Government steering beyond 2020

From Regulatory and Resource Management to Systems navigation

Kaisa Lähteenmäki-Smith, Samuli Manu, Pirkko Vartiainen, Petri Uusikylä, Harri Jalonen, Sami Kotiranta, Urho Lintinen, Mikko Annala, Iacopo Gronchi, Juha Leppänen, Silva Mertsola

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Government steering Beyond 2020: From Regulatory and Resource Management to Systems navigation

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Language	English Pages 84			
Abstract	The Steering2020 project provides an overview of the development and current state of Finnish state governance and strengthens the discussion on the possibilities of systemic governance. The analysis identifies enablers and barriers in the transition to more phenomenon-based steering. The more systems-based form of future steering and anticipatory governance is called <i>systems navigation</i> .			
	The project is based on complexity- and systems-theoretical interpretations of anticipatory governance. From the perspective of complexity thinking, the challenges and opportunities of system navigation are not in the characteristics of institutions and actors themselves, rather in the relationships between them. Systems navigation is a structure and process of systemic steering that emerges and guides interaction, with an emphasis on a humble and forward-looking approach to governance and decision-making, as well as systemic trust and learning.			
	The Covid-19 crisis has provided an exceptional frame of reference for analysing the policy tools and instruments of systems steering in crisis situations. In part, the exceptional situation has reinforced the perceived need for a more systemic approach to steering, in part it has highlighted the longing for clear competencies an less complexity.			
	Multilevel systems steering does not represent mainstream. It is therefore important to draw lessons and learn from examples of cultural change on international, regiona and local level, as well as to support systemic trust and adaptation, and to introduce incentives to reform guidance when needed.			
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Valtion ohjaus 2020-luvulla Säädös- ja resurssiohjauksesta järjestelmänavigointiin

Valtioneuvoston selvitys- ja tutkimustoiminnan julkaisusarja 2021:17				
Julkaisija	Valtioneuvoston kanslia			
Tekijät	Kaisa Lähteenmäki-Smith, Samuli Manu, Pirkko Vartiainen, Petri Uusikylä, Harri Jalonen, Sami Kotiranta, Urho Lintinen, Mikko Annala, lacopo Gronchi, Juha Leppänen, Silva Mertsola			
Kieli	englanti Sivumäärä 84			
Tiivistelmä	Ohjaus2020-hanke tarjoaa kokonaiskuvan Suomen valtion ohjauksen kehityksestä ja nykytilasta sekä vahvistaa keskustelua systeemisen ohjauksen mahdollisuuksista. Analyysi tunnistaa mahdollistajia ja hidasteita siirryttäessä ilmiölähtöisempään ohjaukseen. Tulevaisuuden systeemistä hallinnan muotoa kutsutaan järjestelmänavigoinniksi.			
	Hanke pohjaa kompleksisuus- ja systeemiteoreettisiin tulkintoihin ennakoivasta hallinnasta. Kompleksisuusajattelun näkökulmasta järjestelmänavigoinnin haasteet ja mahdollisuudet eivät ole instituutioiden ja toimijoiden ominaisuuksissa vaan niiden välisissä suhteissa. Järjestelmänavigoinnissa on kyse vuorovaikutuksessa syntyvästä ja vuorovaikutusta ohjaavasta hallinnan rakenteesta, jossa korostuvat nöyrä lähestymistapa ja luottamus, tulevaisuussuuntautuneisuus ja oppiminen.			
	Covid-19-kriisi on tarjonnut poikkeuksellisen viitekehyksen systeemisen ohjauksen välineiden tarkasteluun kriisiolosuhteissa. Osin poikkeustilanne on vahvistanut koettua tarvetta systeemisyyteen, osin se on nostanut esille kaipuuta selkeisiin toimivaltasuhteisiin ja vähempään kompleksisuuteen.			
	Monitasoinen systeeminen ohjaus ei edusta valtavirtaa. Onkin tärkeää oppia kulttuurimuutoksen kansainvälisistä, alueellisista ja paikallisista esimerkeistä, tukea systeemistä luottamusta ja sopeutumista ja sekä ottaa käyttöön ohjausta tarpeen mukaan uudistavia kannustimia.			
Klausuuli	Tämä julkaisu on toteutettu osana valtioneuvoston selvitys- ja tutkimussuunnitelman toimeenpanoa. (tietokayttoon.fi) Julkaisun sisällöstä vastaavat tiedon tuottajat, eikä tekstisisältö välttämättä edusta valtioneuvoston näkemystä.			
Asiasanat	valtio, hallinto, hallinnointi, ohjausjärjestelmät, systeemiajattelu, kompleksisuus, nöyrä hallinto, tutkimus, tutkimustoiminta			
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Statlig styrning efter 2020 Från reglerings- och resurshantering till systemnavigering

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Språk	engelska Sidantal 84			
Referat	Steering2020-projektet ger en översikt över utvecklingen och den aktuella situationen för finsk statlig styrning och stärker diskussionen om möjligheterna till systemisk styrning. Analysen identifierar möjliggörande och hindrande faktorer i övergången till mer fenomenbaserad styrning. Den mer systembaserade formen av framtida styrning och anteciperande styrning kallas systemnavigering.			
Projektet bygger på komplexitet och systemteoretiska tolkningar av anticiperan styrning. Ur perspektivet av komplexitetstänkande ligger utmaningarna och möjligheterna med systemnavigering inte i egenskaper hos institutioner och ak själva, snarare i relationerna mellan dem. Systemnavigering är en struktur och process för systemstyrning som växer fram och styr interaktion, med tonvikt på ödmjukt och framåtblickande tillvägagångssätt för styrning och beslutsfattande liksom systemiskt förtroende och lärande.				
Covid-19-krisen har tillhandahållit en exceptionell referensram för analys verktyg och instrument för system som styr i krissituationer. Delvis har de exceptionella situationen förstärkt det upplevda behovet av ett mer syste tillvägagångssätt för styrning, delvis har det framhävt längtan efter tydlig och mindre komplexitet.				
	Styrning i flera nivåer representerar inte mainstream. Det är därför viktigt att dra lärdomar från internationella, regionala och lokala exempel på kulturförändringar, att stödja systemiskt förtroende och anpassning och att införa incitament för att vägleda reformer vid behov.			
Klausul	Den här publikation är en del i genomförandet av statsrådets utrednings- och forskningsplan. (tietokayttoon.fi) De som producerar informationen ansvarar för innehållet i publikationen. Textinnehållet återspeglar inte nödvändigtvis statsrådets ståndpunkt			
Nyckelord	stat, styrning, ledning, styrsystem, systemtänkade, komplexitet, ödmjuk styrning, forskning, forskningsverksamhet			
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FOREWORD

This report "Government Steering beyond 2020" is significant in many ways. Even though our Finnish government steering systems have been a subject of reform many times during the last decades, there has not been a comprehensive analysis of the past developments, of the recent changes, of the international angle and of the future possibilities.

Reading the report and the valuable policy briefs published during the research process, we can see that we have started on the path towards more anticipatory and systemic governance. But we are still at the beginning of our path. This report is an important knowledge base when we are mapping our way forward. I hope it is an encouragement to a wide and lively dialogue on the issues it takes up and on the conclusions and recommendations that it provides. It is the duty of us as readers, whether we are reformers, decision-makers, researchers or civil servants to ensure that this dialogue takes place.

