of the whole report is to create not only a debate within the government about the future for Finland, but also a public debate about the kind of future we want for Finland. The work is very much hands-on: we are trying to get to a position where a cross-government way of doing foresight is in place. So we are using this Government's Future Report as a vehicle to reach some of the goals for government foresight work."

Increasingly the report is being used as a coordination tool to bring together different perspectives and form a collective orientation on future-related priorities. The Prime Minister's Office indicated its intention to engage ministries more actively in its preparation. To prepare for the new report the Prime Minister's Office has requested more dedicated time commitment from ministerial experts to participate in the work and aims to make the writing of the report a joint government endeavour.

Interviewees found that the current model represents a considerable shift from the past and towards greater central coordination of foresight activities. Previously ministries have led their own foresight activities and prepared also their own reports (future reviews) leading up to the Government Report on the Future. These were produced in different styles and used slightly varying approaches (e.g., Oikeusministeriö, 2018; Valtiovarainministeriö, 2018; Puolustusministeriö, 2018; Sisäministeriö, 2018; Liikenne- ja viestintäministeriö, 2018). Ministries tended to use input from external experts and researchers to contribute to their specific future reviews and Sitra facilitated a joint sense making session for the ministries to move towards a joint report. However this approach was not deemed sufficient by the Prime Minister's Office to reach a collective, synergic vision of the future as prior work done by single ministries started to pre-determine the discussion. While ministries are still expected to their future assessment reports separately from the Government Report on the Future, there is confusion about the roles of different report.

The current model around the Government Report on the Future involves a collective ministerial process from the start, including a joint environmental analysis and identifications of facts affecting the future of Finland before moving towards specific scenarios. These scenarios are also presented early to the cabinet to assure that the findings of the process are taken into account in the government's midterm review, rather than waiting for various parts of the reports to be made available only prior to elections.

"A lot of their resources now are going into the Government Report on the Future. While it is a really good thing, that it is done by the ministries themselves, I don't know how much additional resources in expertise they have put into it. But if you think that usually it was kind of bought from the outside, at least the background parts, and then mostly written within by the Prime Minister's Office, then it is a good development. But it's so much more work and they are quite tied up with that."

BOX 4.1. FINLAND'S NATIONAL FORESIGHT NETWORK

The National Foresight Network started with a pilot in 2014 to regularly bring experts together to share and discuss topical future-related themes and create new knowledge. Under the coordination of the Prime Minister's Office and Sitra (the Finnish Innovation Fund), Finland's National Foresight Network acts as a forum for discussion and coordination among the country's key strategic foresight players. By bringing together ministries, government agencies, regional councils, private sector actors, academia, and NGOs, the Network aims to promote the use of future perspectives and foresight data in the country's decision-making process at various governance levels. It is an open network holding monthly "Foresight Fridays" meetings that involve participants in trainings, presentations and networking events.

In the lead-up to parliamentary elections, it produced future scenarios envisioning Finland's future. The current foresight scenarios cover up to 2025, focusing on digitisation, the needs of an ageing population, and the labour market reform. The scenarios were made widely available online and were successful at bringing discussions of the future into the electoral debate.

Source: Tiihonen and Hietanen, 2014; Prime Minister's Office 2021; Hartikainen, 2021.

The collective, centralised approach, however, does not come without challenges. The interviews showed a large gap in futures and foresight capabilities across ministries, with some having only very limited or no expertise or capabilities in foresight. The result is the level of trust in and commitment to the process differs across ministries.

"Capability levels differ from ministry to ministry and of course, when you're running a joint scenario project, it might produce some tensions. It is a really promising learning process, but I'm not sure what will come out of that. I might feel very differently in a year."

For those ministries with extensive experience in strategic foresight (e.g., Ministry of Defence, Ministry of Interior etc.), a centralised approach can result in shifting attention away from internal foresight reviews and processes which represent important sources of knowledge for the organisation. Based on the interviews, many found that common processes tend to edge out more radical views and may not give enough field-specific detail for specific organisations with connection to strategic planning, experiments and innovation activities. Thus, is confusion concerning the roles and connection between the futures reviews of the ministries and the Government Report on the Future. Formally the links between the two have been severed, while the centralised work resumes.

"We are a bit worried that the Prime Minister's Office wants to centralize everything, and we are going to participate in that, no doubt, because we are part of the government. But we are going to keep also our own ministry internal processes going on, because my impression is that too few international ingredients important to us are discussed in this common foresight exercise."

Also, concentrating on the input of ministries, some interviewees found that the broader ecosystem approach had taken a back seat – importance of which was brought out in the review of the national foresight system in 2020 (Pouru et al., 2020). It was deemed very important that the ministries' future reports should remain, because this is information from civil servants and the connected ecosystems directly to all political parties as is not changed under scrutiny of the collective process. Their role is to provide non-partisan info equally to all political parties irrespective of whether they are in the government or not and their broader ecosystems. This does not mean that information from ministerial exercises cannot be used in the Government Report on the Future.

"So perhaps one thing that I've noticed related to this, is that they are doing this scenario, report with the ministries, the focus tends to be inside the government and towards ministries, less so about the ecosystem which was the message of the foresight evaluation report from spring (authors note: see Pouru et al., 2020). Of course, it there, there is the kind of whole legacy of the foresight network and the role of ministries that is very much alive."

The collective process was perceived to have an underlying political nature that was brought out as a potential danger, due to the Prime Minister's Office's coordinating role and need to validate the findings directly with the cabinet. Moreover, the attention to day-to-day issues (such as tackling the Covid-19 crisis) was found to take attention away from the long-term goals as the Prime Minister's Office is also responsible for preparing the Covid scenarios for the government (see box 4.2 below). Some interviewees felt that the report preparation process should be more transparent and institutionalised so that the expert bias and political interest to subdue more radical propositions would not influence the results.

"I was a bit surprised, because I thought that the kind of the processes in the National Foresight Network and, and the steering group would be more established. But they are tied to what the current government wants."

"The government wants to do foresight more together. Nothing wrong with that. But my fear is that it will be too much Finland- and current interests centred. And we are anyway going to keep our own foresight and try to bring the world to this country, this administration. Participating in the common effort, but also keeping our own and actually strengthening our own capabilities. Because this is really important."

This suggests that the role of different strategic foresight actors within the system needs more clarity as some organisations with more autonomy could be better suited for posing more radical ideas and stress-testing existing policies or planned solutions. Otherwise, day-to-day policy challenges and crisis response may override long-term visions.

IMPACT GAP

There are a variety of ways to set up strategic foresight systems, but the key is that both demand and supply of strategic foresight is present at the same time (OPSI, 2021). This is often very difficult. Based on the variety of levels of futures and foresight capability across public sector organisations in Finland, it was not surprising that the interviews showed a prevalent perception that foresight and innovation were considered "side-of-the-desk activities" and not part of core government processes. A majority of the interviewees and participants in the validation sessions strongly agreed that there is a significant 'impact gap' when it comes to strategic foresight and how it is used in the Finnish government. This has been also noted in prior reviews of the system (e.g., Pouru et al., 2020).

While the resources for central foresight efforts have increased with input from individual ministries, the work does not directly contribute to strategic plans, innovation programmes and decision making in ministries. Across the board, interviewees found that it is difficult to align strategic foresight with ongoing strategic planning and political decision-making processes.

"There are strategic foresight exercises, but how to use that material later on? It it's not that easy, and actually, not very clear. I mean, it was good that the high level leadership was there for the exercise we carried out, but, it took quite a while for the material to come back in a sort of distilled form. And then to be honest, the strategy process had its own life in between. It was hard to bring back future-oriented thinking into the process. When we needed to prioritise, people very much stuck to their guns already, in their own sector specific thinking. And it was very difficult to bring people to think in new terms and to inject new concepts, where we would have gotten beyond the more traditional things."

While Finland has invested quite a lot in recent years in the production of foresight knowledge, engaging with the demand side and usability of the knowledge has been lagging behind. The interviewees found that the producers of futures and foresight insights should also take into account the expectations and communication needs of decision makers. The general attitudes encountered during the interviews were confrontational on both sides: either the futures and foresight experts felt not heard and appreciated, or the senior decision makers felt that they were under-engaged and their needs were not taken into account. Experience indicates that the problem usually lies at both ends: on the one hand, there is a lack of ability to communicate foresight information in ways that are useful and digestible for senior leadership; on the other, there is still a low level of futures literacy and knowledge about the uses and benefits of strategic foresight among the leadership which limit their capacity to absorb and interact with this content. Until both issues can be systematically tackled, there is a need for intermediaries in public organisations able to translate anticipatory information to politicians and decision makers and a need for capacity building at different strategic foresight practitioner levels: expert, policymakers and decision makers. The government could also benefit from better communication principles for different government participants. In addition, more structured demand for futures and foresight in strategic planning processes should be created and a clear

"Sometimes I find it funny that in that government asks what's the impact of foresight? Or does it have an impact? At the same time, traditionally the Finnish government has not seen the purpose for doing foresight in making better decisions. It is a bit double – I think it is a bit peculiar. There has been some anticipation, of course, but the link to direct decision making and to budgets has not been so straightforward."

CLOSED PROCESS AND PREDICTABILITY

Although external engagement and government investment in foresight activities is at an all-time high, interviews indicate that foresight activities across government are not widespread but are conducted in narrow policy circles. Problems with transparency of the work and timely sharing of results were often mentioned as critical issues. While there has been an attempt from the centre of government to engage a wide spectrum of actors in foresight activities (for example, as part of the Government Report on the Future process the Prime Minister's Office ran also a wide future dialogue process), very few of the policy makers and senior leaders in government who participated in the interviews were actually aware about these processes.

Connected to the issue above, interviews indicate that often strategic foresight results are not widely shared or released in a timely manner. The latter seems to be mainly due to leadership hesitancy to share more debatable results and transformative ideas widely and the lack of 'futures literacy' (i.e. the ability to comprehend how, for what reason and for what purpose anticipatory knowledge is used) not only in government, but also in media. This latter factor in particular makes presenting and interpreting more transformative/radical scenarios and wild-card exercises more difficult. Some interviewees speculated that this may also "file the edges off" more radical ideas and limit the stress-testing role of strategic foresight. For example, the government quickly developed Covid scenarios (box 4.2) to respond to the crisis and think of alternative routes forward; however, once completed, the scenarios were approved to be shared only months later (and only internally), which constrained their uptake and use by ministries and other stakeholders.

"It takes a surprisingly long time, you know, to politically accept more transformative/radical scenarios, and for them to be approved to be published. It took a very long time for the Covid scenarios to come out. And then of course, it was a bit late, you know. Things moved fast in that situation and it was a bit sad if you want to be ahead of things, and then you are not allowed to publish the analysis."

The interviewees also referenced futures work as 'foresight by number' as in highly predictable in their results. There is a preference for highly probable futures aligned with existing plans, and institutionally bounded futures. Decision makers participating in the interviews found that there is little coming out of the foresight work that is surprising, meaning that the system does not function as a stress-test for conventional ideas or as a means to propose more radical ideas for experimentation. [15]

"If you have this kind of rather mechanical idea that, you know, every ministry has to have their own ideas, then this kind of big, unknown or difficult to foresee future is hard to collectively to put on paper. I personally think that we should also think about things we don't like, things we have no solution for. But that's not very popular."

15 Invariably the critique tends to come from the same decisions makers who are hesitant to share publicly more radical ideas. Generally, research as shown that senior leaders in organisations tend to defend the status quo and mainstream thinking (Burrows and Gnad, 2018).

For example, one interviewee described: "in the ministry they did a corporate report and already know what they want as an outcome from this – there is a strong path dependence." Hence, both the expectation gap, path dependencies and also the fear of potential backlash need to be addressed at the same time. Furthermore, as outlined above, ministries lack clarity as to the degree to which foresight activities should be carried out centrally and the extent to which should they develop internal capacities for futures and foresight work; and how these should tie in with their daily policy making and strategic tasks.

This raises another area of concern among the interviewees: the influence of expert bias, group think and predictability of futures in relation to foresight work. Most interviewees noted that there is no substantive evaluation or assessment of futures and foresight work – making it difficult to systematically identify critical biases in the production of future-oriented knowledge. This may at times be convenient for both civil servants and politicians as it allows them to avoid difficult topics and more radical, but potentially relevant, ideas and signals that are not considered as their ability to prepare for uncertain situations is not really under scrutiny. Ideas expressed during interviews pointed to the need of increasing inclusion and transparency of the process to counter these biases – by including experts and people (locally and internationally) more widely into the process, more transformative ideas would be difficult to ignore or exclude.

"There no evaluation or assessment of foresight work and the Government Future's Report whether it does have an impact or not. One thing that that is perhaps needed in these policy processes is the bringing more inclusion there or playing more bringing more participation there as well. I think this kind of current digital leap, if you will, has perhaps provided opportunities to that as well."

BOX 4.2. COVID SCENARIOS OF FINLAND

The Covid-19 crisis has been a significant change driver to start talking more about complexity and uncertainty (and based on our interview results in Finland), has dominated the discussion around foresight and futures since March 2020. While the crisis developed, the Prime Minister's Office started to prepare Covid-19 crisis scenarios in 2020 in cooperation with the Finnish Institute for Health and Welfare, the Ministry of Social Affairs and Health, the Ministry of Finance, the Ministry of Economic Affairs and Employment and the Ministry of Education and Culture. The scenarios were published in April 2021.

The medium-term and long-term Covid-19 scenarios describe three possible paths of development of the epidemiological situation in Finland and in the world and their potential impact on society in the period covering summer 2021 through end of 2023:

- The epidemic will be under control in Finland and globally by summer 2021
- The epidemic will be under control in Finland by summer 2021, but it will take until 2022 to gain control of it globally
- Gaining control of the epidemic will be delayed until 2022 both in Finland and globally.

The scenarios were not developed on the basis of forecasts, but on the assessment of the potential effects and impact of COVID-19 mitigation measures and their possible alternative paths.. The work also includes a qualitative overview of the potential impact of the epidemic in 2024–2026. The scenarios also describe the effects of the epidemic with regard to the economy, healthcare and social welfare services and the population in general.

Source: Valtioneuvosto, 2020; https://valtioneuvosto.fi/en/-/10616/government-outlines-covid-19-scenarios-with-a-focus-on-the-coming-years

From a leadership perspective, the foresight process appear to be a distant exercise separated from core ministerial activity. Most decision makers interviewed tended to refer to futures and foresight work being done in "narrow circles", to a degree in which they had little overview about the work itself. As was described by one of the senior leaders in government:

> **"So few people have been involved doing these kind of reports. So that we don't even know that these reports have been done. And when the reports come to our ministry, to people from our ministry, who have been involved in the process, the content sometimes comes as a surprise. So, it still feels like coming from the outside. We need to be more involved in this process, so that we can find relevant findings from there. I think these reports have been done by too few people and I think it is the biggest weakness."**

With the current Government Report on the Future, the Prime Minister's Office in cooperation with the Timeout Foundation has tried to address this by introducing future dialogues with citizens in the process (see box 4.4 in the next section).[16] People from a variety of backgrounds and walks of life were invited to participate. This was seen as a very positive approach forward: "*there has been these future dialogues using the timeout dialogue method, which I think is a really good a good step towards what inclusion might mean in practice.*" Other interviewees questioned how different ideas from the dialogues were prioritised and which were taken forward. There is a need to strengthen communication on these initiatives as interviews with policy makers outside of the foresight network indicate limited awareness of these initiatives outside the expert circles.

> **"During the last 10 years, the ministerial future reviews and the Government Report have been done in a very traditional way. I think we can't use them, for example, in my own ministry and in its strategy process. Now last year, we started a new process led by the Prime Minister' Office, where we had this kind of dialogue with citizens and companies and third sector. I hope this is going to open our minds to the fact that we need to have new ways to do these future reports. So more people actually know what kind of report it is and that we get more insightful knowledge out of it."**

SECTION FINDINGS AND KEY CONSIDERATIONS

The prior analysis has shown that there is a need to deliver on the potential of strategic foresight by integrating it with core strategic processes, innovation and experimentation. This requires better futures literacy among public servants. This includes building up the government's futures literacy and setting up structures to overcome the impact gap of strategic foresight (the individual, collective, and institutional limitations that prevent the use of high-quality futures knowledge in innovation, policy, and strategy), and integrating it with core strategic processes and innovation and experimentation needed to build up the anticipatory innovation capacity. Furthermore, different strategic foresight actors within the system need more clarity as some organisations with more autonomy could be better suited for posing more radical

16 https://valtioneuvosto.fi/en/-/10616/prime-minister-marin-s-government-begins-preparation-of-government-report-on-the-future

There is also an opportunity in the upcoming recovery plans and Government Programme formation to reinforce reliability of the use of strategic foresight by reviewing future-oriented policy-making processes to make design and implementation more inclusive. Currently, prior Government Reports on the Future feeding into the elections and the Government Programme have taken a four-year term perspective and not prioritised longer-term transformation. In general, prior research has shown that the average foresight timeframe for Finnish public sector organisations is 4-10 years (Pouru et al., 2020). In view of the important transformation of Finnish society, the government could improve the formulation process of government programmes by clarifying responsibilities with regards to foresight and anticipation and enhancing dialogue between the political leadership and the senior civil service with regards to their respective roles in anticipatory innovation.

Main Findings	Key considerations
Futures and foresight	
Unclear roles of futures and foresight at the centre of government and ministry levels	• Clarify the roles and expectations of strategic foresight and futures beyond the Government Future's Report • Outline which capacities ministries and public organisations should develop internally and which issues are tackled across government; this may mean that different foresight processes internally and across government are run simultaneously and hence, should be also adequately resourced • Create an evaluation system to outline how strategic foresight contributes to anticipatory innovation capacity of organisations (not the accuracy of predicting the future)
Impact gap: futures and foresight not feeding into strategic planning, innovation and experimentation Difficulty to align with ongoing strategic planning and political decision-making processes	• Strengthen the link between foresight and decision-making • Clarify the expectations of decision makers and policy makers for strategic foresight and create demand for the latter • Demonstrate how anticipatory innovation knowledge could be used in strategic planning, innovation and experimentation processes; create clear expectations on how and when different strategic foresights tools and methods (for visioning, stress-testing etc.) will be used in strategy making processes • Take into account strategic planning and policy making timelines in designing strategic foresight and futures exercises so that there are touchpoints and uses of this information during the government term
'Foresight by number' – preference for highly probable futures aligned with existing plans, institutionally bounded futures	• Involve more varied stakeholder groups and international experts in the futures and foresight work • Release results on an ongoing, timely and open manner • Build in autonomy to explore more alternative scenarios and use the future as a neutral, safe space to discuss and reframe issues that block progress
Closed process: foresight happening in narrow circles and problems with transparency and timely sharing of results	• Involve decision makers throughout the process • Present results to a wider audience on an ongoing basis • Take into account the ecosystem perspective in strategic foresight

PUBLIC INTEREST AND PARTICIPATION

Participation and dialogue are essential mechanisms for anticipatory innovation in that they are a starting point for the exploration, contextual understanding, and creation of narratives about the future that help to define areas where governments need to invest more and test out different scenarios and possibilities for innovation (Tõnurist and Hanson, 2020). As anticipatory innovation touches upon how the future is sought and how to act upon it, it requires broader participation from all stakeholders and the public in order to: (1) generate a collective view and experience of the futures scenarios around which innovations are explored; (2) help orient the direction of innovation as early as possible in the process, and (3) engage in diagnosis change given possible disruptions to existing modes of production and consumption (e.g., the long-term effects of climate change). For this often large-scale engagement in diagnosing change and influencing society is needed. In order for strategic actions to make sense, people need to have experience or at least appreciation about the futures perspective in which those actions make sense. From an innovation point of view, it is also important to involve upstream stakeholders as early as possible, because innovations tend to become more entrenched and, thus, harder to change later on. For all of this, effective and deliberative approaches are essential. An anticipatory innovation governance system depends on public participation and also how (for legitimacy reasons) the general public is involved with the process.

While public participation methodologies are well-known in Finland, they are not promoted through a concerted effort across ministries and they are not yet mainstream across the public sector. It is important that ministries will be able to experiment and innovate in this area, but sharing participation methods to understand what works and inspire those that are less active is needed. A full review of this and other related factors was recently covered by the OECD Civic Space Scan of Finland (OECD, 2021b). Interestingly, the public's trust in the civil service is still very high, but it is subject to something very specific to the country coined as the 'Finnish Paradox' (OECD, 2021). While the levels of trust are high in government, people have low efficacy (belief that they can affect change) leading to diminishing participation rates through formal channels. Levels of trust also vary across groups (ibid.); therefore, involving citizens and other stakeholders in future-oriented policy creation may require a differentiated approach, otherwise it is likely to miss the target. Actions related to that could include strengthening political efficacy by engaging citizens in policy choices and monitoring results, and by giving regular feedback on inputs provided by civil society (OECD, 2021). This also has an impact in the anticipatory space.