I would like to thank so very much the authors of this work Kaisa Lähteenmäki- Smith, Samuli Manu, Pirkko Vartiainen, Petri Uusikylä, Harri Jalonen, Urho Lintinen, Mikko Annala, Iacopo Gronchi, Juha Leppänen and Silva Mertsola for providing us with this valuable work and for your devotion to this important theme. Thank you also to the members of the steering group for your enriching comments and contributions during the work.

Katju Holkeri

Chair of the steering group

March 2021

1 Executive summary

The Steering2020 project provides an overview of the development and current state of the Finnish administration and state governance, and engages in a dialogue that steers the Finnish administrative policy debate in a more systematic direction. The analysis seeks to identify enablers and obstacles in the transition from sectoral specificity and jurisdiction boundary-focused steering, regulation and resource management towards a more systems-based and phenomenon-driven governance. This form of future systems steering and management we call systems navigation.

Theoretically, the project is based on complexity and systems theoretical interpretations of anticipatory governance. The Finnish administration and government steering are still at an early stage in mainstreaming the most appropriate tools for anticipatory and more systemic governance. Instead of changing administrative processes and structures, several points emphasize the importance of management, governance practice and operating cultures. The components of a systems transition are identified as e.g. the application of a humble attitude to policy-making, systemic trust, self-organisation, and enablers such as digitalization, the welfare economy, impact-orientation, and customer-oriented service logic. The world of systems navigation emphasises trust-building in decision-making processes, anticipation and future-orientation in policy-making, and continuous learning in decision-making.

The Covid-19 crisis has provided us with an exceptional backdrop and context in which the transition from steering towards a more humble, listening, and phenomenon-based systems navigation mode is put to test. While more examples and experiences of anticipatory governance and systems -based governance is accumulating, Covid-19 seemed to be pulling in the opposite direction. The crisis brought to the surface numerous contradictions and even paradoxes related to government steering, removing what illusion there might have been of controllability, and revealing resilience to uncertainty and ignorance, motivating more strategic and holistic thinking, while inflexibility of sectoral boundaries and the need for clear command lines were at times lifted. The crisis has highlighted both the longing for over-steer and the need to let go and to strengthen inclusion. The crisis has also been a test of the actual quality of cooperation networks related to government steering.

There are numerous barriers to the transition to systems thinking and more systemic governance, such as overemphasis on power and political interests, tensions between political and public administrative control, cultural constraints that do not promote systems thinking or a more phenomenon-based operations, lack of systemic leadership skills, capabilities and traditions, limited systems capacity and competences, sometimes even competence constraints. There are reasons to be optimistic however, as

there are an equal number of enablers identified: abilities and capabilities that facilitate policy coordination, learning and systems-thinking, humble governance with interaction and deliberation between different sectors, levels of government and service users, ranging from citizens to businesses and the third sector. It is also useful for government steering to draw lessons from other levels of governance as well, in addition to reflecting on international pioneering examples. Experimentation, genuinely systems-based multi-level governance based on listening, interaction, trust and transparency of different actors may not yet represent mainstream. All the more reason to support the cultural change by identifying and using incentives and positive examples wherever they occur.

2 Systems thinking and anticipatory governance in Finland

The historical account of Finnish governance presents itself as a combination of new and old, as new forms of governance have taken form alongside the old, such as the embedded NPM reforms of the 1990s with their corrective actions and a tendency to promote change primarily through reform of the governmental agency structure still very visible. The public administration has been also been redesigned through reforms emphasising comprehensiveness and network governance, while political steering of the public administration has been strengthened by means of strategic steering based on the government programme and the centre of government thinking.

Finland's success story of good governance, a flattened hierarchy and equality of opportunity, based on trust, still remains relevant, though it is clearly no longer enough as society's problems become more complex. The climate crisis and most recently, the societal emergency caused by Covid19 highlighted society's continuing silos, constraints on governance and the need for systems-driven leadership.

As outlined in the first Policy Briefs compiled by the University of Vaasa and MDI, the operating environment of the public sector as a whole and of the government steering system in particular is increasingly unpredictable in nature, necessitating new competences and capacities from the various levels and actors engaged in it, depicting self-organising and emergent characteristics, rather than being subject to only hierarchical and external processes.

In our view, Finnish government steering is only just beginning to identify the most appropriate tools, methods and intervention mechanisms for what is an increasingly systems-driven, interlinked and emergent order of governance.

There are signs of systems navigation emerging, but its traditional counter-currents of siloed and non-integrated solutions still predominate. Our report highlights some conceptual tools and identifies a number of already existing systems-driven practices and measures in order to assist the reader in promoting systems navigation in day-to-day practice, both in government and the various state agencies.

2.1 The historical development of the Finnish administration and government steering

Classical Public Administration: The Era of Legislation and Hierarchies

The paradigm of Classical or Old Public Administration developed in the United States at the end of the 19th century as a response to the poor reputation of public administration, caused by corruption and its perceived incompetence and ineffectiveness. (See Gruening 2001). A central principle of Classical Public Administration is the separation of administration and policy-making. Elected decision-makers were responsible for their political decisions and for forming that into a legislative proposal ready for drafting, legislation. Public administrators in turn were seen as responsible for the provision of knowledge-based advice to decision-makers and for ensuring that their decisions are implemented and the law is followed. Public servants receive their positions based on education and other merits (Gruening 2001; Osborne 2006; Sørensen & Bentzen 2020; Torfing et al. 2019). The citizen was seen as subordinate to regulation and rule-based administrative system, and as a user of services (Torfing et al. 2019). The paradigm of Classical Public Administration sees the human being as an 'Administrative Man', emphasising strong governmental steering conducted via legislation, hierarchies and strictly defined responsibilities, power relations and chains of command.

In Finland, the era of Classical Public Administration extends from the beginning of the 19th century to the 1980s. The legal status of the public administration and public servant action was particularly emphasised from the beginning of the 19th century into the 1940s. During this era, the foundations of the Finnish public administration were laid: democracy, the public agency system and state finance practices. Characteristics specific to Finland included the corporatist inclusion of interest groups and trade unions in decision-making and the acceptance of political appointments to public servant positions (Mäenpää 1991, 35 as cited in Stenvall et al. 2016, 33; Savolainen 2009; Stenvall et al. 2016, 29–30; Temmes 2008a, 75; Temmes 2003/2008b; Tiihonen 1990a as cited in Stenvall et al. 2016, 32–33; Tiihonen 2009a, 17–33; Ylikangas 2009, 313–315). During the Old Public Administration era, the state was extensively involved in steering processes, mainly utilising regulative and economic instruments.

Steering processes are about the implementation of public policies in an interactive process between the actor that conducts the steering and the actor that is the target of the steering process. In Finnish practice (e.g., in management by results), it is usually a ministry that steers governmental agencies, municipalities or other actors in the public administration. According to the traditional three-part categorisation, steering

can be conducted with *regulative*, *economic* or *information-based steering instruments*. (Pekkola et al. 2016, 71–72; on steering types Lundquist 1987, 1992; Nerg 2018; on management by results in Finland, see Valtiovarainministeriö 2021/Ministry of Finance 2012).