> **"Public trust in the polls is still quite high. There is kind of an understanding that civil servants are reliable and there is no major resistance from the public, so to say. So, overall, these are really good starting points for innovative and anticipatory practices, because there is no kind of an automatic reaction from the public that this is something that we should not do. So in a way, we have a good foundation, but again, we don't have any concrete policies in this area – if we would do more, then maybe the reaction would be different."**

Interviewees pointed to lack of institutionalised citizen participation methods especially early on to consider policy alternatives. This limits the perspective and contributes to expert bias and groupthink that were also discussed in the context of strategic foresight. Public consultations often occur at the stage when policy solutions are already worked out and they are focused to see comments to existing ideas rather than to seek new input (OECD, 2021b). The interviews surfaced views on the

barriers to more open anticipatory processes related to lack of political will and lack of time especially when sensitive issues with high public and political attention do not allow for extended consultation process. Some of the interviewees found that politicians did not want the processes to be open. Furthermore, public interest and politicians' attention on topics tends to speed up the policy making process, making it more difficult to have an open-ended engagement process. Invariably, decisions need to be made, so, there needs to be a balance between open and inclusive consultations with meaningful and transparent feedback loops and the need to get things done.

Furthermore, the consultations and also external partnerships, stakeholders often involve only "usual suspects", the circle of known participants. As discussed before, this was wider trend in policy making and can be dependent on different organisational cultures.

"I have understood that the culture in different ministries varies. So, there are ministries that are very open to opinions coming from stakeholders, or from researchers, and then there are other ministries where the one and only "truth" is more strongly in favour. Well, we do know how things are, and if you try to present something else, it's not preferred. And if you try to present something that is opposite to what they think, then you're almost excluded from the discussions. So it's a question of culture."

Many interviewees also found that the input into the policy process often comes from "usual suspects" and tend to be "specialised" i.e. originating from known groups or professional communities (see also OECD, 2021b). This counter the intent of anticipatory innovation where the range of alternatives under exploration is usually dependent on the networks and partnerships (both national and international) connected to transformative change (Ramos 2010). For strategic foresight and signal-reading public organisations in Finland tend to rely on local sources and reports (Pouru et al., 2020). Hence, many interviewees found that the policy making system is still characterised by closed processes.

BOX 4.3. FINNISH LOCKDOWN DIALOGUES

As part of the responses put forward by the Finnish government to monitor the evolution of Covid-19 and with the intention of capturing people's feelings, opinions and expectations, the Lockdown Dialogues were initiated jointly by the Dialogue Academy, Timeout Foundation and Ministry of Finance. These dialogues have been not only a vivid testimony of the social experience caused by the pandemic in its different phases, but have also contributed to identify issues that may require government attention and have become inputs for shaping policy responses. The dialogues started during the first months of lockdown and continued after the restrictions were lifted (renamed Finnish National Dialogues). Between April and September, over 100 dialogues were organised with over 1 000 participants, including civil organisations, individual citizens, municipalities and government offices. Information gathered during dialogues feed into the government's Covid-19 crisis management co-ordination, as well as the exit and recovery strategies. Furthermore, synopsis forms a basis of open government strategies, and they have benefited many other areas. Source: Highlights from the OECD webinar: "The ties that bind: Government openness as key driver of trust", 11 September 2020; Lockdown Dialogues Synopsis provided by the Finnish Ministry of Finance.

Source: OECD 2021.

"If I think about it, the input mainly comes from the usual suspects, so other people or other institutions organisations, in the sector. Also, it's mainly in Finnish or English. When it comes to a more participatory approach and trying to get different stakeholders behind the same table to think, what does this mean, for Finland? There's definitely work to be done there."

"We do it nationally. We do it regionally. We do it maybe sector-wise, we do it in all the ministries separately. But what we do not do is to consider interesting work internationally. We should do it [strategic foresight and signal reading] with the Japanese, we should do resilience work with the US, we should work more with the Europeans on these topics, because we can't think about potential futures which could be substantially different here in Finland and elsewhere."

The interviews also underscored a lack of relevant facilitation skills in the public sector that would utilise new ways of engaging people also through new and emerging technologies.

"It's worth doing participatory processes, because you can find the right policy actions, instead of just pasting and doing small decisions, designing small actions that poor impact. However, the issue is if public organisations have the rights skills for this, especially, if you are used to work in a different way? If you are not doing it, it's no wonder that you have no skills or knowledge of how to, for example, facili-

As in most OECD countries, the use of deliberation as a participatory method is still underutilised in Finland (see OECD, 2020b). This method is useful in exploring uncertainty and outline various values connected to technological change and beyond.[17] There have been few deliberative citizens' panels/juries or mini publics based on random sampling in Finland to date, and most of these have been led by academics (OECD, 2021b). While the forthcoming Government Report on the Future included citizens dialogues into the preparatory process and the government carried out lockdown dialogues during the pandemic (boxes 4.3 and 4.4), it is unclear how the views of the citizens were incorporated or if there is impact on strategic planning processes. Hence, there could be further opportunities to get future-oriented citizens' perspectives directly to the official Government Programme.

Some interviewees highlighted the need to also tackle the challenges presented by the influence of vested interest and external lobbying into policy processes, but more prone to excessive ties and linkages between the public and private sectors (Moilanen, 2018; OECD 2021; 2021b). Furthermore, the Covid-19 crisis also highlighted the risks posed by new lobbying channels such as social media on politicians that can distort transparency of policy making (OECD, 2021). This is very important for anticipatory innovation as transformative change can be held back through incumbent interests.

BOX 4.4. DIALOGUES ON THE FUTURE OF FINLAND

The Prime Minister's Office in cooperation with the Timeout Foundation, as part of the process of the Government Report on the Future, organised 50 citizen dialogues on the future of Finland. Four two-hour groups of citizens from various backgrounds were invited to share their thoughts, hopes and dreams about the future of Finland. After the dialogues were conducted, the Prime Minister's Office analysed the outcomes of these dialogue and the outcomes of the internal scenario process to see, where there are differences in the topics that arose and how these could be aligned. The results showed that many of the insights were missed during the issue identification phase and the process has a strong value-added role.

Source: OECD based on interview data.

17 See for example, https://www.thersa.org/action-and-research/rsa-projects/economy-enterprise-manufacturing-folder/forum-for-ethical-AI; https://www.unicef.org/innovation/GenerationAI

USER CENTRICITY

Anticipatory innovation, especially in the public sector, benefits from a user-centric view. It helps to look at complexity of emerging issues from the perspective of those impacted rather than a silo perspective and concentrate on the developing issues and needs, rather than existing programmes, strategies and inventions (Tõnurist and Hanson, 2020). In well-established government structures this is challenging for most governments. As such, connected to public interest and participation, the interviews pointed to an to the need to increase responsiveness in service design and delivery from an anticipatory perspective, going beyond established services and imagining new possibilities for future users. A large part of the conducted interviews, showed that future-oriented, user-centric services that spanned different organisations and agencies inside the government was a burning issue for Finland. This was found to hold back innovation significantly. Consequently, it is not surprising that Finland fares comparatively low among OECD countries in several components of the OECD Digital Government Index including user-driven approaches (see figure 4.4).

In Finland, there are organisations that have totally transformed themselves based on a user-centric approach, but this is rather an exception than the norm. For example, the Tax Administration used to be a very process-driven organisation, but now has changed the whole structure to be user-oriented with a customer unit, operational and process units and dedicated signal reading activities to be sure that the organisation picks up quickly what is going on with their users. The change was associated with the change of leadership in the organisation, influx of digital skill-sets and resulting organisational changes.

"There is a group that is collecting information about what changes are happening in our customer base. Also the people who are working with our customers directly are recording signals that the customers mentioned. Often it's the first place where they are noticed."

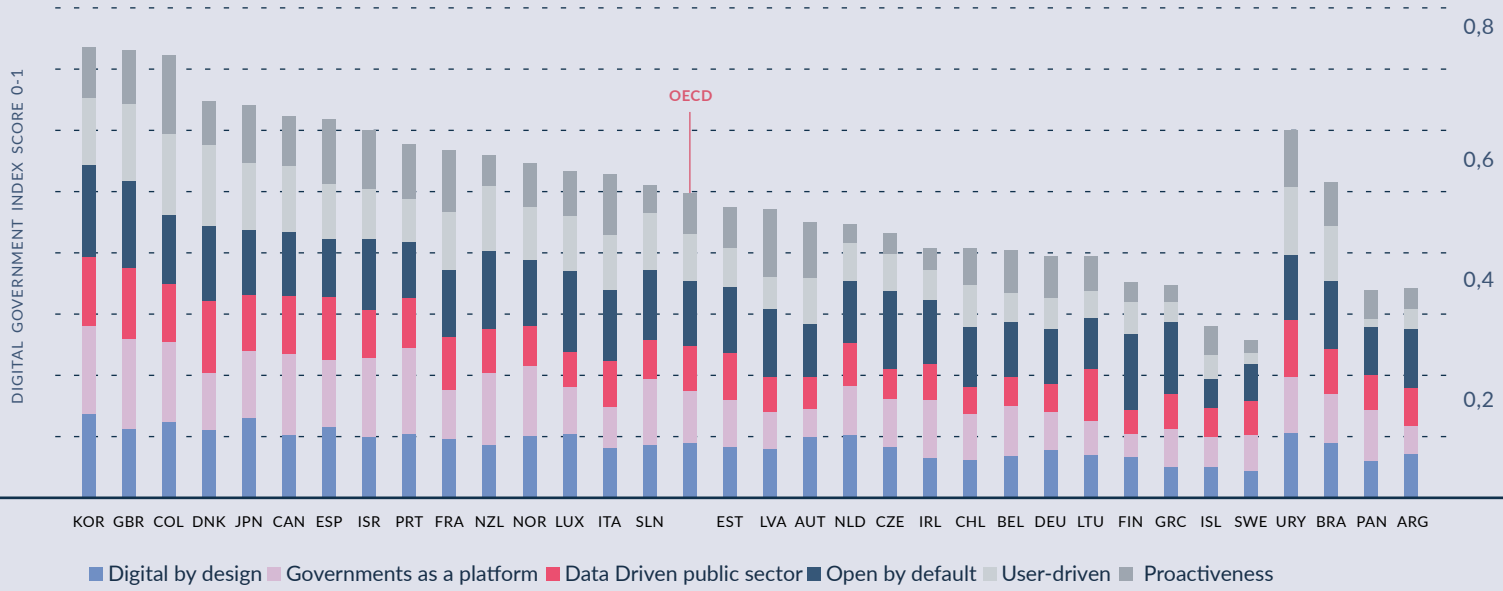


Figure 4.4. OECD digital government index, Source: OECD Survey on Digital Government 1.0.
Information on data for Israel: http://dx.doi.org/10.1787/888932315602.

Note: Data are not available for Australia, Hungary, Mexico, Poland, the Slovak Republic, Switzerland, Turkey or the United States .

Another issue raised during the interviews was the lack of consideration for future generations needs and perspectives connected to anticipatory innovation. Connecting to younger generational ideas and values help establish a baseline of future needs on which to focus new service and policy offerings.

"We don't really deal with future generations and their user perspective in government. We don't talk too much about users or customers –; it's almost a prohibited word to talk about customers. But if we think about future generations and what might they want – it is really important. It is of course a complex matter, but we should try."

A rare, but striking example of future-oriented service development is the Aurora AI program led by the Ministry of Finance (box 4.5). The program aims at developing a new future-oriented approach to public services to Finnish citizens based on life-events which integrates the use of foresight and innovation methodologies and is powered by artificial intelligence. Aurora AI showcases that to radically innovate not only new knowledge is needed about possible future user expectations and need, but also enabling conditions such as system interoperability and innovative data matching are needed.

"In Finland, we have many administrative registers that are very valuable in evaluating field experiments, especially in the field of social security. But then if you are not specifying the data rights early on, then you end up with a very bureaucratic and time-demanding process of acquiring the data and combining it."

In Finland, the regulatory framework connected to data is more stringent than the EU regulatory framework (Ministry of Finance, 2018). This makes it difficult to understand the full range of possibilities for new types of services across different policy areas. Exploring these new opportunities would also require a more systemic approach to data and also service development (capacity for which is not widespread in the public sector – see further under the section of individual and organisational capacities). Even if there are technical ways around privacy issues, then taking these changes further in legislative terms is burdensome and stand in the way of user centricity both in the present and thinking of next generation services.

"So we don't need to know who you are, we just need to know that you are some anonymous person who has permission to use this. That's it. And you should be able to operate with many, many services in a totally anonymous way."

BOX 4.5. NATIONAL ARTIFICIAL INTELLIGENCE PROGRAMME – AURORAAI

AuroraAI is looking for solutions on how to apply artificial intelligence technologies in an ethical and sustainable way. The aim of the AuroraAI programme is to implement a service operations modelbased on people's needs, where artificial intelligence helps citizens and companies to utilise services in a timely and ethically sustainable manner. The vision of the initiative is to build a people-oriented and proactive society, in which organisations work together to help ensure people's ability and motivation to deal with life events easily. The programme assumes that users in similar life situations are considered to require similar services, in order to advance into favourable life situations and avoid undesired ones. AuroraAI uses services from a pool of available ones, in order to facilitate transitions between various life states.
The work is based on the following assumptions:

- **The customer journeys** are guided by people's needs and are seamless.
- **People's well-being and empowerment** are supported by smooth service chains.
- **Digitalisation and use of AI** is enabled by cross-sectoral collaboration at all levels.
- **Data interoperability** is based on new incentive models of the data economy and people's ability to manage their individual data through the portal, MyData.

The prerequisite for the system is a cross-sectoral data interoperability. To make this possible an AuroraAI network was created. This is based on core components including profile management, APIs, service catalogues and recommendation engine (figure 4.5) coupled with UX services and pilot life events to act as proof cases. The term set by the Ministry of Finance for the preliminary study on the Aurora national artificial intelligence programme ran from 15 September 2018 to 28 February 2019. The preliminary study was carried out as extensive, open networking between the public, private and third sectors and, at the same time, was one of the suggestions made in the report AI Finland. Then on an implementation plan was developed with an experimental period starting for 2020-2023.

Source: OECD based on interviews; Hahto, 2020; https://vm.fi/en/auroraai-en

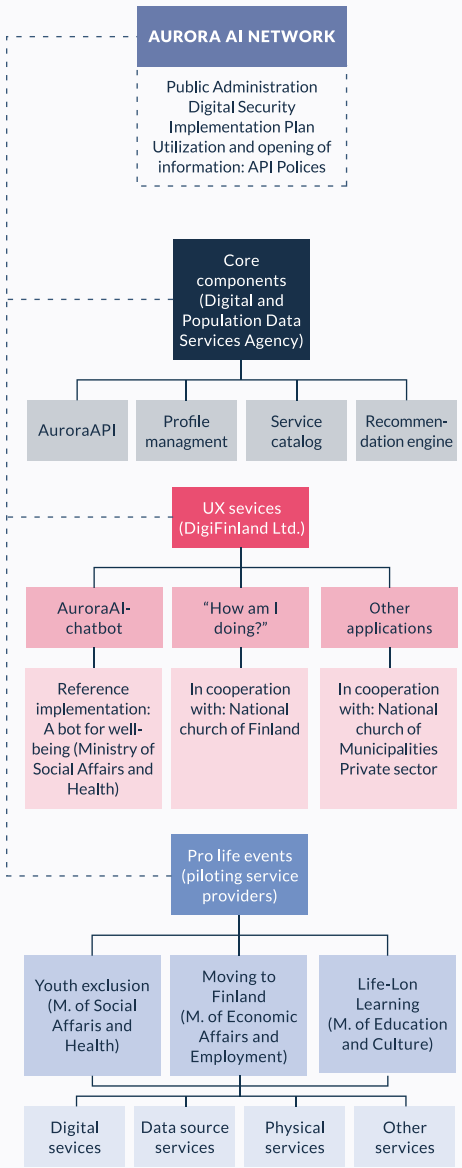


Figure 4.5. AuroraAI network, Source: Hahto, 2020.

There are initiatives in government that try to address data usage and skills, for example the Tietokiri initiative[18], which tries to provide an internal consultative service to government agencies in analysing and making use of data from collection to visualisation of processes. Yet, this does not tackle the more profound issues connected to data interoperability. But another issue here that needs to be addressed is if data from different sources is valued the same way – many in the Government of Finland tend to put the emphasis on forecasting based on current trends, rather than foresight or ethnographic (experiential) user data. Hence, user centricity tends to be bound by and also futures thinking tends to be bound by what can be measured, rather than what is possible.

"Foresight is sometimes confused with forecasting, which of course, the Ministry of Finance is a very strong player. And sometimes people don't really know, the differences and forecasting and scenario work."

"Often people think that prediction is foresight. So they want these linear numbers and they don't want quality of thought about what is going to happen. It is much easier to make decisions if you don't have someone saying that you can do it in two or three different additional ways or that you can do something altogether different. If you are that kind of person, who likes numbers, then you don't even come to those discussions and workshops."

SECTION FINDINGS AND KEY CONSIDERATION

Research shows that a more open approach to participation needs to be taken to counter biases connected to anticipatory innovation processes. Closed processes, paired with the lack of institutionalised citizen participation methodologies hinder the consideration of possible policy alternatives. Here, user-centric approaches could help influence how emerging policy problems are tackled and spur on more transformative innovations. Moreover, there are barriers connected to accessibility and interoperability of data that stand in the way of developing novel, cross-cutting solutions.

Main Findings	Key considerations
	Public interest and participation
Closed processes and lack of facilitation skills Lack of institutionalised citizen participation methods early on to consider policy alternatives	• Involve people early on in the policy development cycle to think about useful alternatives today, but also to consider options for the future • Take steps to institutionalise citizen participation methods and develop capacity in using them (incl. facilitation skills) • Organise targeted outreach to typically underrepresented groups, including future generations • Partner with other countries to collect insights regionally or globally • Counter 'standard' counter-arguments for citizen participation: e.g., politicians do not want the processes to be open, expedited processes do not allow for it. Demonstrate the social and economic value of open processes.

18 The Tietokiri project was launched in November 2017 and will continue to the end of 2021. The programme aims to collect enterprise level data from shared service providers from their operational areas; entitle shared service providers (State Treasury and Palkeet for finance and HR) to use the data in managing and developing government; provide consultative service to government agencies in analysing and making use of data; seek productivity gains and other benefits in order to develop and manage government as a whole; and promote models, best practices and build capacity to data-driven decision-making in central government (Siltanen and Pussinen, 2020).

Lack of deliberative processes that are future-oriented outside of more consultative dialogues	• Introduce citizen-led deliberative futures exercises to counter silo-effects in government thinking (outline challenges that are human centred) • Get future-oriented citizens' perspectives to inform the government programme • Differentiate citizens and other stakeholders involvement in future-oriented policy design based on their levels of trust in government • Consider across ministries dialogues on issues connected to emerging phenomena
Need for more user centric approaches and systems thinking to analyse complex problems	• Analyse barriers to user-centricity and create demonstration cases (similar to AuroraAI) that help to engage with future generation needs • Prioritise also human-centric ethnographic data and foresight data to operationalise challenges alongside 'hard data'
Tackle issues of digital rights which may hinder alternative use of data and address data interoperability to assure more user focused analysis and citizen-centred policy challenges	• Devise ways to counter legislative issues connected to data interoperability and solutions to overcome privacy and other issues innovatively • Look for alternative uses of data including data mining to create insights

ALTERNATIVES EXPLORATION

The general assumption presented in chapter 1 was that future cannot be predicted, yet knowledge about what is reasonably possible or plausible is needed. This is where exploring alternatives, experimentation and innovation become a part of the anticipatory innovation process. Through continuous exploration it is possible to prepare for the unexpected and make judgments about what plausibly may happen in the world as we know it, but also how the world as we know it could possibly change. Complex problems are characterised by uncertainty and need continuous, iterative development (Raisio, Jalonen and Uusikylä, 2018). The only way to deal with this is continuous investigation of different options and testing them in contexts where they will be implemented. While the foresight system in Finland is quite developed, as argued before, this does not always lead to using the knowledge as input in experimentation and innovation. Outside factors connected to futures and foresight, the latter are also not fully institutionalised and established in the public sector of Finland.