Gradually steering has been changing, no longer limited to the actors from the public administration sphere in its traditional form. Citizens, non-governmental organisations and corporations can also be subject to steering, and laws, different forms of economic action such as taxation or subsidies and information such as guidelines and recommendations, research results and statistics may also have an effect on all societal actors (On informational steering, see Jalonen et al. 2009). Gradually, and only more recently have non-state actors also become agents responsible for steering processes, as NGOs, private sector actors and even citizens release publications and take part in public discussion and policy-making in different ways (See Hansson 2002). The role of non-governmental actors has become more important, particularly in the governance era.

The steering and monitoring systems in Finland have evolved with the development and expansion of the welfare state. The growing public sector and new services required more and different steering processes. Until the end of the 1980s, municipalities were mainly steered via regulation or economic instruments. Additionally, agreements between the municipalities and the state or between municipalities themselves were made which reduced the need for regulation (See Heinämäki 2012; also, Eduskunnan tarkastusvaliokunnan mietintö TrVM 5/2008 vp; Stenvall et al. 2016). The softer information-based steering system was adopted more broadly at the beginning of the 1990s, when the direct control of the central government was consciously reduced in accordance with the principles of New Public Management. (See Eduskunnan tarkastusvaliokunnan mietintö TrVM 5/2008 vp.).

New Public Management: Efficiency, Quality, Markets

New Public Management (NPM) became the dominant public management paradigm in the 1980–1990s. NPM represented a comprehensive new approach to public management organisation, impacting all levels of public administration and implemented across much of the world (Diefenbach 2009). It developed (in part) in response to the general critique of Classical Public Administration that (re)emerged with the global economic crisis of the early 1970s. The ineffective and rigid forms of administration, it suggested, should be replaced with procedures derived from the private sector. Both efficiency and a focus on costs and the number of employees are emphasised (See Bryson et al. 2014; Hood 1991; Sørensen & Bentzen 2020). The public administration is seen as a service provider and it is the decision-makers' task to ensure that the administration functions effectively and reacts to the needs of citizen-customers

(Gruening 2001; Sørensen & Bentzen 2020; Torfing et al. 2019). Such keywords as market mechanisms, decentralisation and results-based incentives can be associated with NPM (See Dunleavy et al. 2005). The New Public Management paradigm views the human being as an "Economic Man", emphasising the importance of cost-effectiveness and efficiency, but also the role of the citizens as consumers of public services.

During the NPM era, informational and agreement-based steering instruments were extensively adopted. Traditional legislative and resource-based instruments also however continued to be utilised. NPM-style reforms significantly modified the Finnish public administration system. The reforms led to the current form of local-level democracy promoting independent municipal administration. Management by results was adopted in the steering of governmental agencies, parts of the Finnish central agency system were dismantled and some governmental organisations were privatised (Ministry of Finance 2005, 15; Savolainen 2009, 189-191; Temmes 2008a, 75, 2003/2008b; Tiihonen 2009b; Yliaska 2010, 370–371, 2015). These actions led to significant reductions in the number of public administration employees (Lehtonen 2014; Tiihonen 2009b). Finland also joined the European Union, becoming part of a multilevel supranational system. Connections and relationships between the EU, the central and local government, as well as more societal actors, are both multifarious and diverse - all levels of the public administration and other societal actors can participate in the EU's multi-level governance (MLG) system (See Helsinki EU Office 2020; Hooghe & Marks 2001; Ministry for Foreign Affairs 2018; Pekkola et al. 2016; Tiihonen 2009b). These developments and innovations have fundamentally changed the role of the national administration from one of implementer to that of governor, financier and member of the supranational decision-making organs of the European Union (Tiihonen 2009b; see Hooghe & Marks 2001).

Governance: Emphasising Participation and Democracy

The central assumption of 21st century governance paradigms (e.g. New Public Governance, NPG) is that the public administration cannot cope with the complexity of the contemporary world alone and needs networks of actors to support it (Bingham et al. 2005); Bryson et al, 2014; Sørensen & Bentzen 2020); Torfing et al. 2019). Here, the public administration is no longer positioned above other societal actors, but is rather one actor among others. These actor networks can also form by themselves, without any input from the public administration (See van Kersbergen & van Waarden 2004; Peters & Pierre 1998). The public government is an arena of co-creation or a facilitator which aims to create the conditions for the interaction of different actors (Sørensen & Bentzen 2020); Torfing et al. 2019). Networks, dialogue and participation have emerged parallel to efficiency, expert authority and quick decision-making processes

emphasised in the previous paradigms (See Bingham et al. 2005; Bryson et al. 2014; van Kersbergen & van Waarden 2004; Nabatchi 2010; Peters & Pierre 1998).

Governance is an umbrella term for various sub-concepts which clarify central ideas associated with the paradigm:

- Multi-level governance power is distributed between local, regional, national, supranational and global levels (e.g. on the EU-state-municipalities axis) and/or different actors of the same level of government (such as governmental agencies on different sectors) (Cairney et al. 2019; Piattoni 2015; see Campomori & Caponio (2017).
- Polycentric governance overlapping centres of decision-making have power over the same subjects, but also act together or may end up in a conflict (Cairney et al. 2019; Carlisle & Gruby 2019). Polycentricity has multiple benefits, such as adaptability, useful overlapping that acts as a backup of functions and broader possibilities for connecting with citizens (On adaptability, see Bruns 2019; Cairney et al. 2019; Carlisle & Gruby 2019; on useful overlapping, see Carlisle & Gruby 2019; on connecting with citizens, see Cairney et al. 2019).
- Hybrid governance the optimal governance system is a combination
 of the three administrative paradigms, as none alone can respond to today's societal complexity (Koppenjan et al. 2019; Sørensen & Torfing
 2019; O'Flynn 2019).
- Meta-governance the designing, shaping and steering of governance networks and the coordination of administrative paradigms (hierarchies-markets-networks) (See Gjaltema et al. 2019).
- The law of requisite complexity the public administration should correspond to the complex reality by being complex enough itself, too (Boisot & McKelvey 2011; see also the law of requisite complexity, Ashby 1968/2011; Goldstein 2011; more on complexity, see Vartiainen and Raisio 2020).

The current Finnish governance structure is thus characterised by influences from the NPM era, an emphasis on strategic goals, as well as by network usage and various forms of participatory governance. The Finnish model of governance presents itself as a combination of new and old, as new forms of governance are adopted alongside previous, now embedded, ones. The NPM era reforms are here to stay but have also produced some corrective actions. The governmental agency structure is still under reform with continuing consolidations, closings and the founding of new agencies. The public administration has been also been changed with reforms that emphasise comprehensiveness and network governance (Stenvall et al. 2016; on the continuing impact of the NPM era, see Herranen 2015; on steering instruments introduced during the NPM era, see Holkeri et al. 2012; Ministry of Finance 2019; on the effects of the

reforms made in the 1990s and the organizational structure of governmental agencies, see Nyholm et al. 2016; Savolainen 2009; on the ALKU reform of regional government see Karppi et al. 2010, 2011). Political steering of the public administration has been strengthened with strategic steering based on the government programme. Public official chief executives have been replaced with politically affiliated mayors in some municipalities to strengthen political leadership on the local administrative level (See Keskinen et al. 2017; Ministry of Finance 2014; Piipponen 2018; Stenvall & Airaksinen 2009). Forms of network and participatory governance include participatory budgeting, citizens' panels and different public-private partnership models (On participatory budgeting, see Kuntaliitto / Association of Finnish Municipalities 2017 and Rask & Ertiö 2019; on citizens' panels, see the Finnish Government 2018; on the alliance model, see Haahkola et al. 2018; Yli-Villamo and Petäjäniemi 2013).