Experimentation

While experimentation as a policy area is not new in Finland and initiatives to foster a culture and practice of experimentation have been carried out over the past decade (see box 4.6 below), experimentation is still far from being institutionalised in the public sector. While previous governments have spearheaded important initiatives, these have not resulted in a strong take up of experimentation across government. Most interviewees found that while experimentation was high on the last government's agenda, it was and still is carried forth by a handful of expert pioneers with limited high-level support.

"We have to be like endurance sportsman, you know, running a marathon, we have to be patient with the innovation and experimentation work. We have to keeping repeating that this is important."

BOX 4.6. FINLAND SUPPORT TO EXPERIMENTAL POLICY DESIGN

In 2012, the Committee of the Future in the Parliament held hearings regarding new methods of policy steering for the country including the uptake of an experimental culture. Following to that, the committee commissioned a special report, "Kokeilun paikka! Suomi matkalla kohti kokeiluyhteiskuntaa"("Time to Experiment! Finland on its way to the Experimental Society") (Berg, 2013), which argued for rapid iteration, grassroots experiments and a strategic outlook focused on experimentation in government. The report also suggested the creation of an office or ombudsman for experimentation and public sector innovation. This spurred on additional research on the topic and preparation of the experimental approaches for the next government term.

In 2015, Finland started to develop a new framework for experimental policy design. Together with Demos Helsinki, a Nordic think tank, the Prime Minister's Office (PMO) of Finland employed a combined systems and design thinking approach to develop a new policy framework to carry out experiments in government. As a result, experimentation was incorporated into the strategic government programme ("Finland, a land of Solutions") in May 2015 and an experimental policy design programme was set up. The new approach to policy design allowed both broader "strategic experiments" (formalised policy trials) – for example, the ongoing basic income experiment – and a grassroots experiment designed to build up an "experimental culture" in the public sector in Finland. In addition to the original six strategic experiments introduced by the government, hundreds of experiments and policy pilots emerged across the country both at the central government and municipal level. In 2017, the Finnish government launched a digital platform called Kokeilun Paikka (Place to Experiment) to support the government's key goal: finding innovative ways to develop public services. Following, the government also invested in basic ethical guidelines for conducting experiments. Through the facilitation of the Prime Minister's Office, specific programmes in Sitra (Ratkaisu 100) and in municipalities, a variety of grassroots and strategic experiments were supported between 2016 and 2018.

As the initiative was a high on the political agenda of the prior coalition, the new government coalition of 2019 deprioritised experimentation and de facto dispended the dedicated unit within the Prime Minister's Office, redirecting efforts to promote the use of behavioural insights and more traditional evidence-informed activities based on existing data analysis.

Source: Berg, 2013;Poskela et al. 2015; Annala et al 2015 ; 2016 ; Antikainen et al. 2019; OECD, 2017 and OECD based on interviews conducted.

A majority of interviewees found that experimentation is often talked about, but rarely done beyond government agencies or municipalities and regions. While there is a diversity of experiments carried out across the public sector, most of them are not randomised control trials (RCTs) as capabilities across different levels of government to scope and prepare experiments (RCTs, trials or tests) RCTs properly are missing. This is especially the case in smaller municipalities. This is an inherent feature of the Finnish decentralised system, where municipalities and regions are responsible to deliver the biggest public policy areas – health, education, social services etc. Yet there is not assigned responsibilities to support decentralised initiatives and ensure that learning are shared across the system:

"There is no one at the ministries, who is able to learn from different experiments in municipalities and regions – it is very decentralised and there is no ownership. And currently, there is also no possibility to interfere in municipalities and the city activities. It is both a strength and the weakness of the Finnish public policy formulation and the experimentation and innovation system. It is really a context-sensitive system with all its innovative ways of formulating public policies, designing local solutions, but only one civil servant responsible for the topic on the national level."

Experimentation is also not always timely in policymaking processes and does not suit linear policymaking processes. Experiments take time to develop and carry out, which, under current conditions, does not suit political timelines nor pre-established legal processes. Hence, the benefit and use of experimentation in policy making is not yet fully understood. There still is a need to share more sharing of 'what' and 'how' of experimentation and build up more capacity towards the former.

"Ministries are still a little bit hesitant to use experiments, because they don't want to run up against what is fair and equal and if it is allowed to do an experiment -all the topics connected to how to handle the scoping of an experiment."

In Finland, regulation appear to be acting as a constraint to experimentation as specific laws are required to frame experimentation activities. Not only regulation per se, but the slowness of the regulatory process were indicated as constraints in interviews. The slow regulatory processes and political interest have derailed timelines of large experimentation projects such as the basic income experiment (see box 4.7), as well as recent experiments connected to the municipal trials initiated by the Government of Finland on employment services.[19] As the regulatory process lacks agility, it also acts as barriers to alternatives exploration and innovation in government. Under specific conditions expermentation has the potential to improve regulatory quality, it is important for governments to explore the potential.[20] It was noted during interviews that more extensive use of regulatory sandboxes [21] and testbeds would increase the innovation-friendliness of the regulatory environment (Attrey, Lesher and Lomax, 2020), but these solutions are traditionally externally oriented (targeting private businesses) in Finland and do not give room for government to explore and experiment (e.g., Salminen and Halme, 2019). Simply put, currently there is little room for government to explore and experiment that needs to be addressed in concrete terms.and experiment that needs to be addressed in concrete terms.

"I think that guides to experimentation platforms and exceptions in legislation for could allow certain type of experiments. It would be a good working mechanism to make the process easier. I think it would probably accelerate innovation and bring the research results into real life."

19 http://www.te-palvelut.fi/te/en/information/use_te_services/local_government_trials__/index.html; https://www.kuntaliitto.fi/elinvoima-ja-tyollisyys/tyollisyys/tyollisyyskokeilut

20 See OECD Recommendation on Agile Regulatory Governance to Harness Innovation, forthcoming.

21 The traditional role of regulatory sandboxes is to incubate innovation and allow innovators to test new technologies and enable regulators to understand their implications.

BOX 4.7. BASIC INCOME EXPERIMENT

One of the best-known flagship experiments in Finland was on basic income. Conducted between 2017 and 2018, the experiment was explicitly mentioned as a key project of Prime Minister Juha Sipilä's government programme, and was conducted by the Social Insurance Institution (KELA).

The design and roll out of the experiment was largely framed by the legal provisions authorising the experiment and the more general constitutional principles. In order to abide to the respect of the principle of equal treatment raised by the Constitutional Law Committee, the KELA-led consortium and the Ministry of Social Affairs and Health modified the design of the experiment which meant that different amounts and conditions of basic income could not be tested. Instead, the amounts were downscaled to equal the net level of unemployment benefits (EUR 560 per month), putting a ceiling on the experiment and cutting out part of the hypothesis that needed testing. Also the need to keep a tight schedule, change regulations to simplify the experiment and build an ICT platform to administer the benefits required the experiment to be kept as simple and linear as possible.

The draft law act creating the legal basis for the experiment was handed to Parliament in August and was passed and came into force on 29 December 2016, three days before the first money was paid out. Throughout the experiment, a total of 2,000 unemployed persons between 25 and 58 years of age received a monthly payment of €560, unconditionally and without means testing.

The experiment showed small employment effects, better perceived economic security and mental well-being. Topics surrounding the role of activation policies in shaping the behaviour of the participants in the experiment needs more follow up over a longer period of time.

Source: OECD interviews ; OECD, 2017; https://www.kela.fi/web/en/basic-income-experiment

At the same time, the parliamentary process connected to processing legal acts connected to experiments, shed light on them and increased public debate. Some interviewees found it to be very positive as it gave additional legitimacy to the process and also enhanced transparency. But it requires strong political commitment from the cabinet and the slowness of the procedures was considered a problem, especially as often experiments at the national scale run against political timelines. Consequently, there is a need to rethink regulation not only as a barrier to experimentation, but also as an enabler.

There is a lack of demand and opportunity to propose more radical ideas for experimentation. The interviewees found that outside of the Government Programme preparation every 4 years and the Government Report on the Future, there are few structured 'future-seeking' and experimental moments in policy reforms (opportunities to propose and test radically new alternatives). Hence, proposing large topics for experiments mid-government term is much more difficult than align it with the 4-year government mandate. Depending on topics there may be more room for alternatives-exploration than others as the Government Programme also varies in terms of top-down solutionism,[22] based on political interest. Highly politicised topics are difficult to carry out experiments on even if uncertainty on effects of proposed solutions is objectively very high.

22 Solutionism refers to the idea that the right idea can solve any problem effectively without any friction from implementation.

"I'd say that there is a possibility to open the discussion as a civil servant if issues need to be reframed coming from the Government Programme, but I'd say that you need to be aware on which issues that is possible. We know that some issues are very important to certain parties. For example, the Green Party might have a strong opinions on solutions for carbon neutrality. So I'd say that we need to know when and on which cases we have more room to look for alternatives. We kind of have to put our nose out and see if there is very high political interest or not and then see if there is room to propose something."

This also means that experiments in Finland have to be de facto designed, legal acts (if necessary) passed and experiments conducted in the same time period – with more transformative and complex issues this may, however, not be possible.

"Experiments like the basic income experiment are very demanding. Finnish experiments in general require decision makers to sketch a little piece of legislation for the experiment and get it passed in the parliament and so on. So they are very demanding from the politicians' and ministers' point of view. Even if some political parties are interested to continue experimenting, for example, in the case of social security reforms, the toll is high and it's an open question when a new experiment will emerge."

For example, the government pushed strongly for the basic income experiment to start in 2017 for the same reasons leaving less time for preparations and simplifying the experiment itself (OECD, 2017). If these timelines are exceeded, it becomes questionable whether the knowledge of the experiments is taken into account by the next coalition. Hence, it should be clearer how the experimental knowledge base is taken into account in evidence-informed decision making and what are the concrete and transparent steps that follow an experiment (both in the case where the experiment shows positive results or shows no support for the proposed hypothesis). In many cases it remains an open question what happens later.

"The current government actually did state in their Government Programme that they will be starting kind of a second phase/second experiment, based on the basic income experiment, maybe testing a little bit different model – they are referring to this negative income tax scheme. So this is actually in the Government Programme, but to my knowledge, there's nothing happening at the moment or at least they have not publicly stated anything about the design of the experiment."

There is also a question of how data for experimentation can be accessed. As mentioned above, another barrier for more cross-government experimentation lies in data interoperability: data sources are usually known, but legislation often hinders the alternative use of data. This also limits areas where data-driven, quasi-experimental designs would be possible.

Innovation

»I became very reflective, when you used the word innovation, because it's really a word that we probably use way too little.«

–Senior leader in government

Public sector innovation (defined as implementing something novel to the context with impact to public value) has not enjoyed the same high-level attention as experimentation. Nevertheless, Finland adopted the OECD Declaration on Public Sector Innovation together with the other OECD countries at the OECD Ministerial Council Meeting on 22 May 2019. The Finnish population assesses positively the innovation capacity of civil servants and this has a positive effect on trust in the civil service and

local government (OECD, 2021). Innovation is mostly talked about in connection with transformative, system-level changes (such as large-scale socio-economic reforms), but it does not trickle down to programme and organisational-level supports, and vice versa: smaller organisational level innovations do not scale up or inform large, more ambitious changes, because these feedback systems from practice are missing.

"The concept of innovation is seen as something really ambitious, so, people don't understand that innovations can also be a small steps. How can we improve our operations and daily routines as well? Only something that changes everything is called innovation – it really limits activities. So, in our operations and also at the ministerial level, but people don't understand the different aspects of innovation and how they come together."

The Ministry of Finance has responsibility for pushing forward public sector innovation at the national level as part of broader public governance reform, while at the subnational level the Association of Finnish Municipalities plays a support and coordination role, including in the context of the roll out of the Innovation Barometer[23] exercise among municipal workplaces in 2018.[24] There are a variety of actors within the public sector innovation system (see table 4.3) which the Ministry of Finance brings together through the public sector innovation network. At the same time, there is no dedicated funding specific for innovation in the public sector and most initiatives are project-based or digitalisation- or productivity-oriented (e.g., Kaunismaa, 2019).

"The challenge with innovation projects is that they are projects. So, maybe the best ideas really have some impact, but they are very context-specific. We launched innovation project support programmes twice in our organisation and we found some nice things, but they were not connected to our basic work. They remained projects."

In Finland the public sector innovation approach is largely mixed with private sector innovation support measures and, consequently, developed between different silos. Thus, innovation is more externally oriented: most analyses look at the external effects of regulation or creation of ecosystems (Laasonen et al. 2019; Salminen et al. 2020; Salminen and Halme 2020) or as part of the Agenda2030 strategy (Naumanen et al. 2019). For example, indications of this can be seen in the Ministry of Economic Affairs and Employment "Agenda for Sustainable Growth") highlighting growing future areas (MEAE, 2021). This may help to spur on a more ecosystem based approach, but it makes difficult to establish an innovative practice in the public sector itself. Finland is lagging behind other Nordic countries in terms of introducing specific support programmes to public sector innovation (e.g., such as the case in Norway and Sweden) or bodies to coordinate capacity building and broader action on public sector innovation? (Denmark – see OPSI, 2021). Previous research which compared the Nordic countries' efforts to promote public sector innovation? found that Sweden, Finland and Iceland focus more on structural instruments related to incentives and acting environment, while Denmark and Norway to a greater extent have a practice-based and process-oriented approach focusing on tools and support for individual organisations (NIFU and Ramboll Management Consulting, 2019).

23 Read further in about Innovation Barometers in Copenhagen Manual (2020).

24 https://www.kuntaliitto.fi/julkaisut/2019/2009-innovaatiobarometri-2018

Actor	Role
Ministry of Finance	Ministry of Finance coordinates the work on public sector innovation at national level. It is the host for a public sector innovation network which is mainly used for spreading knowledge about public sector innovation. This network consists of representatives from ministries and other national organisations like Vero and KELA, the biggest cities, Innokylä and the Association of Finnish Municipalities. The ministry has also responsibility for the work on public sector innovation productivity (ex. through digitalisation projects like Tietokiri), open government and public sector leadership development.
Prime Minister's Office	Responsible for strategic steering of government, coordinates the implementation of the Government Programme through cross government working groups. The PMO chairs the national strategic foresight network and coordinates the Government's Futures Report and initiatives on evidence-informed policies and behavioural insights
Ministry of Economic Affairs and Employment	Supports innovation in enterprises, energy, working life, private consumption and regions by different programmes and financing, but also is responsible for the Sustainable Growth Agenda for the country.
Public sector innovation working group	Cross-government working group led by the Ministry of Finance tasked to propose avenues for further development of the public sector innovation system of Finland.
SitraLab	Situated in the government think-tank Sitra, SitraLab is a futures laboratory where change-makers are trained and where Sitra helps organisations and communities take advantage of new approaches and advocate for change.
Liikennelabra	Transport lab under the Ministry of Transport and Communications specialised in digital and innovative transport and communication and logistics services.
Technology Advisory Board	A time-bound ((2020-2023) entity under the Ministry of Finance tasked to prepare a technology policy based on digitalisation that creates well-being for Finland and support national competitiveness.
Hankinta Suomi/ Procurement Finland	Placed under the Ministry of Finance, it works in co-operation with the Association of Finnish Municipalities to promote the social impact of funds used in public procurement and the sustainability of public finances.
Centre of Expertise in Impact Investing	Established in 2020, it assist public sector actors in preparing and managing outcomes contracting. It is part of the administrative organisation of the Ministry of Economic Affairs and Employment, but serves the entire public sector.
KelaLab	Social Insurance Institution's (KELA) development lab with high-level skills and capacities in experimentation.
Innokyla	Innokyla (InnoVillage) is a co-creation platform for social innovation supported by Ministry of Social Affairs and Health, The Association of Finnish Local Authorities and SOSTE Finnish Federation for Social Affairs
KEINO-osaamiskesku	KEINO is a network-based Competence centre for Sustainable and Innovative public procurement in Finland. The founding members responsible for the operation and co-development were Motiva, the Association of Finnish Local and Regional Authorities, VTT Technical Research Centre of Finland Ltd, The Finnish Funding Agency for Innovation – Business Finland,

	the Finnish Environment Institute SYKE, Hansel Ltd, KL-Kuntahankinnat Ltd and the Finnish Innovation Fund Sitra. At the moment the first six are still part of the consortium and are responsible for the operation and co-development of the centre.
Tietokiri	Tietokiri is an initiative coordinated by the Ministry of Finance and was launched in November 2017 and will continue to the end of 2021. The programme aims to collect enterprise level data from shared service providers from their operational areas; entitle shared service providers to use the data in managing and developing government; provide consultative service to government agencies in analysing and making use of data; seek productivity gains and other benefits in order to develop and manage government as a whole; and promote models, best practices and build capacity for data-driven decision-making in central government.
AuroraAI	AuroraAI is a program to apply artificial intelligence technologies in an ethical and sustainable way. The aim of the AuroraAI programme is to implement an operations model based on people's needs, where artificial intelligence helps citizens and companies to utilise services in a timely and ethically sustainable manner. See also box 4.5.
BI in decision making working group	Behaviour Change Science & Policy (BeSP) is an Argument-project (2019-20) funded by the Finnish Cultural Foundation, which aims to create a scientific and interdisciplinary discussion forum on issues affecting behaviour and policy design.
Tyo 2.0 Lab	Tyo 2.0 Lab is a cross-government co-working space to facilitate interactive workshops and working on projects across government.
Törmäämö	Open public service network organising events connected to innovation, experimentation and foresight.
6Aika	Sustainable development initiative crossing six biggest cities in Finland. Under the Six City Strategy, Helsinki, Espoo, Vantaa, Tampere, Turku and Oulu tackle sustainability challenges together and develop better services.
Association of Finnish Municipalities and Regional Authorities	Advocate for all Finnish municipalities and regions with its own innovation, foresight and experimentation programmes
VTT Technical Research Center	VTT is a limited liability company that is fully owned by the Finnish state and operates under the ownership steering of the Ministry of Economic Affairs and Employment. The aim of VTT as a research institution is to help companies and society in solving global challenges by utilising science and technology.
HAUS	HAUS a state-owned company under the Ministry of Finance. HAUS concentrates on full-service public administration training. HAUS is currently pursuing its "New Horizons" vision – a fully virtual international training for aspiring young leaders, current experts and specialist and future potential change makers

Table 4.3. Key public sector innovation entities, Source: OECD

From interviews a diversity of approach emerges as to where to place the innovation portfolio: some see innovation as connected to the achievement of the organisation strategy or sectoral policy goals, others as ways to improve the internal functioning of the organisation (more on the ministerial level), or directly related to more operational issues (for examples in agencies and government institutes). In few organisations, however, the drive for innovation appear to be set at corporate level and innovation efforts largely comes from the bottom up and is dependent on individuals. This makes also innovation processes more ad hoc.

"Innovation relies more on individual civil servants and enthusiasts. It's not so much in the strategy processes even if leaders tend to talk about it. The reality is more in little units in different organisations and people who are enthusiasts, or have this innovation in their working agenda."

There is not a clear common view emerging from the interviews on which organisations are the most innovative in the public sector. Most interviewees brought out examples of agencies such Tax Administration and National Land Survey of Finland, but also of municipalities or cities (e.g., Helsinki, Oulu) leading with practices, while ministries were rarely mentioned. There were a couple of exceptions based on 'inbound' innovation practices where ministries were using strong collaborations and innovation procurement from the private sector to insource solutions (such as the Ministry of Defence, Ministry of Environment and Ministry of Transport and Communications).
Interviews indicate that often research and innovation development tasks in ministries are outsourced to agencies and other partners (e.g., Aalto University, private companies like InnoLink were mentioned during interviews). During validation sessions it was discussed that ministries used to have development units, but these have now been cut and merged with other activities, meaning that ministry-wide innovation, foresight and development activities receive less attention as they have to compete with day-to-day crises and other urgent issues.

"I think it is mainly the private sector: it is more free to bring in new ideas. Compared to other ministries we have a really close connection with our partners in the private sector, but we also have really smart people inside the ministry that know what to do with this information."

"The cooperation with the private sector is very important especially in the area of emerging technologies. organisation [...] Sometimes it is not for us, but it's good to hear because it's usually things we don't see ourselves and comes from a totally different perspective that is not visible to us."

"In Finland, we are focused on everyday life, and innovation issues seem to be far from it. People in public service say that they don't have time for even the business at hand. So, they don't relate to the innovative stuff."

Nevertheless, having some internal research competence and resource slack is needed to set up experiments and more robust testbeds for innovation (Tõnurist and Hanson, 2020). The reliance on outsourcing and also dividing policy making from implementation (principals from agents) may be explained by lasting influence of previous public management paradigms (e.g., NPM): often the interviewees argued that "ministries' task is to do policy, while the agencies job is to implement" and thus, de facto innovate. This belief was quite strong throughout the interviews and may become a substantive barrier for anticipatory innovation.

"What is this sort of relation between innovation taking place in the frontline versus innovation promoted by the central government units? You know, once a professor stated in a lecture I was attending, that the time has passed for those central government bureaus, which tried to steer frontline workers on how to innovate. People are educated enough in all the administration in order to address these questions themselves. And I think that a lot of things happen in those agencies, which constantly have to interact between the environment between markets, between people, between companies. They get signals from the environment every day: how the markets are changing, how people are responding, what they want, versus us who are dealing with central government ministries. We're sort of thinking about policies and drafting legislation, and very far from the fieldwork and we are the ones missing out. We are living in a world where networking and cooperation and working with stakeholders, it's growing more and more important."

Already during the OHRA project (see box 2.1) the fragmented connection and lack of feedback loop between policy design and implementation were brought out. This is still the case and will be described in detail in following sections, but it also has a very strong impact on innovation capacity more broadly and anticipatory innovation particularly. Existing research indicate that it is very difficult to create an iterative anticipatory innovation practice if policy direction cannot be changed as a result of a learning process (Tõnurist and Hanson, 2020). If this possibility is not provided, innovations that are considered and undertaken are those that do not challenge the bigger objectives or the status quo of the system.

In addition, existing evidence indicates that often anticipatory innovations are undertaken by individuals that do not have necessarily the mandate to do so or are poorly connected to feedback loops on the systems level. For example, agencies tend to have more radical innovation projects as was also confirmed by the interviews in Finland. Lacking feedback mechanisms from implementation, it cuts off a large part of the on-the-ground learning that is needed for an anticipatory innovation governance system to emerge. This is not a unique problem for Finland: agencies often perform highly diverse, and often technically, legally or operationally complex tasks. This makes it hard for "outsiders", including central government, to fully grasp the strategic and substantive decisions taken by agencies including the far reaching implications of innovations they tend to work on (Schillemans et al., 2020). The problem will become much larger once more data-driven and real-time governance in the public sector emerges, where policies can become more in tune to environmental changes.

Section findings and key considerations

The results of the research showed that there is still work to be done to institutionalise experimentation and innovation practices inside the public sector of Finland. This also means a more systematic demand in policy making processes and timelines to make room for more alternatives exploration. This requires capacity and investment in public sector organisations in both experimental and innovative processes and capabilities. Furthermore, clarity in the role of the regulatory environments that sets boundaries for experimentation is needed.

Main Findings	Key considerations
	Alternatives exploration
Experimentation is talked about, but rarely done beyond agencies: a handful of pioneers, but little consistent high-level support	• Experiments and the information obtained from them must be better linked to long-term policy development work • There should be more clarity on when it is appropriate to apply experimental approaches and what support can be expected from government to do so
Regulations as gate keepers of experimentation (e.g., experimentation law on employment services experiment in municipalities)	• Consider a comprehensive legal framework to carry out experiments or an established procedure to regulate more transformative experiments • Consider providing guidance to help public organisations better assess the legal implications of designing and running an experiment
Experimentation is not always timely in policymaking processes	• Set a clear path/role for experimentation within established evidence-informed policy development processes • Consider the development of evaluation criteria for experimentation, including for pilot test and initiatives. • Facilitate a structured learning process from bottom-up experimentation connected to missions, support for scaling and last-mile innovations
Outside of the Government Programme preparation every four years and the Government Report on the Future, there are little structured 'future seeking' and experimental moments in policy reforms	• Create concrete, structured and open opportunities to propose innovative or experimental policy designs during the Government's mid-term review • Leave room in the Government Programme for innovation and experimentation and avoid leading by solutions if not validated before
Solutions defined too early in regulation-driven policymaking process: lack of agile and iterative policy design	• Create concrete feedback loops for implementation and space for experimentation and innovation within regulatory frameworks • Create a framework for using regulatory sandboxes, testbeds and other agile and iterative regulatory solutions for public sector innovation
R&D tasks are often outsourced through pre-defined (waterfall) processes with little iterative learning	• Consider ways to strengthen government's organisational capacity for innovation to ensure internal learning. Create the role of boundary spanners who can facilitate learning from external partners into the public sector
Experiments/innovation and their role still not understood by leadership	• To create the demand and supply for experimentation in a functioning anticipatory innovation system, organisations need to be systematically supported and encouraged to start their innovation/experimentation journey. This should include dedicated funding, training and leadership programmes to support innovation management • Expand the view that innovation is connected mostly to digitalisation and productivity projects and create clear links to core policy making and policy implementation processes (including government challenges, phenomenon and missions; adaptive change and anticipatory innovation)

Innovation largely depends on the efforts of individuals and pioneers	• Consider the development of overarching system enablers (e.g. innovation challenge, fund, etc.) to ensure innovation is systematically recognised and supported as an intentional activity and not a sporadic undertaking. • Consider increasing individual capabilities for innovation including making training available on experimental designs and innovation methods • Provide adequate resources for public sector innovation and experimentation

INDIVIDUAL AND ORGANISATIONAL CAPACITIES

Public sector organisations need to be able to create anticipatory knowledge and act on it. Previous research has shown that there are cultural and capacity constraints within the Finnish public administration that are not conducive to tackling complex issues ((Lähteenmäki-Smith et al. 2021). These include a lack of systemic management skills, capacities and tools (ibid.). The interviews indicated that there is limited expertise in ministries and agencies connected to either futures, foresight, innovation or systems thinking. This is accompanied by a view that innovation skills should be diffused and made a responsibility of each civil servants. While the absence of centre of expertise (innovation labs or units) may signal a stronger appropriation of innovation by individual civil servants, interviews highlighted that this is not the case in Finland where the innovation development and diffusion at individual level is still sporadic and depending on individual time prioritisation and resource availability. There might be a positive side to this it keeps the system forming closed bubbles around futures, foresight and innovation that are not linked with the day-to-day strategic activities. But this assumes that people who participate in networks and across government working parties have time to diffuse and use the knowledge in their own context, which is currently not the case.

"It should not be seen as problematic that we don't have specific people working on innovations or foresight in Finland. I do really think that it's something everybody should do when we are leading different projects or fulfilling tasks that are under our responsibility. It should not be something extra to our daily work, but part of it – how we can improve our daily operations."

Consequently, these challenges were not only connected to resourcing and competence constraints (although the latter came up also as a challenge with changing political leadership), but more to prioritisation of activities and lack of time to explore. With limited resources, priorities have to be set, but it may influence the capacity and effectiveness of the public sector in the long term.

"The big problem is lacking time. If you set up a meeting of one and a half hours or two hours, it's not possible to have such deep discussions where you could really achieve a common understanding of the issue. So, in reality everyone has done very good preparatory work that civil servants then present to the minister and the other civil servants. And then they will say that, well, we have now discussed this issue. I'm exaggerating, but you get the idea. The political decision maker should also understand that it takes time; that they need to give their time for this kind of discussion because, we need it to understand complex issues."

"To be honest, time [due to the constraints it places] would not really allow me think of what my biggest problems in my policy area are. There are lots of things coming all the time. So would there be time to actually do that? That would be sort of difficult. Difficulty – not so much any attitude or conservativeness on my part. Just having the time."

As mentioned before in the previous section, following consolidation of policy development functions, strategic policy development responsibilities in ministries currently fall on few people handling substantive portfolios. This, coupled with the lack of dedicated resources and skills for innovation, results in futures and foresight activities not systemically feeding into strategic planning, innovation and experimentation. One of the interviewees described: "Ministries do not necessarily have a strategic department or strategic directors responsible for strategies. So how can we link this knowledge to strategy formation? If the ministry doesn't even have any people responsible for it?" It is indicative that only a few organisations in the public sector have structured signal reading and sense making practices. For example, the Tax Authority has a transformation unit that collects signals from both clients and external and international partners about emerging trends, which are then evaluated based on their importance and decisions made if these topics should be further explored or not. Sitra, in addition to their more structured foresight and megatrends work, also operates with weekly signal reports that are less structured, but help to collect new knowledge about emerging topics.

Leadership skills and capacities

Leadership skills and capacities in areas connected to anticipation (sense making, experimentation, strategic foresight, innovation etc.) and more general transformative leadership capabilities (leading by vision, giving autonomy to explore etc.) were found to be unequally spread both among the civil service and political leadership according to the result of the interviews. This is consistent with the result of an OECD initial mapping of the personas of director generals (DGs) in the Finnish government who tend to be the heads of substantive policy areas (see box 4.8). The personas revealed a varied picture of skills, traits, capacities and motivation factors across the public sector.

"I think there are some old-fashioned models of leadership. It's too hierarchical. Aside from that it's very much about expertise, but then it goes into this hierarchical structure, which becomes more important than the experience."

There is a need to analyse leadership behavioural traits and decision-making tools around uncertainty and what is the best format to communicate anticipatory information to leaders both political and administrative (see also OECD's recent work on this in Gerson, 2020). As outlined above, interviewees outlined a perception that foresight and innovation are side-of-the-desk activities and not part of core processes. Support from senior decision-makers, is indispensable to setting up and sustaining impactful foresight processes, but this requires leaders to understand and appreciate the necessity of anticipatory work. It is also important to note that regardless of skills, leadership motivations may not always coincide with the effective tackling of particular issues because electoral cycles do not correspond with the development of those issues. It is also important to recognise the varying time horizons and motivations of different interest groups. These are also important elements to take into account in leadership development as future generations may be greatly affected by a decision relating to carbon emissions but lack a voice to advocate their position.

BOX 4.8. LEADERSHIP PERSONAS IN THE FINNISH GOVERNMENT

The following personas are archetypical descriptions of certain characteristics that may be observed in certain people occupying various posts throughout government. They are intended to illustrate general experiences, not to draw conclusions on specific characteristics or individuals in the Finnish public administration.

The Law-maker

This DG persona values rules and process, and believes that coordination and collaboration work when mandated through formal means and mechanisms (e.g. legislation, traditional consultation mechanisms). The Law-maker finds discomfort in new or different ways of working. The challenges faced by this DG stem from a tendency to revert back to traditional or old forms of co-ordination that have proved successful in the past. However, the interconnectivity of government priorities suggest that previously used techniques will not prove as effective.

Subject Matter Expert

This DG rose to senior management levels quickly based on particular expertise, and successful performance related to a policy issue that was previously a government priority. They did not have any career planning or management that prepared them for leadership demands. While their expertise, in-depth knowledge, and passion for his specific files is to be commended – and can, if used properly, engage or energise civil servants in his organisation – this type of leadership is often challenged with an ability to see the bigger picture (which is essential for implementing horizontal initiatives) or the value in building other leadership capabilities such as collaborating outside of silos and managing the political interface.

Overloaded Achiever

This DG is new to this level of leadership and finds it difficult to balance competing demands and political priorities. They view horizontal collaboration and changing ways of working as positive, though they struggle to manage both their vertical organisational pressures and the horizontal cross-cutting issues. They are particularly challenged with understanding that the priorities of the government should drive the work of their organisation, and at linking their organisation's work to horizontal projects.

Frustrated Newcomer

This DG is relatively new at managing an organisation at the central government level, and is highly frustrated that their previous leadership style is not proving effective in this new environment. In their previous leadership role, they rarely got bogged down with expert details, preferring to trust their employees and focusing on bigger-picture strategic issues, and how they could get the most out of employees in the organisation. Now, as a result of how the political level is operating (namely the minister), this DG is pushed to be an expert on all topics covered by their organisation, and to collaborate horizontally with ministries that may not see the value in co-operation. They are challenged with learning the new system and the complex environment they now operate in, which will require a recalibration of expectations, and a focus on leadership capabilities necessary for this role such as agility – the ability to effectively confront and nimbly transform obstacles and roadblocks. Adapting and thriving in this new working environment will be of key importance for this DG.

Source: OPSI, 2019; Gerson, 2020.
Source: OECD interviews ; OECD, 2017; https://www.kela.fi/web/en/basic-income-experiment

One interviewee referred to as the distribution of leadership styles in the Finnish public sector as "leadership lottery," where it was more up to chance which kind of leadership specific areas ended up with. Many interviewees cited the "engineering mind-set" (linear, reductionist, causality-based planning culture coupled with control-based management models) and preference for forecasting standing in the way of systems innovation. At the same time, digital skills and background were seen in a very beneficial light in modernising the public sector, especially as a driver to include more agile, iterative and technology oriented working methods into the government.

"We really need to be ready to challenge mind-sets. Then again, there are kind of more practical-level problems like lack of resources or time that also need to be tackled. Also there are many biases, foresight is viewed as something kind of external that you need an external project for to create some scenarios, which probably nobody will read. But I think good foresight is something that's really ingrained into the culture."

Leadership development, however, is not often seen as part of reforms – it is in the background as part of the continuous development of the public sector.

"Finnish people are very keen on organisational structure tools. If you have a problem that a bureau is not working effectively or has cooperation issues, then Finns see it as a structural problem to be solved: let's put organisations together and hope that issues get solved if they are handled together. But you often forget that people are those who make the cooperation, not the organisations. You can see it in a big ministry in Finland that was put together over 10 years ago and they still have huge problems making those different sectors work together. And it is something that needs to be addressed when you choose leaders to organisations that they would understand more clearly that they work for state governance not just a small silo. It is the same with regional level organisations – after the structural reform we are just done and we are heading to the next problem."

In general, more systemic drivers for anticipatory innovation in human resource management are not deployed. For example, performance management systems do not directly support cross-government aims, or solving complex problems that may take more time or will be a continuous process of anticipation/innovation. Also human resource practices do not explicitly value innovation as a criterion for recruitment and enhancement in the system.

"How do we promote the innovation capacities? I think the human resource and recruitment policies are a key issue. Recruit innovative people in the first place to the government, if you want to have innovations. There should be a statement in the HR policy that demands that when you when you hire new people or promote them, you have to think about this capacity."

The Ministry of Finance, who is in charge of developing the public administration of Finland, coordinates the training and the public sector innovation network of the civil service and is also setting up to tackle some of these leadership issues.

"In all our ministries there are people who are interested in developing their field in a future-oriented way, but they may not be interested in leading the endeavour. I think we need to have people who want also to lead this kind of development. Leading is a weak point in our system. And that's why Ministry of Finance has also started a new training programmes where all these management trainings are integrated in-house to develop new leaders in this sector."

But of course these capabilities need to be more widely spread than just to the leadership level. There are a vari-

ety of issues described below that need to be addressed public sector wide. Some interviewees also found that public administration and political leadership issues should be looked at together in a holistic way. At the moment they tend to be tackled separately.

"The education and the human resource policy should concentrate on the whole workplace community, whole ministry, not only the leader. There are so many layers in a ministry, that it doesn't help anything if the chief is well educated in ecosystem thinking and anticipatory innovation. It is not sustainable if it's only one in the top that may even get his or her chop during the next government, because of their five-year appointments."

Individual factors and cognitive biases

Having an anticipatory mind-set is an important factor in supporting anticipatory innovation. This includes being open to change, iterative approaches to policy making, consideration of variety of future possibilities and also a higher risk tolerance in weighing alternatives (Tõnurist and Hanson, 2020). The data generated from conducted interviews shed light on a variety of individual level challenges that were connected to lack of an anticipatory mind-set (see figure 4.6). These were most often connected to a linear, engineering mind-set, lack of experience with new types of approaches, lack of open mindedness, fear of failure, expert bias and at times procrastination, risk aversion and rejection of change. Many of these issues are interlinked: for example, procrastination can be both spurred on by risk aversion and fear of failure. There may be misconception that an issue deemed 'long-term' does not require immediate attention and limited time is spent elsewhere. Often also loss aversion plays a role, as well as denial or failure to act on the future when it involves letting go of something – as discussed before, there are few points in which trade-offs can be openly discussed. Often these issues individuals face are very rational and justified based on the feedback the system gives back to them. For example, spending on recovery from a crisis might be valued and rewarded higher than spending for preventing a crisis that potentially never occurs.

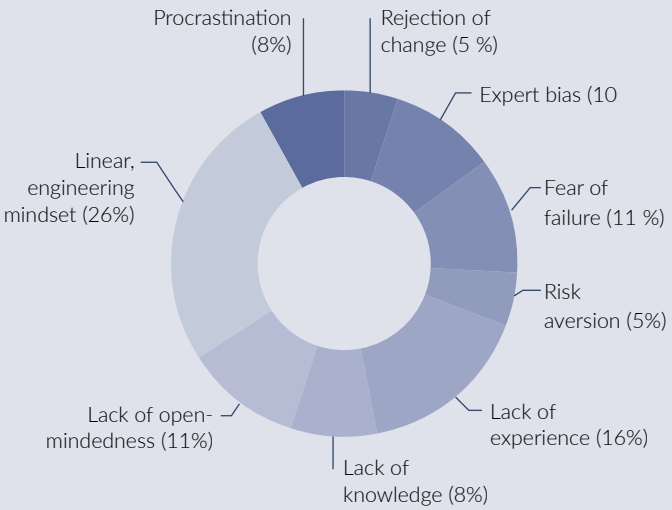


Figure 4.6. Individual level challenges associated with lack of an anticipatory innovation mind-set, Source: OECD.

Note: Based on number of uniquely coded observations from interviews.

A majority of interviewees also described that doing things in accordance to rules and not making mistakes was very important for civil servants. Thus, internal legitimacy (doing things by procedure) overrides external legitimacy (reaching the outcomes needed). Previous analyses have also pointed to the need to encourage practices and leadership that accepts justified risks and failures, and especially learns from them (Lähteenmäki-Smith et al. 2021).

"Challenges come from many different directions - they can be political, they can be environmental, they can be economical, you name it. We need to be more resilient and be more innovative. And if we want to be good innovators and developers, we will need to have resilience and courage to fail. But at this moment, we do not have the courage to fail."

"It's more important to do the right things, even if not so correctly. But I have a feeling that in some places, currently, we are kind of trying to do wrong things better and better. And it's not like we can develop our current processes forever. But if the processes are not okay, the result won't be right. And it is not just about developing management by results – we can try to develop and develop and refine that process over and over again, but if the whole process, the whole management idea, doesn't work, it doesn't help."

Other cognitive biases that may play a role in the Finnish public administration include aversion to uncertainty; a tendency towards group think, recency, availability, and status quo biases[25] and pressure to agree on a single 'official' version of the future – all of which are contributors to the formation of expert biases, lack of open-mindedness and rejection of change.

"A lot of managers don't like things they are not that used to. Okay, but there is little open mindedness or foresight. They just think that they know what kind of future we will have. And we are just going that way. Then we end up writing what we already know. I almost know what we are going to write down in the next two years. It's quite depressing, but there is no-one in ministries or even the Prime Minister's Office challenging that."

Prior research has also highlighted that Finland's resilience can be hampered by "living in a bubble" – concentrating on internal issues rather than engaging actively in reading signals from global fora (Hyvönen et al., 2019). There also seems to be limited debate and complacency within the public sector around considering alternative views and approaches (which was also highlighted before in connection to futures and foresight activities). It is important to use processes and methods which identify and overcome these cognitive biases in futures thinking. Overall, there is a need to increase futures literacy of individuals and the foresight capacity of organisations and utilise more global knowledge sources. Some interviewees also pointed to the lack of mobility of people in the public sector and the need to foster it as a way of circulating new ideas. Additionally, opportunities to develop external networks from varied backgrounds is important. This might help avoid expert identity being too silo-centric and people could develop different perspectives that would be helpful to tackle cross-cutting issues and complexity better.

"For anticipating changes, it's very crucial that the people that work in the ministries have enough networks outside the ministries. And I think that's one of the deficits nowadays, because I think the ministries have somewhat grown to look too much inside themselves."

Tools and methods

As mentioned in the section before, the mechanisms for anticipatory innovation governance that tends to be prioritised in Finland are those related to regulations and legislative instruments, however anticipatory innovation rely on a wide range of tools and methods. These including those that enhance creativity and imagination (e.g., visioning, historical analogy, gaming); promissory tools and methods conveying permission to proceed, or need to rethink (stress-test) and that weigh values and give licence to explore options (scenarios, course of action analysis); operational tools that allow testing in practice (e.g., adaption pathways); and epistemic tools that make it possible to generalise knowledge and validate it (e.g., developmental evaluation) (Tõnurist and Hanson, 2020).