Regulation, resource-based and information-based steering are still utilised in the governance era. Strategic steering and different forms of participatory governance have been introduced as new instruments. However, ideas and policies shaped with the strategic and participatory forms of governance may be put into action through more traditional steering instruments. Therefore, it may be questioned whether these new forms of steering actually function as steering instruments at all. Strategic steering is based on the goals of the government programme. This new steering instrument is related to the aim of strengthening policy effectiveness: the public administration should be steered based on the government programme (Ministry of Finance 2014). In the end, strategic steering is based on other steering instruments, especially management by results (See Holkeri et al. 2012).

2.2 Becoming Aware of Complexity

The Three System-Theoretical Paradigms

Traditionally, both science and the society have been based on a mechanistic worldview. The basic idea of the mechanistic worldview is that it is possible to dismantle any entity down to its constituent parts in order to find out how it operates. Every action has a counteraction. Such mechanistic systems are viewed as closed systems, on which external factors have no effect (Ståhle 2004; see also Alhadeff-Jones 2008; Sawyer 2005; Turner & Baker 2019). The mechanistic worldview has historically been significant, as it has contributed significantly to technological development, among other things. It does not however describe the complicated characteristics of societies that well (Lundström 2015; Turner & Baker 2019). The mechanistic worldview remained central to social thought until the 1960s, when the open systems paradigm developed. Open systems consist of multiple parts, each of which has an effect on the

others – an open system is interactive. Even though open systems are more complicated than mechanistic systems, they were seen to follow certain rules and to be predictable (Ståhle 2004).

In the 1990s, theories of complexity began to develop. A complex world also consists of open systems. However, contrary to the open systems paradigm, interactions between the different parts of a *complex system* cannot be predicted. The world presents itself as unpredictable, changing, self-organising and emergent, meaning that it generates surprising results; results that could not have been imagined based on the initial prevailing conditions. (Cairney et al. 2018; Hanén 2017, 79; Puustinen & Jalonen 2020). The essence of complexity lies in two core properties: variety and interdependence. Variety refers here to the many possible alternative states of the system and its parts while interdependence refers to the intricate intertwining or interconnectivity between different actors and components within a system and between a system and its environment (See Mitleton-Kelly 2003; Ryan 2009)

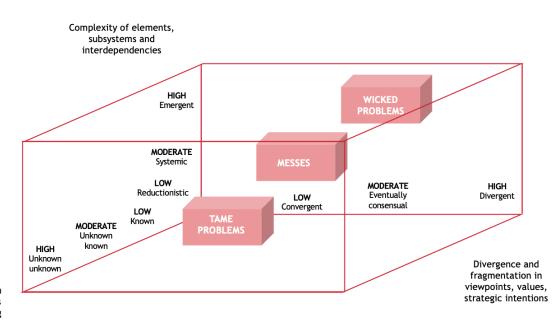
Parallels can be drawn between these three system-theoretical paradigms and the three governance paradigms outlined in the previous section. Classical Public Administration is characterised by hierarchies and clearly defined tasks, as is the predictable mechanistic worldview with its clear causal mechanisms. During the New Public Administration era, the inclusion of new private sector actors was accepted as part of the system allowing them to take part in tasks that had previously been the legal preserve of the public administration. The complexity and governance paradigms accept societal pluralism acknowledging the importance of connectivity and a multiplicity of actors. It is however important to note here that complexity is essentially not about an *ei-ther/or* but a *both/and* mindset. Dichotomies (such as hierarchies vs. self-organisation) do not work well in the era of complexity, hence societal actors must have multiple operational capabilities available simultaneously; their strategies must be ambidextrous (See March 1991; Raisio et al. 2020).

Increasingly Wicked Problems

In a complex world, we are faced with novel challenges. Most problems that can be easily solved – usually those that can be dismantled to their parts – have already been solved. What is left are those issues that cannot be agreed upon due to the inherent characteristics of societies. The concept of wicked problems describes the ways in which it is basically impossible to reach a complete agreement on societal problems or their solutions (Rittel & Webber 1973; see also Lundström 2015; Lundström & Mäenpää 2020). Because of this, such wicked problems cannot ultimately be 'solved'. Thus wicked problems are "chronic public policy challenges that are value-laden and contested and that defy a full understanding and definition of their nature and implications." (Danken et al. 2016, 28)

The three dimensions of a problem's wickedness are depicted in Figure 1 in the form of a Wickedness Cube (Raisio et al. 2018). Different problems depicted in the figure require different kinds of approaches. Ideally, public administration practitioners should be able to use all of these simultaneously, that is, the 'machinery of government' should be tuned to be able to respond to all types of problems. It is often however the case that wicked problems are left unaddressed and thus accumulate as political focus is aimed at tamer, more easily solvable, problems (Kosonen 2020). Moreover, when wicked problems are addressed, the public administration participates in a wicked game: where when solving a problem, the problem is simultaneously modified to conform to a certain viewpoint on the reasons for the problem's occurrence (Lundström 2015; Lundström & Mäenpää 2017, 2020; Lundström et al. 2016; Mäenpää and Lundström 2019).

Figure 1. A Wickedness Cube



Uncertainty in relation to risks, consequences of action and changing patterns

The centrality of the wicked problems notion is underlined by the development of society in a more complex direction. It has become difficult to discern the normal from the abnormal. Strong emotional reactions are becoming more regular and also more central due to emotion-utilising technologies and actors. New communications methods create connections between people, issues and knowledge, but relationships between individuals are no longer as deep as they used to be and knowledge is selectively used to support certain opinions (Dufva 2020a, 52–53; on megatrends in English, see

Dufva 2020b). To summarise, complexity is generally *perceived* as increasing for two primary reasons (See Raisio, Puustinen & Jäntti 2020). First, the operating environment of public administration is becoming more and more connected, especially because of increased globalisation and the development of information and communications technology. As a result, local phenomena can be very effective in influencing issues and phenomena, even globally. Second, the increasing amount of information, its ambiguity and the speed of information flows pose significant challenges to the ability to handle the uncertainty and instability of the operating environment: "things are happening faster, and the activities of seemingly distant actors are now having a more rapid and often more significant impact." (Say and Pronk 2012, 120).

2.3 Emergent systems steering in Finland

Complexity and systems steering can be identified as elements of **systems navigation** ("järjestelmänavigointi" or "järjestelmien navigointi" in Finnish), which in the Finnish case is perhaps most familiar in the context of integrated mental health or families' or children's services, ensuring timely access to a range of services, despite the sectoral barriers, seeking to reduce fragmentation and inefficiencies caused by each sector providing its own solutions, but not being able to integrate them in a meaningful way, thereby also reducing service accessibility. In the context of this study, systems navigation could be defined as the development of collaborative and citizens-based solutions to governance and policy conundrums which allow the agents in a governance system to circumvent unnecessary hierarchies and sectoral barriers and in so doing, promote better solutions by creating the functions needed in an increasingly complex policy environment.

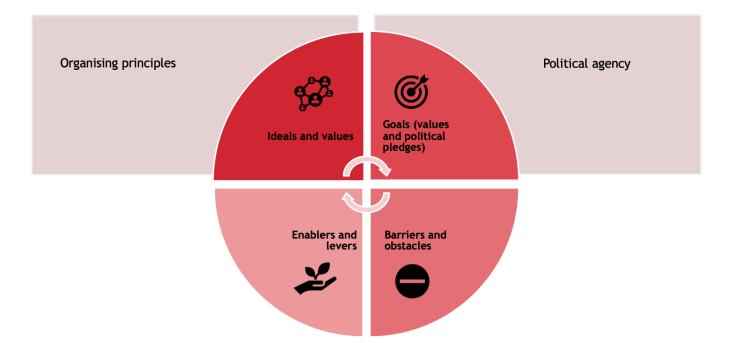


Figure 2. The framework of anticipatory governance used in this study

Our original approach to anticipatory governance was based on a literature review and interviews of key stakeholders involved in government steering (approx. 15 interviews in the early stages of the project). The organising principles that emerged from the analysis included systems-thinking and the methods and perspectives it entails and a more phenomenon-based focus of policies (visible for instance in the Rinne and Marin governments' approaches to designing the government programme around cross-sectoral strategic themes, see https://valtioneuvosto.fi/en/marin/government-programme/strategic-themes. The central elements of the framework identified included the systems-thinking of the methods and perspectives, the more phenomenon-based focus of policies, complexity as a theoretical starting point, the increasingly acknowledged need for experimentation (of methods and tools), as well as the need to ensure the appropriateness (and sensitivity to context) of the methods and practices of government steering.

Political agency was seen as making itself visible in the strategic goal-setting, values and political commitments, such as the political pledges made by the Marin government. One of the interesting aspects of the normative framework assessed here, where the three layers coincide is the politico-administrative interface, where innovations are interpreted and embedded in societal principles. One example of such an interpretation could be the formulation of pledges by the Marin government to the citi-

zens, e.g., the pledge for continuous learning in government, for a new kind of interaction, for long-term policy-making, non-discrimination, for fair and equal treatment across generations and the pledge for knowledge-based policy-making. Though these pledges are yet to be defined in more operational terms they could be taken as a positive indication of the willingness to pay heed to more systems-based ideals, as they each require a certain systems-focus and cannot be efficiently achieved in vertical structures alone. How they are implemented in practice was a question we went on to investigate more closely through group interviews and workshops, where the tensions between the political (government term focus) and the administrative (perceived as a more long-term focus) were discussed more in depth (see conclusions).

The enablers and levers of anticipatory governance are however now increasingly numerous. Phenomenon-based policy-making, experimentation in policy design, networks, more broad-based systems expertise, collaboration and co-design are clearly more commonly identifiable, though not yet the prevailing more of operation. There are many pioneers, role models and bold leaders in the organisations that we spoke to and societal change-making is appreciated as an area where systems-based methods are required. This is increasingly also visible in designing the layer of governance that we have termed 'meta governance' (shared regime, rules of the game, code of conduct, rules of procedure etc.). Examples here include the development of pilot actions in phenomenon-based budgeting or the adjustment of the Government's rules of procedure, where in 2018, a change was passed, where §45 was added, with its requirement for the Permanent Secretaries to be responsible for cross-sector coordination, e.g., "coordinating the activities of the Ministry and its administrative branch with the activities of other ministries and their administrative branches". (200/2018, Government Rules of Procedure).

In terms of assessing the fit-for-purpose policy instruments and measures, one of our initial hypothesis based on the first round of interviews and our working hypothesis was that the degree of experimentation required is dependent on the degree of systems characteristics of the policy objective: the more systems-driven the goal, the more experimentation is required to promote it. The subsequent group interviews with the ministries involved in the Steering2020 dialogue were undertaken to validate or invalidate our hypothesis.

Trust in a society is a systemic attribute which has emerged as a central feature in respect of the response to Covid-19. It is essential in relations between citizens and policy-makers, as well as in institutions of scientific evidence and society at large, as indicated by Cairney and Wellstead.

Table 1.

Trust in	Individuals	Institutions	Societal necessity
Evidence and advice	Policymaker trust in experts based on beliefs and previous exchanges	Scientific rules to gather evidence and government rules on the use of advice	Evidence as necessary for policy (reduce uncertainty and ambiguity)
Citizens	Policymaker trust in citizens based on beliefs and mass social behaviour	Collaborative rules and social norms to foster collective action and trust- based policy	Balance trust-based and coercive policy as necessary for public health (reduce unpredictability)
Governments	Citizen trust in governments based on beliefs and track records	Political system rules to foster trust in policymakers and deter breaches	Trust in leaders as necessary for coherent action (reduce division)

(Cairney & Wellstead 2020, 6.)

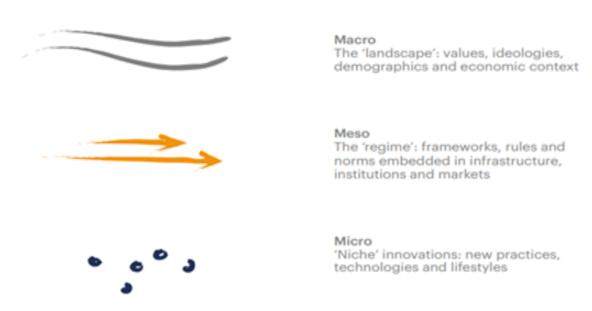
In the Steering2020 context, we have focused on systemic trust between government, evidence and knowledge, citizens, institutions and organisations (e.g., within government departments, between government departments and agencies, within working teams and units within public organisations...) We have in the context of the Steering2020 project been interested in systemic trust as an enabler of proactive management at the system level and bold, yet humble attitudes and approaches to reform and renewal at the level of management and steering, while, in addition, seeking to identify practical examples which may build the capacity of both organisations and individuals involved in government steering to think, act and collaborate in a more integrated way and in such a manner that is more in tune with systems navigation. This responds to our original research goals, defined as identifying and reviewing the key elements of government steering and the linkages between societal contexts, policy sectors and societal objectives; analysing the latest international trends, new perspectives and solutions in government steering and governance, ranging from global regulatory systems to local aspects; designing models for future steering, bearing in mind the identified development needs, key characteristics and sectoral differences.

On the basis of the interviews and literature study, a number of ideals and norms that seem to be relatively stable and independent of the immediate political context but which can be seen to be clearly guiding the general administrative approach to governance and government steering were identified. They were summarised as includ-

ing trust, impact, resilience and tolerance of uncertainty as well as adaptive capacity and the capacity for foresight and anticipation. What has been positive in recent years is that these issues are accepted both within the government and the majority of other societal stakeholders. In the Finnish context the multi-layered nature of the governance system and by extension the multi-layered nature of response, or adjustment to crisis, is evident.

Figure 3. The three levels of governance adjustment (Leadbeater & Windhall 2020, 21)

Three Levels



These three levels of governance adjustment—reflect the dominant attitudes, cultural values and ideologies, which remained relatively unaltered by this external crisis (at least in the short term). Macro level seems the slowest to change, while the meso level may be most reflective of external influences, openness and renewal, and the micro level is where small-scale innovation and experimentation takes place, even at quite fast pace.