25 Recency, availability and status quo biases are cognitive biases. The first favours recent events over historic ones. The second denotes a tendency to think that examples of things that come readily to mind are more representative than is actually the case. Lastly, status quo bias leads people to prefer things stay as they are or that the current state of affairs remains the same.

"We don't have this anticipatory thinking so much in ministries […]. We need to focus more on these tools and methods, but I don't think we have many [methods] to think about where we will be in, for example, 10 years' time. We think about what was going to happen now and we think about our own sector this year and next."

Interviews indicate that these tools are not very well know or used in the public sector. For example, a small minority of the interviewees had personal experience with strategic foresight tools – 11% with scenario approaches, 4% with horizon scanning, 4% with megatrends analysis and 2% with concrete visioning tools and methods. Most of the mentioned tools are analytical in nature – they describe emerging issues and try to put them in context – or strategic or perspective – they create pictures of a preferred future that capture values and ideals – but they are not action-oriented. As indicated above, in the context of anticipatory innovation governance, futures tools need to also bridge with innovation tools and methods, so that different possibilities can be worked on in practice.

Prior organisational-level research in Finland has shown broader results in terms of the use of future-oriented tools and methods (see Pouru et al., 2020). Most organisations in the Finnish public sector apply five different methodologies (figure 4.7): signal detection (within and outside of one's sector), participatory workshops, statistical analysis and forecasts, scenario approaches, and expert surveys and interviews. Confronting this and other existing research (e.g., Lähteenmäki-Smith, 2020; Lähteenmäki-Smith et al., 2021) with the results of the interviews, the picture is more contrasted as it appears that while elements of new tools and methods connected to anticipation have been introduced and used , they are far from mainstream, and are not embedded enough to serve all anticipatory governance needs. They are also not exploited in key governance processes, especially budgeting or legislative preparation, which are areas that tend to act as bottlenecks for other activities.

The research showed (figure 4.8) that the biggest areas where the interviewees saw the need for new tools and methods were connected to foresight, experimentation, data analysis, collaborative and participatory tools, systems thinking, human-centred design, crowdsourcing and science of crowds and pattern analysis. As the importance for user centricity and also participation for the Finnish government have been outlined before, the need to develop skills and methods towards these areas is clear.

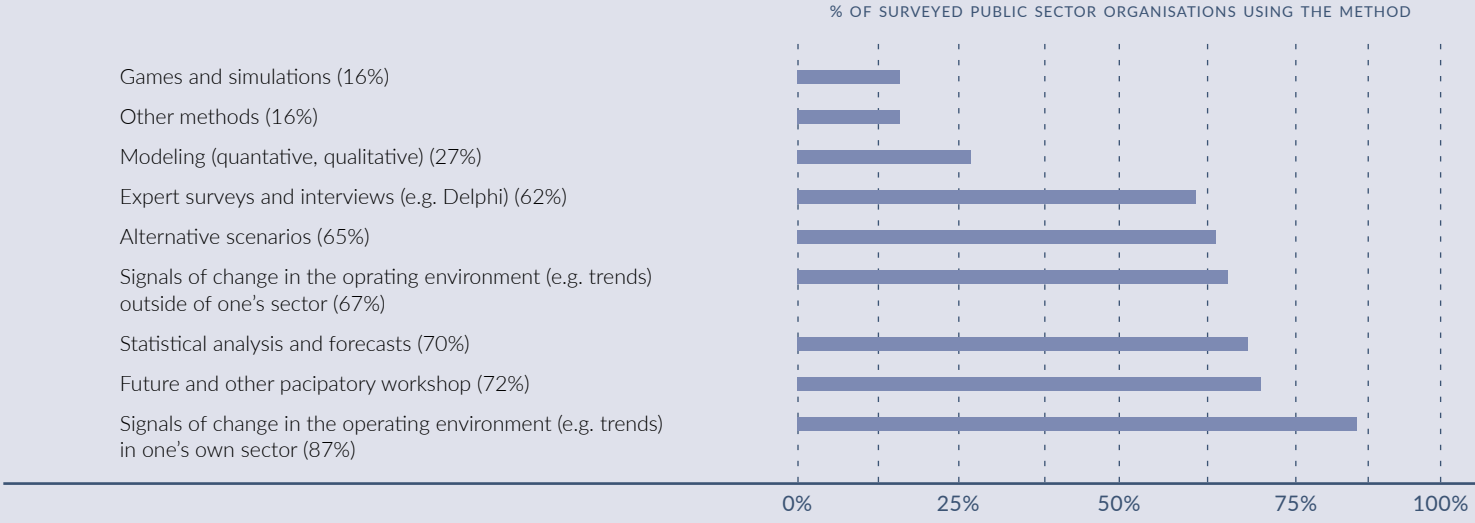


Figure 4.7. Types of foresight and futures methods used in Finnish public sector organisations, Source: Pouru et al., 2020 – OECD translation from Finnish to English.

Note: Based on a survey of 78 organisations with a response rate of 44%.

When it comes to data analysis, not only was quantitative data science mentioned, but also more qualitative, phenomena-based skills and capacities that were often lacking in organisations. Systems thinking as a topic has also been on the rise in the public sector in Finland, as seen as an essential capacity to tackle complex issues and phenomenon-based policies.

There are certainly blind spots in the reported tools and methods areas based on interviewees' limited experience, particularly with innovation and experimentation approaches in general. For example, experimentation skills without good research capacity will not work – there needs to be a sufficient baseline to build and design experiments that actually measure the right things.

"Initiating experiments requires a level of research competence. There are lot of issues that need to be taken into account in the design phase. If an RCT is deemed the right methodology then you have to make sure that everything that is required when designing the experiment is actually there. For example that the data can be collected the right way and it doesn't take years. Having this researcher's point of view is a very important aspect."

At the same time, as described in previous sections, the research and development capacities in ministries tend to be declining with the increasing reliance on insourced information. This may create a barrier for absorbing knowledge and also utilising the tools and methods necessary for anticipatory innovation.

"The number of people who work here permanently in the ministries has decreased. Those who go to pension [retirement], we don't replace them. Instead we buy a lot of research and this knowledge should help us to anticipate. But it means that we don't build up the skills in the ministries and have difficulty using the information. These skills are becoming more and more scattered."

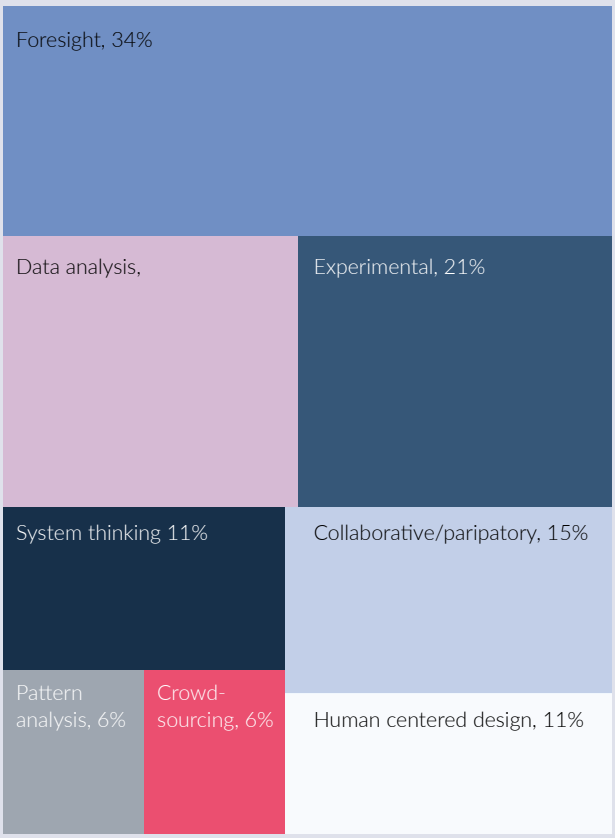


Figure 4.8. Perceived needs for tools and methods in the public service of Finland, Source: OECD.

Note: Based on coded interview data across all respondents (one observation per category per respondent taken into account).

Section findings and key considerations

The conducted research showed a variety of barriers to implementing anticipatory innovation approaches in the Government of Finland on the organisational and individual capacity levels. As discussed in the beginning of Chapter 4, there is a difference in the approach and needs of various public sector organisations. While some have invested heavily in innovative skills and capacities and use foresight tools, it is far from a systematic approach with dedicated resources across public sector organisations. Hence, different elements on the individual and organisational level (ex. leadership, culture, perceptions, resource investments, availability of tools and methods etc.) need be to addressed to spur on a wider anticipatory mind-set in the public sector.

Main Findings	Key considerations
	Individual and organisational capacity
There is a lack of dedicated capacity and futures literacy on both individual and organisational levels Few organisations have structured signal reading and sense making processes/teams Lack of knowledge in foresight, futures, innovation tools and methods	• Expand both leadership and public service training programmes to systematically include foresight, futures, experimentation and innovation knowledge with a specific aim to show the interlinkages between methods and approaches and how they can be used in practice • Support the creation of signal and trend detection functions in public organisations and give insights to tools and methods and ways to tie this work to daily operations • Share good practices in public organisations in these areas across government levels
Short-term tasks override long-term thinking	• Ensure enough time is allocated for long-term thinking at the • organisational level • Create slack in organisations to respond to crises, but also leave room • for development and innovation work
Development responsibilities fall on few people with very full portfolios: lack of dedicated resources with right skills, capacities and resources (incl. time)	• Analyse where development, innovation and experimentation support tasks fall within public sector organisations and create dedicated structures for their support
Unequal spread of transformative leadership capabilities both in PA and politics	• Continue leadership development programmes incorporating anticipatory innovation capacity elements target to both PA and political leadership
Perception that foresight and innovation are side-of-the-desk activities and not part of core processes Performance management systems do not support cross-government aims and anticipation/innovation	• Create clear expectations that innovation, experimentation and foresight are part of business as usual and are capabilities that are valued in staff and in organisations
Fear of close media scrutiny and making mistakes – internal legitimacy overrides external legitimacy	• Create programmes to increase futures literacy of media, involving them early in the process and make the purpose and expectations clear • Promote risk-taking and safe failing approaches in the public sector and facilitate learning from the former

Engineering mind-set and preference for forecasting standing in the way of systems innovation, yet digital skills and background have been very beneficial in modernising the public sector	• Highlight skills and capacities that are associated with positive transformation and modernisation of the public sector • Make clear how to use data from alternative sources and how to integrate foresight and experimental knowledge into evidence informed decision making • Acknowledge that not all aspects of uncertainty can be tackled and cognitive biases connected to the future need to be openly dealt with

BUDGET AND RESOURCE ALLOCATION

Anticipatory innovation invariably is influenced by one of the most dominant steering mechanisms in government – budget and resource allocation. As argued above, without dedicated resources it is difficult to create the necessary experience needed to engage with anticipatory innovation. Furthermore, considering more transformative, future-oriented change is also influenced by the budgetary steering processes that influence policy making as a whole. Consequently, there were a variety of budgetary and resourcing issues connected to anticipatory innovation brought forward during the interviews and workshops.

As outlined above, the Government Programme tends to be the biggest window of opportunity for transformative ideas. However the overlap between the election calendar and the budget cycle, leaves a tight schedule for negotiations to reach an agreement on the program[26]. Interviewees noted that in the period preceding government formation, consideration on futures and foresight activities have difficulty to find their space and be systematically included in the strategic planning discussion and budgetary steering processes. With very strict deadlines seem to precede strategic steering and are not in line with futures and foresight activities. Following national elections, there is a very tight schedule to reach an agreement on the Government Programme for the next four years as Finland has predominantly coalition governments that do not rely on single party programmes. Then the government proceeds to form an action plan for the Programme. In parallel the new government has to deal with the budget formation (see table 4.4 the yearly budget cycle), which means that usually the strategic elements get overshadowed by budget negotiations. Opinions on this varied, but most found that due to the pressures of the budgetary process, strategic steering was sped up, limiting the opportunity to consider alternatives. This directly influences the possibility to introduce anticipatory innovation into policy making especially as policy reform directions tend to get locked following the Government Programme negotiations.

"I suppose the process to make the action plan itself started a few months after the Government Programme. So if the programme was published in June, then the action plan came in October. So honestly, looking in hindsight, it should have maybe taken a bit longer to make the action plan, because in four months, the ministries could not have – you know, with the summer vacations and everything –, established exactly how they will implement some of the more unclear goals in the Government Programme."

26 National elections are usually held on the third Sunday of April in the election year, unless Easter affects this schedule, which means that the new government forms at the end of May at the earliest (and in previous years in the second half of June).

	Timing
Budget circular	May
Pre-budget fiscal policy statement	April
Negotiations with line ministries	August
Executive budget proposal	September
Parliamentary vote on budget	December
Start of the financial year	1 Jan
In-year budget execution reports	N/A
Mid-year implementation report	N/A
End of financial year	31 December
Year-end financial statement	April
Audited financial report	May
Parliamentary accounting	May

Table 4.4. Budget cycle in Finland, Source: OECD, 2019.

Another issue that was outlined by a majority of the interviewees was the conflicting logics between the strategic and budgetary steering systems. While the first aims to outline strategic goals and phenomena to tackle, the latter is based on organisational allocations accompanied by some performance information. While organisation-based allocations are a way to assign responsibility and accountability, there needs to better ways align allocations and promised outcomes Currently the basis of performance budgeting is based on mutual agreements on outputs and outcomes: morally, not legally binding performance agreements between sector ministries and their agencies form the system (OECD, 2019). Furthermore, the interviews indicate that the allocation of budgets in administrative silos is perceived as a substantive barrier to the implementation of more cross-cutting goals. Budget allocations are not phenomenon/user-centric nor are allocations holistically aligned with the challenges involved.

"When the strategic level is concerned, I think that we reach missions and targets that are cross sectoral, but the problems arise concerning the implementation, where these broader collective goals get lost in the sector silos. The budgeting system is based on the sector and the budget system isn't cross-sectoral enough."

Allocation-based monitoring and composition of budgets limits the understanding of how much is invested in complex issues and what the intervention portfolios across public organisations looks like. Many interviewees found it very difficult to put the picture back together again and understand how much the state is actually investing in different challenge areas and whether the investment was proportionate to the size of the problems. While the Government Programme has phenomenon-based indicators, the budget system does not follow suit.

"In the Government Programme we have a few 'Phantom Menace'-based indicators and targets, but in the budget proposals and the budget bill, we don't have any exact phenomenon-based targets or indicators."

There seem to be room for improvement in the availability and use of data for monitoring the implementation of the Government Action Plan. As was described by interviewees, it is very difficult to find quarterly or monthly data that corresponds with what the government wants to measure. This also limits signals reported to government about emergent change influencing the ability to anticipate changes early in the policy making processes. There are some actions with several corresponding indicators, while other have none or have serious time-lags connected to them, making it difficult to monitor the effect of government actions in real time. However, aligning resource commitments across organisational budgets in general at the same time is very difficult. This also limits the possibility to look at concrete government action connected to different emerging challenges and phenomena across the public sector.

"There should be more cooperation about how phenomena between different agencies and organisations are dealt with in the whole system in the public sector, but also in the private sector. We cooperate with a couple of agencies and they have their own programmes and they may not have funding for a certain area or a problem that is interesting for us. Even an important topic, if they don't have resources at the same time, we cannot put it to work. So, we are pausing a lot and trying to find ways to go forwards with minimum funding, to see what is possible."

Research indicates that it is challenging to plan and monitor portfolios of investments according to a phenomenon-based logic across the ecosystem. In addition to better online planning and monitoring tools, new instruments are needed for cross-sectoral budget analysis and assessment of how resources are used across policy problems (Varis, 2020b). There is an ongoing budgetary renewal ("Buketti 2020") project in the Finnish Ministry of Finance which is hoped to produce a modern tool that enables cross-sectoral monitoring of phenomenon-related cash flows by means of new technologies, artificial intelligence and digitalisation (ibid.).

Furthermore, the validation workshops highlighted the difficulty of taking into account the many trade-offs between different policy areas in tackling complex issues when their concrete financial impact are not visible, nor are investments across government based on societal challenges (described as "budgeting through spreadsheets"). There might be enough fora for discussion, but there may not be enough (political) willpower to make clear the trade-offs and dynamics between policies.

"Of course, climate change is linked to the work of everyone, including our ministry, there's no doubt about that. Yet, there are many competing topics – for example, biodiversity has become a big issue as well. So, when you're working in the Ministry of Environment, you can just think about how to protect. If you are in the Ministry of Trade and Economic Affairs, the only thing you should think about is money. And in the Ministry of Agriculture and Forestry, you have to have the balance between both because you cannot produce food without thinking about the environment. But at the same time, you have to think about money. Because if the farmers don't get salaries, they don't produce anything. And the same thing is linked to forestry. So, you have to cut the pace, you know, to earn money. And at the same time, we have to take care of biodiversity and synchronise these issues."

These issues are very important for the budget process itself, because long-term fiscal sustainability depends on stress-testing for unforeseen phenomena that may influence future generations beyond the immediate trends connected to demographic changes, pensions, economic cycles etc. This may affect fiscal, physical, human and natural capital which may impact fiscal stability directly or indirectly (Mulgan et al., 2021). At the moment, when it comes to fiscal planning and other activities, there are no dedicated resources for anticipatory innovation as few organisations have the resources (time and money) to undertake these activities.

Phenomenon-based budgeting

While phenomenon-based narratives widely use in the strategic processes in Finland (see Box 2.2 in Chapter 2), it does not seem to work in practice (at least not yet) in Finland. Nevertheless, phenomenon-based budgeting is something that is on the radar of the Finnish government. Among others, the National Audit Office has called the government to develop tools for phenomenon-based budgeting (Varis, 2020b). 53% of OECD countries practise gender budgeting to a degree[27] and 40% of OECD countries practise green budgeting, with considerable OECD support to help countries implement these practices (OECD, 2021b). Globally, there are already budget models that also take into account SDGs such as those in Mexico, Ireland and Scotland. Additionally, New Zealand has a well-being budget model (OECD, 2019; the Treasury of New Zealand, 2019). OECD has also been developing tools to support governments especially in gender budgeting and green budgeting (OECD, 2019).

27 See https://www.oecd.org/gov/budgeting/gender-budgeting.htm.

"Most of the activities actually are happening in municipalities – health care policy, social policies, educational posts - they are all implemented in municipalities. The Finnish system is heavily based on the so called autonomous local administration, and has really like limited possibilities to actually implement or design different policies."

In the Finnish context, the introduction of phenomenon-based budgeting is challenging given the attribution of substantive spending areas to municipalities and regions, which makes getting a phenomenon-specific resourcing view across government very difficult.

"I guess there has to be one ministry, who is responsible for one phenomenon? So how would they manage it and assure coordination differently to today? I don't know about solutions for that. But I would be open to the idea to have phenomena-based budgeting, definitely."

Interviews indicated that there is still a lack of clarity about the mechaniscs of how this will look like in practice and how responsibilities will be identified.

"If the government changes and creates new strategies it doesn't mean that they will be fulfilled right away, because always something in the next year's budget is based on the use of the resources of the last year. So bigger strategic decisions and implementation in certain areas are so difficult to make, because the resources don't follow, even if the decisions are made. And as you know, it's difficult to implement something if you don't have resources."

Currently according to interviewed experts, the government's budget is quite rigid and transfers between different budget items are quite small. While this increases transparency and parliamentary oversight, it limits ability for align strategic actions when needed. This is due to the fact that around two-thirds of the budget are law-based transfers. However, the interviewees indicated a wish for transfers between different organisations within state administration to be made more flexible.

BOX 4.9. PHENOMENON-BASED BUDGETING: ON THE ROAD TOWARDS CHILD BUDGETING IN FINLAND

The Prime Minister's Office has set up a working group to study child budgeting as part of the national children's strategy. The aim is to promote children's rights and child impact assessment in the budget process and at different levels of government. According to the UN Committee on the Rights of the Child, children's rights should be taken into account at all stages of the budget process. However, attention to child budgeting in Finland has so far been very low.

Child budgeting refers to looking at the budget from the perspective of the rights of the child. It can be used to assess what proportion of public money is spent on children. This helps to outline the services and benefits for children and their costs. Child budgeting also makes it possible to assess the effects of different investments.

The aim is to pilot the child budgeting with the state's 2022 budget process. The task of the working group is to prepare a concrete proposal on how the child budgeting section will be introduced in the state budget process. This is to be piloted already in the 2022 draft budget and consolidated in the 2023 draft budget. To support this the Ministry of Finance is working on an assessment of the possibilities to move towards a phenomenon-based budgeting system in Finland.