The interactions between these three levels are particularly relevant when it comes to dealing with unusual or turbulent situations in the operative environment. At the macro level, the Covid-19 crisis has clearly provided the governance system and government steering capacity with a particularly complex challenge. As a public governance challenge, one could even argue that it has become a litmus test of anticipatory governance, requiring a new kind of adjustment and tolerance of uncertainty, testing the

capacities of the government steering system in its entirety for resilience and sustainability. New approaches to living with uncertainty, designing tools and experiments, as well as adjusting practices at the micro level will only be possible as a means of renewing the whole system if there is already a considerable degree of systemic trust at the meso level.

Systems thinking and complexity go hand in hand and they seem to be connected to a more anticipatory governance mode. Their key features include the notion that selforganisation does not need to be the anthesis of having a clear mandate, rather it could be argued that successful self-organisational characteristics can only be a constructive part of a more systems-based culture when there is both a clear and strong mandate for action, as well as enabling leadership. Co-evolution can be supported by identifying and building on phenomenon-based drivers and enablers, such as digitalisation, the wellbeing economy or customer-based service logic. The factors standing in the way of such collaborative and enabling governance are equally familiar and reported in many reports over the last 5 years (e.g. VTV 2021, 16): poorly interlinked and separate processes of governance which lead to inconsistencies in policy-making, embedded organizations and processes leading to sub-optimization and weakening the overall effectiveness of policy outcomes; poor or non-existent linkage between substantive work and its impact with resource allocation; the fragmented nature of the system making systems-based solutions unstable or impossible and responses to complexity of policy responses inefficient; too much time and resources spent on planning on paper solutions, the impact and relevance of which is questionable.

The practitioners' perspectives are important and the views and the co-creative potential of the personnel should be better incorporated and taken into consideration when system change is pursued. Feedback loops are important and in itself, conducive to creating and consolidating systemic trust. All enablers should be steered towards the same goal in a consolidated manner, cross-sectoral and more systems-based funding is one such important enabler which should not be overlooked.

There are a number of bottlenecks in respect of systems-based anticipatory governance which were identified both prior and, subsequently, in relation to the Covid-19 crisis, such as the over-emphasis on power relations and political interests, tensions between political and civil service steering, cultural constraints not conducive to systems thinking, the lack of systemic management skills, capacities and traditions, limited management tools and (to a lesser extent) resource and competence constraints. Capacities which make it easier to coordinate and integrate policy efforts across sectors and from the point of view of service users, i.e., citizens, companies and third sector bodies need to be boosted through a concerted effort, as they are not yet mainstream. Incentives should be introduced and levers for systems change identified and nurtured that make it more attractive to policy actors, including government ministries

to act in s systems-based manner, rather than remaining attached to their sectoral interests. Such incentives still however remain few and far between. Some examples of such policy instruments boosting systems-based incentives and measures are presented in the section on 'future-proofing policy-instruments'.

The three cases reported in the Policy Brief summarising the current features of government steering and systems navigation are recounted in the table below.

Table 2. Features of systems navigation in case examples

The systems elements and the key questions	ALKU (2009–2010)	Digitalisation project (2015–2019)	Situation centre (2017–2019)
Emergence: How to promote a desired future where the whole is more and better than the sum of its parts?	Political vs. technocratic objectives, efficiency and productivity gains vs. horizontality and promotion of democracy. Strong political steering and control.	Improving the efficiency of public services through digitalisation, emphasising customer orientation. Strong political mandate.	Improving the efficiency of public services through digitalisation, emphasising customer orientation. Strong political mandate.
Self-evolving features of the system ('self-organisation'): How is information that upsets the balance of the system regulated and how is that information curated into new creative meanings?	Trust and a well-trained civil service ensuring effective implementation. Strong focus on monitoring and evidence for decision-making, but at the same time divergent views and assessments on actual utilisation of such data, e.g., whether one has measured (or should measure) the internal or external, or quantitative or qualitative elements of reform ('what the reform looks like', 'feels like', as opposed to the quantitative indicators, measured mainly in person years).	Trust, strengthening the mandate for joint action. New common meeting and decision-making spaces, a key role for the ministerial working group.	Consciously building trust by increasing the use of shared time. A real-time snapshot reported by the provincial and social reform preparers to the Situation Centre which coordinates the activities of the networks and together with the Academy for Change Management, supported the work of the networks through training.

The systems elements and the key questions	ALKU (2009–2010)	Digitalisation project (2015–2019)	Situation centre (2017–2019)
Mutually evolving features of the components of the phenomenon ('co-evolution'): How to identify what kind of path dependencies result from the choices made at the nodes?	The multigenerational nature of the preparation (e.g., many thematic working groups and subgroups), but path dependencies and group interdependencies are difficult to comprehend.	Shift in focus from digitalisation as a goal in itself to digitalisation as an instrument towards achieving other goals.	The reform taught the importance of perceiving the big picture. At a later stage, a strategic situation Centre was set up, which intensified cooperation.
Feedback processes: How do you combine change-accelerating feedback with change- limiting feedback?	Feedback from staff was collected, but its use is unclear. The narrative of the productivity programme began to be seen as a staff reduction project, which created mistrust.	The political backbone of the reform is a strong mandate for implementation. Project ideas were collected extensively. The unifying process is an open process and a shared goal.	Feedback in itself is important and trust-building. Feedback was collected from participants in the coaching and workshops, and the feedback was taken into account, for example, in the formulation of the content of change support.
Diversity: How does diversity support adaptation to change in the business environment and ensure that findings are translated into enforceable decisions?	The risk of "political oversteer", the overemphasis on productivity rhetoric, systemic diversity was sought in order to be included in the multifaceted structure of working groups and subgroups, but the ultimate significance of the structure is unclear.	Transparency in project applications and calls, project sparring, and access to workshops and tools supported diversity.	The changes in administrative doctrines and the desire to change guidance were particularly evident in the idea of cooperation between 8 ministries in the provinces. The situation Centre model developed into a support structure for the preparation of large horizontal projects.

The systems elements and the key questions	ALKU (2009–2010)	Digitalisation project (2015–2019)	Situation centre (2017–2019)
Consolidators: Which actors / institutions are the enablers of change in terms of systems-level change?	Positive success in integrating support services, overemphasis of the person- year perspective as a barrier. At the design stage, the personnel perspective was underestimated (6 000 people as powerful promoters or alternatively agents resisting change).	The coordination of the officials responsible for the key projects for which the Ministry of Finance is responsible, together with the political support, project leaders. Slow pace of rooting changes in public administration remains a challenge.	Ministerial silos persist. In future, the situation centre model should be introduced at an earlier stage in the legislative process. Personnel play a major role in bringing about change.
Non-linear factors: What kinds of discontinuities can be identified?	Some of the objectives remained theoretical (especially the democratic dimension of the provinces).	The gradual loss of cross-funding and horizontal focus after funding is dispersed.	The distance between objectives and the practical implementation, with the situation centre shifting from a physical working environment to a virtual one.
Attractors and enablers: What structures and behaviours drive change?	Inconsistency of the original ('branded') goals and technocratic implementation.	Shared goals, few politically divisive issues on the agenda. Strong linkages between the reform project and day-to-day steering and governance.	Clarity of management structures. The situation Centre's relationship with line organisations is unclear in some places.