Source: OECD interviews ; https://stm.fi/-/10616/tyoryhma-selvittaa-lapsibudjetointia-miten-lasten-oikeudet-toteutuvat-talousarvioprosessissa-

Section findings and key considerations

Budgeting and resourcing is an area that influences all government and policy making processes. Hence, it is not surprising that this also influences substantially the extent to which anticipatory innovation approaches can be adopted in the government of Finland. The misalignment of budgetary and strategic steering processes make it difficult to integrate futures and foresight practices in policy making and it is easy to miss opportunities to consider more long-term reform agendas and alternatives for the former. Silod budgetary processes do not also allow to approach policy challenges from a phenomena or user-centric manner meaning that it is difficult to explore emerging topics that do not fit or expand beyond existing organisational structures. This does not only limit collaboration, but also the ability of government to have a unified view about what impacts they are making on the ground and what further changes are needed. Furthermore, anticipation also presumes the possibility to experiment and innovate in an iterative manner, which might be considerably constrained by budgetary processes that do not account for that or presuppose ex ante (cost) evaluations that do not account for the uncertainty involved.

Main Findings	Key considerations
	Individual and organisational capacity
Budgetary steering processes and strategic steering do not account for consideration of futures and foresight	• Review the timeframes connected to strategic decisions on the Government Programme and increase flexibility of the simultaneous budgetary planning system with the possibility to re-evaluate the budget according to strategic directions • Include a long-term vision into the budgetary process that utilises strategic foresight inputs and also aligns itself with the government's long-term plans
Money does not follow problems: budget allocations are not phenomenon/user centric nor are allocations holistically aligned with the challenges involved Aligning commitments across organisational budgets at the same time is very difficult	• Implement clear monitoring and evaluation tools that are outcome and phenomena specific and make government investments visible • Make trade-offs between different policy areas visible
Phenomenon-based narrative widely in strategy, but does not work in practice	• Pilot and test phenomenon-based budgeting which also allow for joint budgets between ministries and cross-ministerial taskforces
Ability to make agile and iterative changes to projects once the situation develops	• Consider ways to make the budgetary process more iterative and agile and look for ways to create stability in long-term funding in areas with longer time horizons • Look for ways to include innovation and experimentation in the budgetary process giving alternatives to funding routes

POLICY CYCLES AND CONTINUITY OF REFORMS

OECD research indicates that anticipatory innovation processes need to gain legitimacy in order to be recognised as able to produce change and carry it through effectively (Tõnurist and Hanson, 2020). Part of the legitimacy comes from a general government commitment to a long-term vision on policies and overall consensus on the long-term nature of the challenges that societies are confronted with. This is not only dependent on the analytical capabilities of civil servants, but also the organisational skills and capacities of ministers and political staff that lend legitimacy to processes and decision-making and consider longer-term aims. Correspondingly, one of the biggest clusters of observations that emerged during the conducted research was around the strategic aim and the continuity of reforms, and how they are connected to the policy-cycle.

Overall, short-term tasks tend to override long-term thinking in the Finnish government. Both conducted research and prior studies pointed to a trade-off in all governments to either serve short-term needs and pressures or also invest in proactive responses (Määttä, 2011). Prior research (figure 4.9) in the Finnish context attempted to map the explanatory factors related to short-term orientation of politics and decision making. These refers to factors both external to the government (electorates, media, strong advocacy groups like labour market organisations and the nature of policy problems themselves etc.), but also issues directly related to how government is organised (distance from problems and their slow concretisation; personalised style of politics; quick outcomes/output focus of politics). Conducted interviews also pointed to the divisive and short-sighted nature of politics which often makes not politically rewarding to be address long term cross-cutting issues where several ministries are involved and rewards take time to emerge. Some of these factors governments can tackle, others they need to contend with.

"The biggest challenges is the nature of politics itself. While there are problems that need systemic change and often require long-term solutions and commitment, politicians tend to focus on short-term political success. Then the interests of a nation and interests of a party, worrying about the next poll or the next election, they don't always go hand in hand."

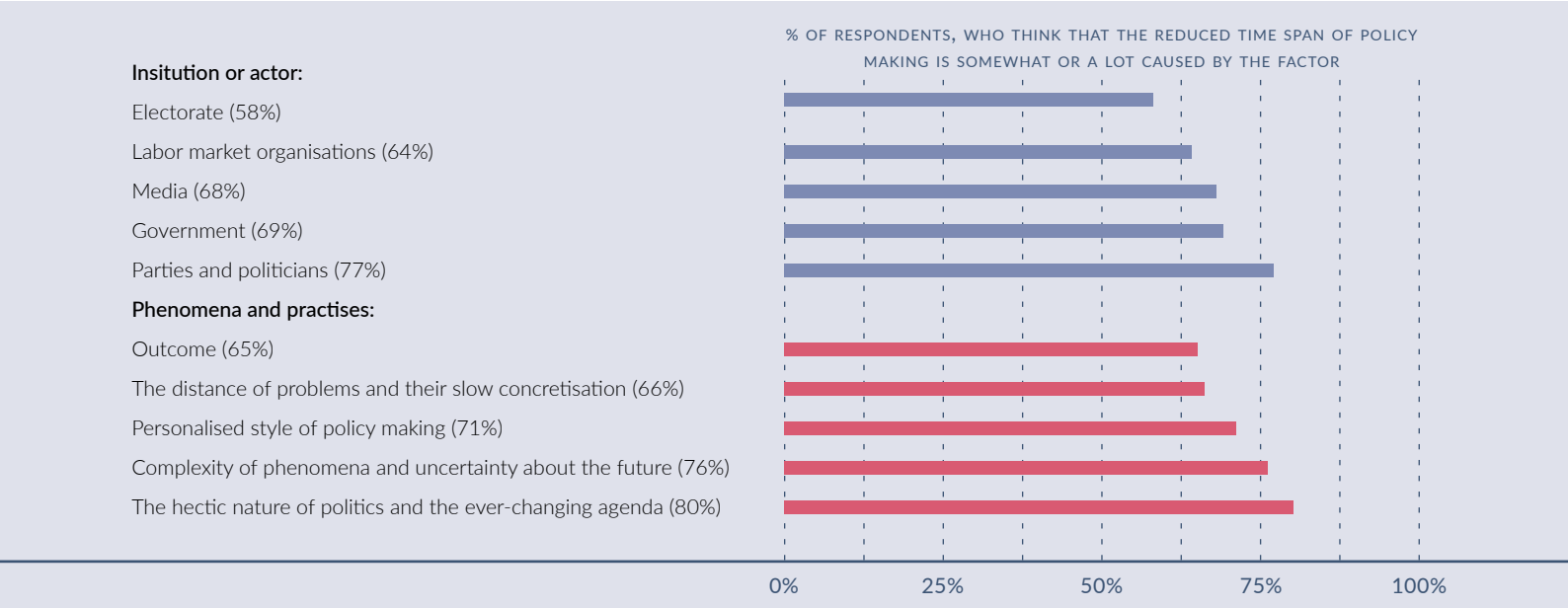


Figure 4.9. What makes politics short-term? Source: Koskimaa and Rapeli, 2020, translated into English by the OECD.

Note: Sample population top and middle management of ministries and central agencies, members of parliament + party officials, labour market organisations (approx. 3,500 people); respondents approx. 700, weighted to match the population by job description and gender.

"So, for big changes spanning over years, some kind of political consensus is needed. Sometimes it's pretty difficult. Political parties may want different things from the reforms and the reasons might be good. But it's hard to fit into a simple, big change plan, especially when we need pretty drastic changes, for example, facing our ageing population and running out of money [in the] social and healthcare system…"

Government programs provides a proxy of the commitments to a long-term future-oriented vision and more transformative change. Previous analysis on the Finnish government programs indicates that they have responded to different needs including that of providing a shared perspective on the government's vision and priorities in facing the future; stating an intended position for the country, for example in the global economy; offering a political plan or roadmap for the decisions and policies to be drafted and implemented; and providing clear and transparent objectives and guidelines for the formation of policies (Määttä, 2011). However, as interviewees pointed out, the government programs have often been accompanied by a high number of strategic goals and action with limited prioritisation. For example, the Government Programme for the 2011-2015 had over 900 action items with no clear priorities for implementation (OECD, 2015). The previous government's action plan (2015-2019)[28], with five cross-cutting strategic priorities, are materialised in the form of 26 key projects (five key projects per strategic priority with the exception of six in the priority of Knowledge and Education). The current government action plan has again increased activities. Interviews indicated that while that the high number of items included in the plan is an expression of political negotiations and hard-won agreements around the program especially in the case of coalition governments, this may be leading to a lock-in effect and overemphasis on the present more immediate issues (sometimes described as "political oversteer"), limiting agility and ability to reconsider the possibility of long terms changes reforms in uncertain situations and reducing the space for alternatives exploration, experimentation and innovation. With too many action points it also becomes easier to "pick and choose" which ones to implement. Yet, with many parties in government coalitions, it may be the only way to keep stability.

"This government made a very, very heavy program. It's 200 pages and there are over 1000 policy actions connected to it. But it has actually kept the government together. It's a critical reference point, if any party who wants to divert our vote back an issue into that programme then it is possible to say: look, everything worked, what we agreed we will do, but nothing beyond if we don't find a consensus. In the Finnish government within a five-party setting it is very important to stick to that."

It was also observed that the 4-year timeframe offered by the plan might be too short. Interviewees found that this diminished agility and ability to reconsider reforms in uncertain situations as political will to open up hard-won agreements was often absent. The lock-in effect can be rather large with the time available to negotiate the Government Programme being limited. This does not reflect the pivotal importance of the document to introducing transformative reform agendas to the government. Furthermore, as described before, the timeline is also pushed forward by budget negotiations. This, together with the fact that it is a four-year document with the aim to fulfil as many coalition goals as possible within the timeframe, strongly highlights the problems of the present, easily leaving behind broader issues of greater complexity and uncertainty. Due to this and the focus on government programmes, policy-making for future problems is challenging to coordinate and difficult to find resources for (Koskimaa and Rapeli, 2020). The reality is that many complex issues need a much longer time frame.

28 See further: https://valtioneuvosto.fi/en/sipila/government-programme

"Very often it will be much longer than a four-year period. We should have longer programmes – maybe six or eight years. I think then we will be able to get big changes."

One of the examples outlined was the digitalisation process. This that took several government terms and consecutive programmes to implement and the process is far from over. The political backbone of the Digitalisation Strategy (2015-2019) was specifically connected to implementation and the project ideas were collected extensively, while the Ministry of Finance was directly responsible for key projects (Lähteenmäki-Smith, 2020). Financial grants for public organisations in line with the aims of the strategy was one of the biggest incentives of change. However, challenges remain as the horizontal nature of the projects tends to disappear once the funding runs out and such issues as described above continue with legacy systems and lack of data interoperability.

"I would say that we have the possibilities to do far, far better in the field of digitalisation. In creating human-centred anticipatory services that's very, very difficult to do with the existing way of governance thinking."

One of the biggest and most frequently mentioned policy failures in recent years mentioned by the interviewees was connected to the ongoing health and social services reform (SOTE) which has spanned 15 years without completion – see further in box 4.10. This was indicated in the interviews as an example of both misalignment between complexity of the reform and the narrow policy cycles framing it, and lack of specific tools and methods to work with complex issues. The reform process also demonstrates the difficulty to reach a clear vision and political consensus around complex reform and contend with vested interests in the system. Many interviewees pointed out that the reform effort at that scale and complexity also started to overshadow other topics and contributed to burn-out of many departments. Meanwhile the system is comprised of multiple components layered on top of each other, adding to the complexity.

"With the health and social services reform, it's always easier said than to actually do the reform. It's a complex system by nature. They've been building those systems bit by bit, part by part over years and over decades. And now the system is very varied, and more detail is continuously needed to take into account the needs of different people. So more complexity on complexity. There is almost no way around it."

The reasons for the decades long delay are connected to various factors including the extreme complexity of the reform programme that has not fit into the policy cycles nor the tools and methods available for government.

"I think one of the reasons why structural reform has been so difficult in Finland is because we were often kind of incapable of identifying or realising when we are actually dealing with a complex problem. And when we're just dealing with a traditional problem, when traditional tools would be appropriate to dealing with it."

As an area of reform that will influence the whole policy domain for years to come and will involve a large organisational, process and service innovations, it is a ripe area to include anticipatory innovation approaches to the process. This means also a closer connection to the implementation of the reform program which might be challenging as there seems to be large distance between political decision-making versus evidence-informed decision making was also noted by interviewees. As one interviewee described connected to the SOTE reform: "There are all kinds of research and statistics and papers and we study them very, very closely, but then we realised that there is not the essence of policymaking in these papers and we put them aside."

BOX 4.10. HEALTH AND SOCIAL SERVICES REFORM (SOTE)

The Finnish health system is governed at national and local levels. At the national level, the Ministry of Social Affairs and Health is responsible for developing and implementing health reforms and policies, with extensive support from a large network of expert and advisory bodies. Local authorities (over 300 municipalities) fund and organise (often jointly) the provision of primary care, and form 20 hospital districts to fund and provide hospital care.

The national Social Insurance Institution runs the statutory National Health Insurance (NHI) scheme. It funds outpatient pharmaceuticals, healthcare-related travel costs, and sickness and maternity allowances. The NHI is financed through compulsory employment contributions, while primary and hospital care are funded through taxes collected by the municipalities as well as subsidies from the national government.

While high levels of decentralisation allow the health system to adapt to the needs of a dispersed population, it generates some inequalities and inefficiencies. Agreement has been broad on the need to reform the Finnish health system for over a decade, but reaching policy consensus on how the reform should be implemented has proven very difficult.

The current ongoing reform pursues several objectives that could be described around the following lines: recentralisation of the organisational structure from the local to the regional level; containment of costs; ensuring fair and high-quality social and health services for all Finns; securing the availability of skilled labour in the health sector in view of demographic and social changes; strengthening the focus on prevention, diagnosis and early detection; and increasing patients' choice.

Preparations for the legislative work for the current version of the reform started in autumn 2019. The Government's proposal regarding the establishment of welfare areas and the reform of the organization of social and health care and rescue services was approved by Parliament on 23 June 2021.

Source: OECD, 2019b; 2021; https://soteuudistus.

Strategies do not lead to action

The previous considerations highlights that one of the most discussed and recurring topics in the interviews was that strategies do not automatically transform or lead to action. The interviews echoed that in government, time for policy execution is often too short to reflect on possible alternative approaches, implement and operationalise and evaluate changes on the ground. The pace of policy implementation is also highly dependent on policy cycles that disrupt continuity of reforms and follow-through.

OECD research has identified various factors that emerge from the interviews as challenges to implementation (figure 4.10). These range from problems with operationalising strategies and fragmented action to policy mechanisms (overreliance on regulation and lack of iterative, experimental approaches and flexibility, procurement challenges, issues with data), budgetary barriers and learning and evaluation. Some of these have been covered in more detail in prior sections.

Previous OECD research in Finland has pointed to the risk of excessive fragmentation in translating the government action plan into concrete actions (Gerson, 2020). The problem is more acute, as the interview data showed the prevalence of the myth that implementation is not part of strategic policymaking, which tends to be widespread and stands in the way of experimentation and agile/iterative policymaking. Changes overall are speeding up and so is policymaking getting closer and closer to real-time policymaking through implementation (as was also illustrated through the case of Covid-19).

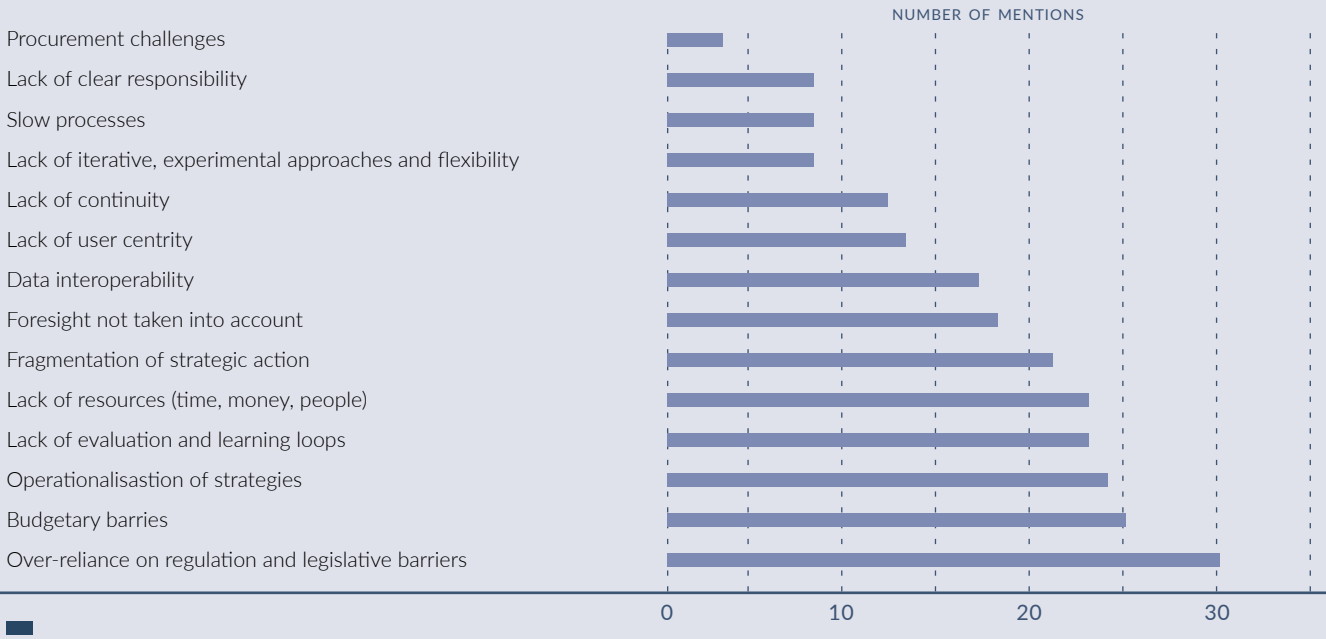


Figure 4.10. Challenges connected to implementation, Source: OECD.

Note: Based on coded interview data and frequency of mentions across 53 interviews.

"The problem with decision making nowadays, especially in some fields like climate change and biodiversity, is that things are moving so fast. So basically, when you make a decision, you have to be ready to make the next decision, and then start to make the next decision right away when you only have the first one in place. It is a moving target and our policy making and implementation needs to take that into account."

At the same time, policy evaluation has traditionally been a retrospective activity, which undermines its value in future decision-making (Raisio, Jalonen, and Uusikylä 2018). Furthermore, it may not always be timely before the new policy cycle begins. Thus, ongoing and developmental evaluation[29] should be considered to get a more timely feedback system from practice (OECD, 2018).

When it comes to long-term policy reforms and their continuity, interviewees found that there is a need for a more institutionalised transition processes between government terms assuring that policies actually reach implementation and learning from prior reforms is collected in a meaningful manner. Interviewees saw opportunities in the parliamentary process connected to the re-established committee system (outlined in Chapter 2), but it is not clear if it works in practice. The government has created parliamentary committees to ensure continuity of long-term reforms; however most interviewees did not know of their existence nor what their tasks actually were.

When it comes to continuity and long-term policy reforms, there appears to be an over-emphasis on power relations and political interests and tensions between political and civil-service steering (Lähteenmäki-Smith et al., 2021). The roles between civil service and politicians in anticipatory innovation governance are far from clear and should be further examined. With the current government's establishment of political state secretaries, the interviewees found also that the discussions with civil

29 Developmental evaluation is an approach that assumes a long-term relationships between evaluators and project or programme staff as evaluation is ongoing, meaning that feedback can be provided on a continuous basis. Development evaluation is especially appropriate in circumstances where the work is done in complex or uncertain environments.

servants had decreased, because the political state secretaries preferred to run negotiations in their own circles.

Section findings and key considerations

Policy cycles and political terms are a normal part of democratic governance systems. However, it does not mean that they do not influence how and under which assumptions governments consider long-term issues and future opportunities. Not everything can be accomplished or tackled in a 4-year government term and in some areas like climate change, natural resource management, socio-economic reforms etc. changes need to be considered decades in advance to make a real difference. Hence, the policy cycles tend to directly influence the anticipatory innovation capacity of governments when considering future visions and implementing them in an iterative manner. The research indicated closer ties between policy implementation and policy making are needed to make anticipatory innovation possible, especially as in many policy areas public sector is getting closer to real-time policy making as changes are speeding up. This means also new evaluation and measurement procedures for government and procedures to transition from one government administration to the next. In these areas connected to anticipation, the role of public administrators and politicians is not always directly clear especially in preparing reforms across government terms or proposing alternatives for exploration before a clear direction has been set. All of the above needs to be tackled to make the Finnish government more anticipatory in nature.