A similar analysis of tools for renewal, both in the form of business-as-usual practices of building systems-based capacities (capacity management), ideation of new experiments and pilots for renewal, as well as fully-fledged structural and institutional reforms (necessarily also entailing aspects of capacity management and experimenta-

tion) could be a useful analytical and planning tool, a kind of "future-proofing of adjustment capacity", when faced with the requirements of an increasingly complex operational environment.

International benchmarks and their implications for the future of the Finnish steering and governance system

Most OECD-countries have realised that future governance and leadership systems must be agile and able to adapt to complex changes. Old management models and best practices will not be sufficient to achieve success in public sector management because of the pervasiveness of new systemic governance challenges.

These changes are likely to be so challenging and pervasive that in some countries they go beyond the capacities of public service delivery. As such, state failure may in some cases be triggered by these emergent, radical changes.

This chapter examines how the challenge of systemic change has been met in the comparison countries of interest to Finland. What practices have been adopted in these countries? How has the process of systemic change progressed? What have been the key reforms or turning points during the reform process?

The following countries have been selected for review: Denmark, the United Kingdom, Canada and Singapore. The selection was based on key areas for Finland's systemic change: 1) labour market reform (Denmark), 2) whole-of-government thinking (UK), 3) public sector innovations (Canada) and 4) digital reform in public administration (Singapore). At the end of the chapter, the key lessons learned from these countries' models for Finland will be summarized.

Denmark

The following general observations can be made concerning the interface between politics and administration in Denmark: the government acts, decides and communicates as a College (*collegium*); the most important policy decisions are made in a coordination committee chaired by the prime minister; minority coalition governments are internally coherent and ready for quick decisions; parliamentary committees ensure expertise and political support; multi-level formal and informal communication occurs between the political and administrative machinery.

Denmark invests heavily in developing economic dynamism, especially through improving competitiveness and increasing the labour supply. In terms of competitiveness, the government aims to cut red tape, streamline regulation and increase research and innovation activities. The labour supply is promoted via various incentives and sanctions. Accordingly, Denmark's public administration reforms can be characterised as a mixture of modernisation and marketisation (Greve 2006). Reforms are supported by building a culture of consensus, promoting systemic trust and strengthening social capital. The conscious development of civil society and dialogue-based consultations between various stakeholders are believed to alleviate the tensions between the centralisation and decentralisation of power.

The guiding principle of the Danish systemic reform is the idea of *flexicurity*, in which liberal economic policy is combined with the Nordic welfare model. Flexicurity refers to a configuration of welfare policies that aims to complement labour market flexibility with economic security (Kongshøj 2008). In a broader interpretation, the flexicurity model builds on the reconciliation of the mutual rights and responsibilities of society and citizens. Flexicurity not only promotes adaptation to economic fluctuations, but also speeds up Schumpeterian 'creative destruction', that is, the creation of new ways of doing things that endogenously destroy and replace the old ways (Garayannis 2013) It can be said that the flexicurity policy has both instrumental value (competitiveness of the economy) and intrinsic value (active citizenship) and the results come in the form of social resilience (Bredgaard & Madsen 2018). In Denmark, active labour market policies, lifelong learning and social security have been linked in a way that encourages adaption to social change (Jørgensen et al. 2007). The well-established practices of the political-administrative system, together with the strong tradition of civil society, have created a kind of public-spiritedness (samfundssind) (Algan et al. 2006). This public-spiritedness has contributed to systemic trust (i.e., the belief shared by the citizens) and lowered the barriers to collaboration.

Flexicurity is not a separate policy model, but a manifestation of a systemic change that requires attention to structural factors, institutional practices and their interactions. Several studies suggest that the implementation of flexicurity always depends on the institutional environment which, in turn, has led to other countries being more successful than others (Algan et al. 2006; Bredgaard & Madsen 2018; Bekker & Mailand 2018). The Danish version of flexicurity can be described as a success. For example, in terms of unemployment and employment rates, Denmark ranks highly in European terms (Bredgaard & Madsen 2018). It has a diverse economic structure and is considered a good business environment (Laursen et al. 2018). In addition, Denmark ranks highly in surveys measuring the happiness of nations (World Happiness Report 2020). Denmark has also been a pioneer in the comprehensive use of design, as evidenced by the world's first National Design Policy in 1997 and the establishment of

MindLab in 2002 as well as, more generally, promoting design thinking in public services (Carstensen & Bason 2012). It is also worth noting that the success of a systemic reform such as flexicurity depends to a large extent on society's confidence in key social institutions. At best, flexicurity feeds into a self-reinforcing cycle in which trust brings about positive development and positive development strengthens confidence.

Canada

The Canadian public sector has a well-established reputation as a frontrunner in terms of advancing public sector innovation, making it a promising object of study from a systems perspective concerning evolutive change of activity and innovation. In 2018, the OECD released a unique report: 'The Innovation System of the Public Service of Canada'. Its novelty consisted in its adoption of a systemic approach to the experiences and lessons provided by the thirty-year-old historical journey travelled by the Canadian federal public service. This report provided the backbone for the case study about systemic change and was supplemented with, among other things, an analysis of original documents and reports identified in the OECD's report. The following remarks are based on the more detailed research study 'Julkisen sektorin systeminen muutos – kokemuksia maailmalta' (Forthcoming) and they depict the key characteristics and findings concerning the Canadian innovation system and what they can tell us about the nature of changes occurring in a systemic setting.

A sense of history deepens one's knowledge about the factors behind systemic changes and their various degrees of interrelatedness and consequences—intended or unintended; however, constructing a historical narrative bears the risk of creating an impression that systemic change is a progressive process that advances steadily towards a specific endpoint through linear design rather than a continuous evolutive movement that goes through multiple and occasionally incongruent events in a spiral motion. In the case of Canada's public sector innovation system's history, by scrutinising its various reform agendas and initiatives, we can observe how the notion of innovation has evolved from a sporadic activity that takes place in different pockets or silos of public sector organisations to an activity that should be a natural and continuous part of life at all levels of public administration. Reform agendas rarely succeed or fail completely; nevertheless, they do pass on some of their lessons, including successes and failures. Changes can be seen in the role assigned to innovation: in the early 1990s, innovation was primarily seen as a driver of efficient new solutions to specified problems, whereas in the late 2010s, it has been perceived as a tool for approaching complex or wicked problems via experimentation and co-creation. Innovation as a public sector activity happens both due to and despite explicit policy programmes or agendas, meaning that innovation is not an exclusive domain or restricted activity commanded from above, but an activity that can also spring forth from

below (out of necessity, for example) and helps create nodes between different actors in a self-organising manner. (See Public Service Renewal: Beyond2020, https://www.canada.ca/en/privy-council/services/blueprint-2020/beyond-2020.html).

The OECD has pointed to several recurring themes in the history of Canadian public policy innovation, which have influenced and enabled the practise of innovation from a systemic level. These include, among other things, the recognition of changes in the environment and an accelerating pace of change, the need for reform without sacrificing the core values of public service and the challenge of finding a balance between the empowerment of individual actors and accountability and/or control (OECD 2018). Generally, one of the most interesting aspects and/or lessons of the Canadian case is the continuous striving to strike a balance between the centre and the periphery: on the one hand, centrally led innovation can lead to 'an innovation theatre' if public sector organisations do not genuinely commit to it; while, on the other, without support from the centre, various innovative practises developed by different actors may fail to take root and spread horizontally across the public administration. The historical path of innovation in Canada has had its ups and downs, and the story it tells is still unfolding before us.