Main Findings	Key considerations
	Policy cycles and continuity of reforms
Lack of formal transition procedure between administrations	• Pilot different transition procedures between administrations including the role of civil servants
Role of public administration and politicians in complex and long-term policy issues unclear and subject to (hidden) power relations	• Clarify the roles politicians and civil servants need to play within a long-term anticipatory innovation governance system
Strategies do not lead to action – time for proper implementation is too short to develop theories of change, operationalise and evaluate changes on the ground	• Develop actionable theories of change connected to strategic goals that are realistic to the effort and resourcing to deliver • Ensure that policy makers are actively involved in the ongoing evaluation of policy implementation
Myth of implementation not being part of strategic policymaking stands in the way of experimentation and agile/ iterative policymaking	• Ensure flexibility and learning from the implementation process • Leave room for experimentation and innovation: e.g., create testbeds to see how different options would work in practice
Government Programme as future-seeking moments and catalysers, but of varying strategic quality	• Agree on the level of technical detail for the Government Programme and leave room for innovation and experimentation • Create stress-testing moments for the Government Programme that are open and transparent

COORDINATION ACROSS GOVERNMENT CHALLENGES

One of the fundamental challenges to anticipatory innovation governance is governments' tendency to address problems in closed compartments and silos (Tõnurist and Hanson, 2020). Research has pointed to the limitation of silo-based structure and mentality in dealing with complex challenges that cuts across multiple subject domains, and further reduces its capacity to respond successfully (ibid.). As argued avoce, keeping up with the pace of change requires addressing the issues of administrative silos and corresponding behaviours to enable a more real-time and iterative policymaking which can influence the design of solutions themselves.

In Finland, the interviewees found that the policy steering system rather old, compartmentalised and lacking innovative organisational approaches. Thus, it is not surprising that one of the most challenging issues around this topic is vertical and horizontal coordination in government and dealing with public sector silos. The effect of silos, especially when money and task division is discussed, has been highlighted many times in the context of Finland (e.g., Hyvönen et al., 2019). As argued above, budget, regulative and strategic steering enforce different aims: strategic, rule-based or organisational. Unsurprisingly, the topic of silos was the most discussed during the interviews and validation workshops.

"I would say that even though we have a rather impressive bits or pieces in innovation, system, risk management, etc., they are a little bit too much working in our kind of isolated islands."

There are many structural issues that contribute to this that have been discussed before: trade-offs between different policy areas are not visible, nor are investments across government based on societal challenges. Moreover, factors connected to incentive systems, how cross-government goals are tackled in management structures and culture in different public sector organisations remain barriers.

In Finland, the strength and independency of Ministries is perceived by interviewees as slowing down government decision-making when dealing with cross-governmental issues. In this context, often the Prime Minister's Office within a coalition government can exercise limited steering and has fewer levers to coordinate change across policy sectors. Hence, interviewees found that cross-governmental issues and following negotiations tend to make decision-making much slower. The involvement of other levels of government increase the complexity of decision-making for example when phenomenon-based approaches are attempted. Some interviewees argued that this requires new meta-governance functions that currently do not exist.

Currently there is not a unified process to identify and assign responsibility for new, cross-governmental issues – this happens often in an ad hoc manner. Coordination on cross-government issues happens most frequently through networks and working groups. For example, the Prime Minister's Office supports the ministerial working groups appointed by the Government that guide the implementation of the Government Programme in terms of employment promotion, climate and energy policy, health and social services reform, competence, education and innovation, child and youth policy, and internal security and the strengthening of the rule of law (Government Action Plan, 2019). The ministerial working groups are also responsible, within the scope of their remit, for providing guidance on the preparation and implementation of the objectives and measures contained in the Government Action Plan (ibid.). While the Prime Minister's Office is involved, the ministerial working groups are led by ministers that work in coordinating ministries and also the head secretary for the groups comes from coordinating ministries. This, however is not deemed to be enough.

"In Finland we talk about phenomenon-based policy making. Well, it hasn't worked out well. Every ministry is just sticking with their main goals and defending them. For the Ministry of Finance it is all about money, for Ministry of Social Affairs and Health – welfare, for Ministry of Environment… It is really hard to combine all this around a cause, when people keep on defending their ministry and their ministry's money. The silo mentality is still really strong."

While some interviewees were sceptical about how much coordination these working groups accomplished on truly anticipatory and innovative topics, many agreed that the Covid situation had actually improved cross-government collaboration in these groups. The regular permanent state secretaries' steering meeting has now come to function as a Covid taskforce, coordinating actions between branches of administration and in crisis situations. At the same time, the discussion in this group has switched to more tactical issues (such as immediate tasks needed to be implemented across government connected to the pandemic) rather than strategic outlook. Interviews indicated that the Covid situation also highlighted the difficulties in coordinating action across different levels of government and raised issues between the national government and regions and municipalities. In some cases, regions and cities reportedly felt micromanaged by the state and hindered in taking care of their own actions. Yet, the situation also illustrated areas where problems crossed boundaries and adequate coordination vehicles did not exist.

"When people started returning from abroad to Finland during the pandemic, it seemed that no one had taken responsibility for the process and the Helsinki airport, how they were being questioned, if they were put into quarantine, etc. It took forever to get this organised, because it was between four or five different ministries, cities, local municipalities, the airport officials and so forth and so forth. And everyone just blamed everyone else. This is something that our government admitted was a big failure, and we should have done better and we learned that some of our functions are spread in way too many different directions."

For example: The creation of dedicated temporary cross-government taskforces emerged – from the interview validation sessions – as a proposal to overcome silo approaches. Taskforce participants would be picked up centrally and report to Government and not individual ministries. One of the interviewees found that "the civil servants at the ministerial level should have a position owned only by the government, not owned by one ministry." Other proposals involved allocation of clear accountability lines for senior civil servants driving the implementation of politically-sensitive government reforms.

"It would be great if it would be possible to create a temporary team that works across ministries. Accompanied by a phenome-non-based budgeting experiment or a pilot at least. Maybe this would create a window of opportunity to actually make things work in

"The administration could, for instance, have a sort of joint exercise on complex problems. Over the time, it could lead to a more common understanding of what the others are doing in this field. And what I could do differently in order to contribute to what the others are doing."

The validation sessions also highlighted that the centre of government organisations (Prime Minister's Office, Ministry of Finance and also Ministry of Justice) could take a more direct role in steering whole of government approaches and to 'build bridges' between different organisations. These different solutions should be tested and piloted to see what is viable in real-life situations.
Consequently, ideas on how to tackle coordination issues vary from stronger organisational reforms to softer mindset/leadership tools (serving the government or one ministry/minister). Leaders, for example, have difficulty in balancing horizontal and vertical priorities and adapting to new ways of working (Gerson, 2020).

"We need to work more across sectors to develop these capabilities. It's very much dependent on the individuals at the moment, those who want to make things work together. It's easier if you are an introvert, because I think that the government itself is introvert, by its

Section findings and key considerations

Emerging challenges and future-oriented opportunities often do not follow the current structures of government and get stuck between different organisational boundaries in the public sector. This has been a prevailing issue in Finland that has been raised in prior OECD studies (2010; 2015). In a highly decentralised governance system, addressing coordination challenges and creating ways to work across government in a meaningful way is often a prerequisite for anticipatory innovation. This means aligning budgetary and strategic steering processes and also regulatory processes, all of which were discussed in prior chapters. Various ways to tackle the influence of government silos could be tested, including organisational solutions (e.g., phenomenon-based taskforces) and staff rotation to disseminate futures, foresight and innovation knowledge across government. Also a more unified approach to analyse and tackle new emerging problems is needed – this would help to incorporate anticipatory innovation approaches from the start and examine these issues in a more institutionalised manner.

Main Findings	Key considerations
	Coordination across government challenges
Budget, regulatory and strategic steering enforce different aims: strategic vs organisational	• Set up a process by which these aims and incentives could be synchronised
Very strong governmental silos	• Counter silo mentality by creating stronger counter-structures to work in a horizontal manner (e.g., phenomenon-based taskforces) • Increase staff rotation in government to provide a more natural exchange of knowledge between sectors, possibly accompanying phenomenon initiatives • Set up demonstration cases around cross-government issues on how to tackle cross-government challenges led by central steering bodies (including a variety of organisational and leadership level solutions)
When new, cross-governmental issues arise, responsibilities are assigned in ad hoc ways: lack of clarity of process	• Set up concrete procedures to analyse different types of policy problems based on their uncertainty and complexity • Outline responsibilities for different ways in which policy problems could be assigned
Diverging ideas on how to tackle coordination issues: through stronger organisational reforms or softer mind-set/leadership tools	• Analyse in greater detail how coordination issues could be tackled and which options – structural and leadership level – would be the most viable • Use foresight and futures thinking to explore different avenues of reform and use prototyping and other innovation tools and methods to create possible pilots/experiments on how these issues could be tackled and tested in practice

5

Preliminary considerations and proposed pilots

»The problem with Finland is that in international comparisons we are doing pretty well in these issues. But if you compare it to the kind of possibilities, what our skill base would allow us to achieve, and even the low hanging fruits that are left unpicked, we could do much, much better.«

–Senior leader in the Government of Finland

PRELIMINARY CONSIDERATIONS AND PROPOSED PILOTS

Based on strong foundations, the Finnish government has the potential to build up its governance systems to deal better with uncertainty and complexity. The prior discussion outlined reform needs and opportunities to make the Finnish government more conducive to anticipatory innovation governance. Here, the main challenges will be covered:

Futures and foresight

The research showed there is a significant 'impact gap' when it comes to strategic foresight and how it is used in the Finnish government. While the resources for central foresight efforts have increased with input from individual ministries, the work undertaken does not directly contribute to strategic plans, innovation programmes and other executive instruments. It is difficult to align strategic foresight with ongoing strategic planning and political decision-making processes. Overall, futures and foresight are not feeding into innovation and experimentation which is fundamental to anticipatory innovation governance.

A contributing factor to this impact gap is a lack of 'futures literacy' across the government. Ministries are uncertain about the degree to which they should develop internal capacities for futures and foresight activities, and to what extent this work should be carried out centrally. It is important that the ministries have an opportunity to challenge collectively aligned futures and for civil servants to distribute anticipatory knowledge to all parties and stakeholders as was the goal of ministerial futures reviews. Futures methods need to be mainstreamed and tied to core government tasks, while 'opening the system' would allow for more radical ideas to emerge.

Futures and foresight

Main Findings	Key considerations
Unclear roles of futures and foresight at the centre of government and ministry levels	• Clarify the roles and expectations of strategic foresight and futures beyond the Government Future's Report • Outline which capacities ministries and public organisations should develop internally and which issues are tackled across government; this may mean that different foresight processes internally and across government are run simultaneously and hence, should be also adequately resourced • Create an evaluation system to outline how strategic foresight contributes to anticipatory innovation capacity of organisations (not the accuracy of predicting the future)

Impact gap: futures and foresight not feeding into strategic planning, innovation and experimentation Difficulty to align with ongoing strategic planning and political decision-making processes	• Strengthen the link between foresight and decision-making • Clarify the expectations of decision makers and policy makers for strategic foresight and create demand for the latter • Demonstrate how anticipatory innovation knowledge could be used in strategic planning, innovation and experimentation processes; create clear expectations on how and when different strategic foresights tools and methods (for visioning, stress-testing etc.) will be used in strategy making processes • Take into account strategic planning and policy making timelines in designing strategic foresight and futures exercises so that there are touchpoints and uses of this information during the government term
'Foresight by number' – preference for highly probable futures aligned with existing plans, institutionally bounded futures	• Involve more varied stakeholder groups and international experts in the futures and foresight work • Release results on an ongoing, timely and open manner • Build in autonomy to explore more alternative scenarios and use the future as a neutral, safe space to discuss and reframe issues that block progress
Closed process: foresight happening in narrow circles and problems with transparency and timely sharing of results	• Involve decision makers throughout the process • Present results to a wider audience on an ongoing basis • Take into account the ecosystem perspective in strategic foresight

Public interest and participation

Both are essential to an effective anticipatory innovation system as starting points for the exploration, contextual understanding, and creation of narratives. The findings pointed to lack of institutionalised citizen participation methods to consider policy alternatives early on, closed processes and lack of facilitation skills in the public sector. There is a need to counter 'standard' arguments against citizen participation, such as that politicians do not want the processes to be open, or that sped-up processes do not allow for wider engagement. While the forthcoming Government Report on the Future included citizen dialogues in its preparatory process, it is unclear how the views of the citizens were incorporated or whether there was an impact on the strategic planning processes. Hence, there could be further opportunities to incorporate the future-oriented perspectives of citizens directly into the Government Programme.

Furthermore, governments own data analysis methods and barriers to data interoperability are standing in the way of user-centric approaches and development of new, future-oriented services. It is difficult to triangulate knowledge from citizen participation and other sources of data for anticipation, which could help to improve the government's ability to pick up on emerging changes or unfulfilled goals. Frameworks to go beyond this, but still assure the privacy of data and its ethical use, should be considered.

Public interest and participation	
Main Findings	**Key considerations**
Closed processes and lack of facilitation skills Lack of institutionalised citizen participation methods early on to consider policy alternatives	• Involve people early on in the policy development cycle to think about useful alternatives today, but also to consider options for the future • Take steps to institutionalise citizen participation methods and develop capacity in using them (incl. facilitation skills) • Organise targeted outreach to typically underrepresented groups, including future generations • Partner with other countries to collect insights regionally or globally • Counter 'standard' counter-arguments for citizen participation: e.g., politicians do not want the processes to be open, expedited processes do not allow for it. Demonstrate the social and economic value of open processes.
Lack of deliberative processes that are future-oriented outside of more consultative dialogues	• Introduce citizen-led deliberative futures exercises to counter silo-effects in government thinking (outline challenges that are human centred) as citizens tend to structure their thinking in government silos • Take a differentiated approach to involving citizens and other stakeholders in future-oriented policy based on their levels of trust in government. • Get future-oriented citizens' perspectives to inform the government programme • Consider across ministries dialogues on issues connected to emerging phenomena
Need for more user centric approaches and systems thinking to analyse complex problems	• Analyse barriers to user-centricity and create demonstration cases (similar to AuroraAI) that help to engage with future generation needs • Prioritise also human-centric ethnographic data and foresight data to operationalise challenges alongside 'hard data'
Tackle issues of digital rights which may hinder alternative use of data and address data interoperability to assure more user focused analysis and citizen-centred policy challenges	• Devise ways to counter legislative issues connected to data interoperability and solutions to overcome privacy and other issues innovatively • Look for alternative uses of data including data mining to create insights

Alternatives exploration

The research showed that a few expert pioneers are pushing forward experimentation and innovation in the government of Finland, but largely these approaches were seen as a side-of-the-desk activity. Inside government, there is a lack of capacity and futures literacy at both individual and organisational levels and few organisations have structured signal reading and sense making processes or teams. Experimentation specifically is not always timely in policymaking processes and does not suit established linear policymaking processes. Outside of the Government Programme preparation every 4 years and the Government Report on the Future there were few structured 'future seeking' and experimental moments in policy reforms, where policy making timelines create clear demand for future perspectives and experimental approaches. In ministries, experimentation, research and development fall on few individuals with large portfolios or are often outsourced through predefined (waterfall) processes with little iterative learning. This means that there is no clear value chain from futures and foresight to exploration, experiment design, innovation and policy development.

Alternatives exploration	
Main Findings	**Key considerations**
Experimentation is talked about, but rarely done beyond agencies: a handful of pioneers, but little consistent high-level support	• Experiments and the information obtained from them must be better linked to long-term policy development work • There should be more clarity on when it is appropriate to apply experimental approaches and what support can be expected from government to do so
Regulations as gate keepers of experimentation (e.g., experimentation law on employment services experiment in municipalities)	• Consider a comprehensive legal framework to carry out experiments or an established procedure to regulate more transformative experiments • Consider providing guidance to help public organisations better assess the legal implications of designing and running an experiment
Experimentation is not always timely in policymaking processes	• Set a clear path/role for experimentation within established evidence-informed policy development processes • Consider the development of evaluation criteria for experimentation, including for pilot test and initiatives. • Facilitate a structured learning process from bottom-up experimentation connected to missions, support for scaling and last-mile innovations
Outside of the Government Programme preparation every four years and the Government Report on the Future, there are little structured 'future seeking' and experimental moments in policy reforms	• Create concrete, structured and open opportunities to propose innovative or experimental policy designs during the Government's mid-term review • Leave room in the Government Programme for innovation and experimentation and avoid leading by solutions if not validated before
Solutions defined too early in regulation-driven policymaking process: lack of agile and iterative policy design	• Create concrete feedback loops for implementation and space for experimentation and innovation within regulatory frameworks • Create a framework for using regulatory sandboxes, testbeds and other agile and iterative regulatory solutions for public sector innovation

R&D tasks are often outsourced through pre-defined (waterfall) processes with LIttle iterative learning	• Consider ways to strengthen government's organisational capacity for innovation to ensure internal learning. Create the role of boundary spanners who can facilitate learning from external partners into the public sector
Experiments/innovation and their role still not understood by leadership	• To create the demand and supply for experimentation in a functioning anticipatory innovation system, organisations need to be systematically supported and encouraged to start their innovation/experimentation journey. This should include dedicated funding, training and leadership programmes to support innovation management • Expand the view that innovation is connected mostly to digitalisation and productivity projects and create clear links to core policy making and policy implementation processes (including government challenges, phenomenon and missions; adaptive change and anticipatory innovation)
Innovation largely depends on the efforts of individuals and pioneers	• Consider the development of overarching system enablers (e.g. innovation challenge, fund, etc.) to ensure innovation is systematically recognised and supported as an intentional activity and not a sporadic undertaking. • Consider increasing individual capabilities for innovation including making training available on experimental designs and innovation methods • Provide adequate resources for public sector innovation and experimentation

Individual and organisational capacity

There is a lack of individual and organisational capabilities in anticipation, innovation and futures literacy and an uneven spread of transformative leadership capabilities both in public administration and politics. For both administrators and decision-makers, the research showed that short-term tasks take precedence over long-term thinking. As outlined above, strategic development responsibilities in ministries fall on few people with very full portfolios. Prior development functions have been consolidated and organisations lack dedicated resources with right skills, capacities and resources (including time).

There is a need to strengthening the capacity of public servants to reflect and act on future policy challenges by increasing access to and experience with anticipatory innovation approaches and tools. To create demand for anticipatory innovation, leadership skills and capacities need to be addressed and additional support structures and practices put in place in organisations to develop signal reading and anticipatory policy making skills that lead to innovation.

Individual and organisational capacity	
Main Findings	**Key considerations**
There is a lack of dedicated capacity and futures literacy on both individual and organisational levels Few organisations have structured signal reading and sense making processes/teams Lack of knowledge in foresight, futures, innovation tools and methods	• Expand both leadership and public service training programmes to systematically include foresight, futures, experimentation and innovation knowledge with a specific aim to show the interlinkages between methods and approaches and how they can be used in practice • Support the creation of signal and trend detection functions in public organisations and give insights to tools and methods and ways to tie this work to daily operations • Share good practices in public organisations in these areas across government levels
Short-term tasks override long-term thinking	• Ensure enough time is allocated for long-term thinking at the organisational level • Create slack in organisations to respond to crises, but also leave room for development and innovation work
Development responsibilities fall on few people with very full portfolios: lack of dedicated resources with right skills, capacities and resources (incl. time)	• Analyse where development, innovation and experimentation support tasks fall within public sector organisations and create dedicated structures for their support
Unequal spread of transformative leadership capabilities both in PA and politics	• Continue leadership development programmes incorporating anticipatory innovation capacity elements target to both PA and political leadership
Perception that foresight and innovation are side-of-the-desk activities and not part of core processes Performance management systems do not support cross-government aims and anticipation/innovation	• Create clear expectations that innovation, experimentation and foresight are part of business as usual and are capabilities that are valued in staff and in organisations
Fear of close media scrutiny and making mistakes – internal legitimacy overrides external legitimacy	• Create programmes to increase futures literacy of media, involving them early in the process and make the purpose and expectations clear • Promote risk-taking and safe failing approaches in the public sector and facilitate learning from the former
Engineering mind-set and preference for forecasting standing in the way of systems innovation, yet digital skills and background have been very beneficial in modernising the public sector	• Highlight skills and capacities that are associated with positive transformation and modernisation of the public sector • Make clear how to use data from alternative sources and how to integrate foresight and experimental knowledge into evidence informed decision making • Acknowledge that not all aspects of uncertainty can be tackled and cognitive biases connected to the future need to be openly dealt with

Budget and resource allocation

The results of the analysis showed that often budget allocation and strategic steering in the Finnish government serve different aims: the first enforcing organisational silos, while the other emphasising cross-governmental goals. There are a variety of improvements that could be made to make resource allocation more iterative and agile, including more flexibility in government transfers, budget monitoring tools etc. Alongside more incremental improvements, phenomenon-based budgeting could act as a more transformative approach, tackling coordination and organisational issues while including anticipation and innovation in the budgetary process. Setting up phenomenon-based resourcing and budgeting pilots can also shed light on how to counter the effects of organisational silos.

Alternatives exploration

Main Findings	Key considerations
Budgetary steering processes and strategic steering do not account for consideration of futures and foresight	• Review the timeframes connected to strategic decisions on the Government Programme and increase flexibility of the simultaneous budgetary planning system with the possibility to re-evaluate the budget according to strategic directions • Include a long-term vision into the budgetary process that utilises strategic foresight inputs and also aligns itself with the government's long-term plans
Money does not follow problems: budget allocations are not phenomenon/user centric nor are allocations holistically aligned with the challenges involved Aligning commitments across organisational budgets at the same time is very difficult	• Implement clear monitoring and evaluation tools that are outcome and phenomena specific and make government investments visible • Make trade-offs between different policy areas visible
Phenomenon-based narrative widely in strategy, but does not work in practice	• Pilot and test phenomenon-based budgeting which also allow for joint budgets between ministries and cross-ministerial taskforces
Ability to make agile and iterative changes to projects once the situation develops	• Consider ways to make the budgetary process more iterative and agile and look for ways to create stability in long-term funding in areas with longer time horizons • Look for ways to include innovation and experimentation in the budgetary process giving alternatives to funding routes

Policy cycles and continuity of reforms

Policy cycles and political factors play a large role in anticipatory processes. One of the recurring topics in the interviews and validation sessions was that strategies do not lead to action. Time for proper implementation is too short to develop theories of change and operationalise and evaluate changes on the ground. Effective implementation of reforms and tackling complex challenges is highly dependent on policy cycles that disrupt continuity of reforms and follow-through, leading to the proposal of additional institutionalised transition processes for switching of governments. The Government Programme tends to spur on actions, but is often of varying strategic quality and leads through proposing solutions rather than giving strategic direction.

Thus, the conducted research indicates a need to account for the chronological distance between developing visions for alternative futures and their implementation which often spans across several policy cycles. Anticipatory mechanisms could help bridge this gap by reducing time-to-implementation of policies (e.g. through constant iteration and testing). This becomes especially acute in many policy areas, where changes are speeding up and public sector is getting closer to real-time policy making. To assure the continuity in development, mechanisms are needed that allow to continue policy exploration and development across policy cycles supported by new evaluation and measurement procedures.

Policy cycles and continuity of reforms	
Main Findings	**Key considerations**
Lack of formal transition procedure between administrations	• Pilot different transition procedures between administrations including the role of civil servants
Role of public administration and politicians in complex and long-term policy issues unclear and subject to (hidden) power relations	• Clarify the roles politicians and civil servants need to play within a long-term anticipatory innovation governance system
Strategies do not lead to action – time for proper implementation is too short to develop theories of change, operationalise and evaluate changes on the ground	• Develop actionable theories of change connected to strategic goals that are realistic to the effort and resourcing to deliver • Ensure that policy makers are actively involved in the ongoing evaluation of policy implementation
Myth of implementation not being part of strategic policymaking stands in the way of experimentation and agile/ iterative policymaking	• Ensure flexibility and learning from the implementation process • Leave room for experimentation and innovation: e.g., create testbeds to see how different options would work in practice
Government Programme as future-seeking moments and catalysers, but of varying strategic quality	• Create clear expectations that innovation, experimentation and foresight are part of business as usual and are capabilities that are valued in staff and in organisations

Fear of close media scrutiny and making mistakes – internal legitimacy overrides external legitimacy	• Agree on the level of technical detail for the Government Programme and leave room for innovation and experimentation • Create stress-testing moments for the Government Programme that are open and transparent

Coordination across government challenges

The conducted research shows that the Government of Finland is still characterised by very strong silos. When new, cross-governmental issues arise, responsibilities are assigned in ad hoc ways, lacking clarity of process. There is a possibility to explore organisational solutions for cross-cutting challenges. For example, by increasing mobility actoss silos or creating dedicated challenge-based teams (e.g., phenomenon taskforces), within or spanning across public-service institutions.

Coordination across government challenges	
Main Findings	**Key considerations**
Budget, regulatory and strategic steering enforce different aims: strategic vs organisational	• Set up a process by which these aims and incentives could be synchronised
Very strong governmental silos	• Counter silo mentality by creating stronger counter-structures to work in a horizontal manner (e.g., phenomenon-based taskforces) • Increase staff rotation in government to provide a more natural exchange of knowledge between sectors, possibly accompanying phenomenon initiatives • Set up demonstration cases around cross-government issues on how to tackle cross-government challenges led by central steering bodies (including a variety of organisational and leadership level solutions)
When new, cross-governmental issues arise, responsibilities are assigned in ad hoc ways: lack of clarity of process	• Set up concrete procedures to analyse different types of policy problems based on their uncertainty and complexity • Outline responsibilities for different ways in which policy problems could be assigned
Diverging ideas on how to tackle coordination issues: through stronger organisational reforms or softer mind-set/leadership tools	• Analyse in greater detail how coordination issues could be tackled and which options – structural and leadership level – would be the most viable • Use foresight and futures thinking to explore different avenues of reform and use prototyping and other innovation tools and methods to create possible pilots/experiments on how these issues could be tackled and tested in practice

In addition to the key findings and considerations during the process, participants in the validation workshops suggested concrete opportunity areas and pilot ideas. These are presented in table 5.1 below.

Findings cluster	Pilot examples and ideas
Futures and foresight	Opportunity to organise cross government topical foresight exercises with citizens Counter backlash against considering negative futures by piloting a futures literacy programme for the medial Build stress-testing methodologies and toolkits for strategic planning with permanent state secretaries
Public interest and participation	Pilot citizen-led deliberative futures exercises that could help counter silo effects in government. These could include superforecasting, AI matchmaking, seamless services, deliberative process, gender budgeting and human rights budgeting with a future generations perspective
Alternatives exploration	Opportunity to identify natural experiments and set up a learning system around them Test solutions for common sandboxes and datasets to make experimentation easier Opportunity to direct part of "*tulosohjaus*" to produce learning. Pilot experimental academy, agile funding, experiment with civil servants' responsibilities in relation to AI
Individual and organisational capacity	Opportunity to establish teams based on societal challenges and opportunities rather than representatives from ministries and agencies Create guides to roles for anticipatory innovation governance in the public sector, such as a 'field expert' (also in innovation and futures; policy makers and decision makers and leaders both administrative and political)
Budget and resource allocation	Opportunity for anticipatory innovation governance pilots in phenomenon-based budgeting pilot Pilot an open budgeting platform, across policy area budget lines, ex ante/ex post prescriptive budgeting
Policy cycles and continuity of reforms	Opportunities seen in the parliamentary process as part of the long-term committees, but it is not clear if it works in practice, hence, more learning needed Opportunity to experiment with transition processes for the next administration and set up different experimental transition protocols Opportunity to build on capacities developed in theCovid-19 crisis to introduce more scientific input to policymaking and integrate experimentation and innovation more with evidence-informed policy agenda
Coordination across government challenges	Opportunities in sustainability roadmap 2030 to showcase new approaches Opportunities in the field of continuous learning Opportunities in EU recovery fund and experimentation with new processes; the Democracy Programme Pilot state-level strategic transformation office, agile team-of-teams pilot

Table 5.1. Opportunity areas and pilot ideas, Source: OECD based on information collected in the validation workshops

6

Towards a new model of anticipatory governance

> »I have sometimes been asking this question: if our governance system of Finland had never been invented, what kind of system would we invent now?«
>
> –Senior executive in the Government of Finland

TOWARDS A NEW MODEL OF ANTICIPATORY GOVERNANCE

This assessment has highlighted a variety of issues related to the anticipatory innovation governance system in Finland, and identified small and large changes that could help address these. How can these changes be made in reality? The next step is to develop a working anticipatory innovation governance model based on the findings of the assessment report. This prototype will be tested through four experimental cases in Finland and will help to tackle some of the challenge areas specific to Finland. The cases should inform learning about the effective governance of anticipatory innovation, demonstrating how Finland's governance structures can deal with shifting values, new public expectations, uncertain future shocks and a variety of preferable futures that the country wants.

In April-May 2021, the OECD developed case selection criteria (box 6.1) and discussed these with the high-level advisory board. In order to include the widest potential variety of governance mechanisms in the experimental cases and to address areas with disruptive potential, the OECD proposed including cases:

- Involving deliberative or public participation methods, but with the flexibility to adapt them with future-orientation in mind
- Involving how leaders, both administrative and political, engage in shared sense making of knowledge about the future
- Involving a forum in which trade-offs are discussed and explored, but not necessarily decided
- Addressing cross-government coordination and resourcing
- Addressing continuity and long-termism beyond political cycles
- Addressing anticipatory innovation capacity issues in ministries both on the political and administrative levels

Based on the discussion at the previous advisory board meeting and the following outreach, the OECD chose to support cases in four areas: (1) continuous learning, (2) carbon neutrality and evidence about the future, (3) children, youth and family policy; and (4) dialogues between politicians and leading civil servants on anticipatory innovation governance roles. Figure 6.1 illustrates how the case topics are connected to the challenges outlined in

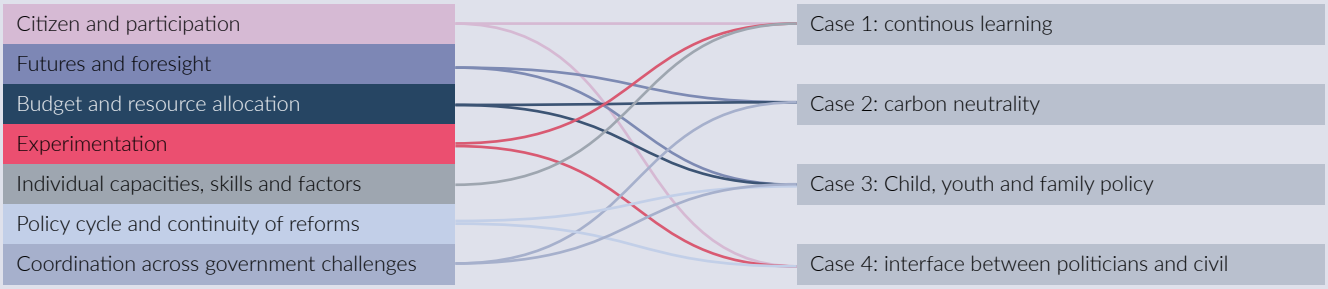


Figure 6.1. Planned cases and their ties to thematic cluster areas, Source: OECD

BOX 6.1. CRITERIA FOR A GOOD ANTICIPATORY INNOVATION GOVERNANCE PILOT

Experimental cases for anticipatory innovation should explore unknowns and unexpressed values or the impacts of uncertain future events. For these projects, cause and effect can be difficult or impossible to predict and often challenging to connect, even indirectly and after the experiment. Deductive reasoning is not the primary logical basis for these experimental cases. While research questions may serve as guidance, hypotheses, quantitative evidence and control groups are not well suited to an anticipatory innovation approach.

Characteristics of a good pilot

- **Variety** – One of the outcomes of the overall Anticipatory Innovation Governance project is to inform an emerging model, so pilots should represent a variety of different mechanisms in terms of both authorising environment and agency (see Figure 1). The cases should also be varied across different policy sectors.
- **Significance** – The cases should be in policy areas that are important to the Government and serve as a significant demonstration case.
- **Ministry-level ownership** – Cases should have top-level legitimacy but should not be subject to the same administrative constraints and evaluation methods as other innovation projects. Cases should be relevant to national government but can also be cross-governmental and involve agencies.
- **WILLING PARTNERS** – Cases should involve trusted relationships with project-owners in Finland. Experimental case owners and the OECD should be able to have frank and direct conversations about the experimental cases, both to design them well and to learn from them.
- **Alignment with current priorities** – Given the limited duration of this project, , and the need for both topical legitimacy and on-the-ground experimental case operational support, cases should involve ongoing work areas or work planned for 2021 or have a clear window of opportunity to propose/prepare change.
- **Do no harm** - Experimental pilots should reveal and uncover unknowns and surprises. Invariably operating in emerging policy the impacts might not be known up front or to be benign or positive.
- **Avoid entrenched positioning** – There are certain topics for which cultural narratives are deeply entrenched or about which open discussion is more difficult due to strong positioning by politicians or interest groups (e.g. immigration, employment policy). These topics should be avoided to allow for open exploration in the experimental cases.

Source: OECD.

The cases are outlined as follows:

- **Continuous learning and implementation of reforms.** One of the most frequent challenges described in the prior research was the ability to implement strategic visions in complex policy areas. Finland has been working on a strategic approach towards continuous learning over the last decades and has one of the most successful skill-development systems among OECD countries. Yet trends such as ageing and digitalisation are now challenging the system. The OECD conducted a review on the topic last year concluding that the Finnish skill-development system must get future-ready (OECD, 2020a). One of the goals here is to develop a new forward-looking system with partners from the public, private and third sectors participating in a continuous learning centre that anticipates and tests future needs in the policy area. The case will analyse how this future-oriented implementation system could look like in the context of continuous learning centre and what the new engagement model it would entail. The reform

is supported by a parliamentary group that started its work in 2019, making a roadmap for the reform. In autumn 2019, Sitra facilitated the first phase of the work by applying constructive dialogue methodologies to facilitate the discussion between stakeholders in the policy area.

- **Carbon neutrality and evidence about the future**. Much of policymaking today, especially macroeconomic policy, depends on forecasting and predictions based on existing data. These models are probabilistic and only capture a small set of future possibilities. They tend to discount more transformative change that is difficult or impossible (due to complexity and uncertainty) to model robustly using quantitative methods. In complex policy situations like climate change, these models rarely illustrate the conditions in real life. This case will look at the anticipatory knowledge base, decision-making mechanisms and institutional roles of ministries in facilitating one of the biggest transitions of our lifetime: the green transition. The case will highlight which tools are needed to take anticipatory climate needs into account in macroeconomic policies and how climate actions could be better supported by macroeconomic policies in a future-oriented way. This is a topic where the learning could be shared across countries as Finland is the current acting chair of the initiative "Finance Ministers for Climate Action."

- **Steering change across government levels in the area of children, youth and family policy.** In 2020 Finland adopted its first ever National Child Strategy, which aims to create a more child- and family-friendly Finland. The strategy concentrates on developing a vision that spans across government terms and crosses administrative boundaries. Beyond the vision, many multi-level governance and coordination challenges emerge. A key issue is how to coordinate challenges specific to the area and support mechanisms of the future to deliver on the strategy. The Ministry of Finance has been working on the topic of phenomenon-based budgeting in connection to the strategy. Project leaders would like to explore what would this look like and how it could be incorporated into the anticipatory innovation governance model. Tackling these questions will help address several themes coming out from the research conducted by the OECD: policy cycles and continuity of reforms, resource allocation and coordinating across government challenges.

- **Interface between politicians and leading civil servants on their role in anticipatory innovation governance**. A well-functioning interface of politicians and leading civil servants is a vital part of public governance. Acknowledging the mutual roles, functions, processes and challenges connected to anticipation is vital for a new governance system. This topic has come out across the anticipatory innovation governance themes, from complex and long-term policy issues to knowledge creation and advice by civil servants. The case will take the format of joint dialogues between politicians and leading civil servants around the identified anticipatory innovation governance themes. Each dialogue will be undertaken by different groups of six to ten individuals, with positions divided equally between politicians and civil servants. The dialogues will be facilitated by the Finnish project secretariat and the OECD will use the insights for a guidance document on the emerging roles and communication mechanisms.

All of the cases will be scoped with the project teams in Finland and core outputs defined in the fall 2021. The cases will be then developed and supported until April 2022. All the cases will benefit from learning sessions with international peers and owners of similar challenges, facilitated by the OECD. The results will feed into the final report of the OECD expected in June 2022, in which the improved model of anticipatory innovation governance will be presented.

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IMAGE CREDITS

Image 1: Tim Bird, Suomi Finland Images. Caption: Icebreaker Otso assists a cargo ship stuck in the ice near the port of Kemi

Image 2: Suomi Finland Images

Image 3: Pasi Markkanen, Suomi Finland Images

Image 4: Riitta Supperi, Keksi, Team Finland, Suomi Finland Images

Image 5: Jukka Rapo, Keski, FIB, Suomi Finland Images Caption: Clean Air in Helsinki

Image 6: Sakari Piippo, Suomi Finland Images

Image 7 : Pasi Markkanen, Suomi Finland Images

Image 8: Suomi Finland Images

Image 9: Riitta Supperi, Keksi, Team Finland, Suomi Finland Images Caption: Voting in the general elections

Image 10: Riitta Supperi, Keksi, Team Finland, Suomi Finland Images Caption: Emergency services cooperating in Finland

ANNEX A. LIST OF INTERVIEWEES

1. Kaisa Lähteenmäki-Smith, MDI Ltd / Steering2020 project
2. Petri Peltonen, Ministry of Economic Affairs and Employment, Corporate Steering Unit
3. Markku Heikura Finnish, Tax Administration
4. Jaana Husu-Kallio, Ministry of Agriculture and Forestry
5. Harri Martikainen, Ministry of the Interior
6. Markus Pauni, The Association of Finnish Local and Regional Authorities
7. Tuomas Pöysti, The Office of the Chancellor of Justice
8. Eva Biaudet, Parliament of Finland
9. Janne Viskari, Digital and Population Data Services Agency
10. Antti Joensuu, Ministry of Economic Affairs and Employment
11. Emma Terämä, Ministry of Finance
12. Jouni Backman, The Finnish Innovation Fund Sitra
13. Petri Knaapinen, ELY-centre Uusimaa
14. Anna-Maija Karjalainen, Ministry of Finance
15. Anna Similä, Ministry of Transport and Communications
16. Janne Kerkelä Prime Minister's Office, Government Administration Department
17. Ulla Rosenström, Prime Minister's Office, Strategy Department
18. Jyrki Katainen, Finnish Innovation Fund Sitra
19. Arvo Kokkonen, National Land Survey of Finland
20. Juha Majanen, Ministry of Finance
21. Olli-Pekka Heinonen, Finnish National Agency for Education
22. Tuula Jäppinen, The Association of Finnish Local and Regional Authorities
23. Päivi Nerg, Ministry of Finance
24. Maria Kaisa Aula, Ministry of Finance
25. Anita Lehikoinen, Ministry of Education and Culture
26. Sinimaaria Ranki, Sitra
27. Juha-Pekka Raeste, Helsingin Sanomat Newspaper
28. Jussi-Pekka Rantanen, Finnish Broadcasting Company YLE
29. Maria Höyssä, The Committee of the Future, Eduskunta
30. Pauliina Pussinen, Ministry of Finance
31. Markus Siltanen, Ministry of Finance
32. Annika Damström, Finnish Broadcasting Company YLE
33. Jukka Uosukainen, Prime Ministers Office
34. Matti Anttonen, Ministry of Foreign Affairs
35. Niklas Vainio, Ministry of Justice
36. Leila Kostiainen, Finnish Council of Regulatory Impact Analysis
37. Tarja Rautio, Finnish Tax Administration
38. Miska Simanainen, Kela
39. Tiina-Liisa Forsell, VTT Technical Research Centre of Finland
40. Tiina Nakari, VTT Technical Research Centre of Finland
41. Maija Saloranta, VTT Technical Research Centre of Finland
42. Taina Kulmala, Prime Minister's Office
43. Joakim Strand, The Committee of the Future, Eduskunta
44. Jukka Juusti, Ministry of Defence
45. Mikko Dufva, Sitra
46. Heli Mikkelä, National Audit Office of Finland
47. Lassi Perkinen, National Audit Office of Finland
48. Juhani Damski, Ministry of Environment
49. Päivi Sutinen, City of Espoo
50. Elias Pekkola, University of Tampere
51. Ira Alanko, Aurora AI team, Ministry of Finance
52. Antti Hahto, Aurora AI team, Ministry of Finance
53. Aleksi Kopponen, Aurora AI team, Ministry of Finance
54. Jaana Tapanainen-Thiess, Prime Minister's Office