Singapore

The Government of the Republic of Singapore plays a fundamental role in Singaporean society. Trust, shared values and cooperation constitute the foundation upon which the government has been able to build an inclusive system of governance that uses national resources while fostering relatively broad societal development. This requires a holistic approach and the constant development of both systems of governance and the core competencies of public servants. Changes in the internal functions and structure of the Singaporean government are closely entwined with the changing forms of government steering as the system of government meets the needs of increased cross-sectoral cooperation and the production of public services moves closer to the end user.

Digitalisation enables new forms of interaction between citizens and the state. Increasing the amount of good quality real-time data from all walks of life creates opportunities for new forms of government steering while also creating challenges in terms of the proper use of this data. Singapore's Smart Nation Initiative (described in greater detail here: Smart Nation Singapore (2020). https://www.smartnation.gov.sg/) aims to bring together some of the necessary components to build a robust and adaptable system of digital governance. The key components of the Smart Nation programme (Smart Nation Singapore (2020). Strategic National Projects. https://www.smartna-

tion.gov.sg/what-is-smart-nation/initiatives/Strategic-National-Projects) are 1) the Core Operations Development Environment and eXchange (CODEX)¹ platform, 2) the LifeSG Initiative² app, 3) the National Digital Identity (NDI)³ system, 4) the E-Payments⁴ system, 5) the Smart Nation Sensor Platform (SNSP)⁵ sensor network, and 6) the Smart Urban Mobility⁶ programme. These strategic national projects consist of a number of smaller subtasks and are supported with some dedicated research and development programmes—perhaps most notably, the National Artificial Intelligence Strategy.⁷

Singapore's approach is to create a self-affirming virtuous cycle, where societal needs act as a driving force for development at all levels of government. These strategic aims are promoted by setting clear, achievable goals and fostering a government network-wide sense of progress with a steady stream of small wins while ensuring that the government, its institutions and individual civil servants are adaptable and able to meet the needs of continuous change.

While Singapore's Smart Nation initiative represents an inspiring example of digital governance, it is important to bear in mind the unique qualities of the Singaporean state. Singapore is a city-state that greatly affects the cost efficiency of the deployment of ubiquitous technology. Singapore's *de facto* one-party system also limits the generalisability of the model, as the continuity of the work is not affected by internal political disputes. Therefore, it is best to compare Singapore to societies with equivalent levels of societal development but with different political cultures.

In recent years, Taiwan has made great gains in digital governance and while the overall system displays similarities with Singapore's model, there are some key differences. While the Singaporean model builds on the idea of top-down transparency, the

¹ Smart Nation Singapore (2020). CODEX. https://www.smartnation.gov.sg/what-is-smart-nation/initiatives/Strategic-National-Projects/codex

² Smart Nation Singapore (2020). LifeSG Initiative. https://www.smartnation.gov.sg/what-is-smart-nation/initiatives/Strategic-National-Projects/lifesg-initiative

³ GovTech Singapore (2020). National Digital Identity. https://www.tech.gov.sg/scewc2019/ndi

⁴ Monetary Authority of Singapore (2020). E-Payments. https://www.mas.gov.sg/development/e-payments

⁵ Smart Nation Singapore (2020). Smart Nation Sensor Platform. https://www.smartnation.gov.sg/what-is-smart-nation/initiatives/Strategic-National-Projects/smart-nation-sensor-platform.

⁶ Smart Nation Singapore (2020). Transport. https://www.smartnation.gov.sg/what-is-smart-nation/initiatives/Transport

⁷ Smart Nation Singapore (2020). National Artificial Intelligence Strategy. https://www.smartnation.gov.sg/docs/default-source/default-document-library/national-ai-strategy.pdf?sfvrsn=2c3bd8e9_4

Taiwanese model emphasises governmental transparency and aims to empower citizens as co-creators of public innovation. For example, Taiwan has been hesitant to increase state-led data gathering due to inherent privacy and security concerns which can be difficult to manage retroactively. Taiwan aims to first reap the value of the existing data by crowdsourcing and then create new methods of fully transparent public participation. Taiwan also openly favours open-source technology, so that the code of all components in this critical infrastructure can easily be audited.

Juxtaposing the Singaporean and Taiwanese models helps to highlight some sociotechnological aspects of digital governance that could otherwise be overlooked. Technology is a great enabler and its deployment can be designed to complement existing societal norms and ensure a safe and democratic shift to a fully digital system of governance.

United Kingdom

The UK is often viewed as something of a pioneer in public sector reform and systemic change (Burton 2013). This might sound absurd since the British Westminster model is rather old fashioned and rigid when it comes to its processes and structures. However, the status of an exemplary country refers to the active creation and dissemination of development agendas and tools by the British government and various think tanks (e.g., NESTA). Three decades ago, the British government was one of the early adopters of the performance management system and so called New Public Management ideology. Subsequently the UK became a key supporter of the unified governance model (whole-of-government), evidence-based management (evidence-based governance) model, and in recent years, the public sector innovation and experimentation culture (public sector innovations and experimental government).

According to Geoff Mulgan, there was a major turning point in the UK during the Blair government (even a change in the governance paradigm): public service delivery did not work and an urgent change was needed. There was an understanding that public services are not just costly for the economy, as had been thought during Thatcher's time, but also a vital part of the democratic system.

The UK administrative system is characterised by flexibility and informal meetings which makes it possible to respond to current situations in a tailor-made manner. The current two-party system makes it easier to change policy than in multi-party systems, where (especially when minority governments are in power) gaining opposition support for social reform is a prerequisite for change. Policymaking is also characterised

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⁸ https://www.geoffmulgan.com/post/the-meaning-of-1997-and-2020-and-what-lies-ahead

by a strong belief in research data and evidence: researchers and other experts are not only offered opportunities to be heard, but also to participate in the preparation of policies. In addition, the government produces so-called consultation papers (Green Papers) which contain preliminary policy proposals. This gives the UK Parliament the opportunity to comment on emerging decisions.

In recent years, the so-called 'Public Value' framework, ⁹ which aimed to improve the practical impact of public service policies on citizens' lives, has focused on the availability of high-quality earnings data and the continuous utilisation of innovations. Its four key pillars are driving towards goals, resource management, citizen involvement and system capacity building. The United Kingdom has outlined that its goals include being the most open and transparent government in the world (UK National Reform Programme 2019). Currently, Brexit is creating a lot of uncertainty in the system: strategic planning is difficult when political realities are uncertain. Brexit has also turned attention away from improving the efficiency of the public sector and the government has been unable to push through the significant reforms it has been planning. ¹⁰ As such, systemic change in the UK has taken place more at the level of doctrines, programmes and speech than at the level of concrete actions.

There have however been some success stories. One of the key aims of the UK government has been to increase the involvement of citizens through, among other things, a reform that enables young people to participate in social projects that improve their work and life skills (e.g., the National Citizen Service 2011¹¹). Restoring power closer to local communities has been the goal of the government (e.g., the Localism Act 2010). ¹² In 2017, the UK government outlined its Industrial Strategy ¹³ which aims to support companies in creating high-paying jobs by investing in government public sector reform and innovation policy and emphasises the importance of achieving sustainable societal impacts. The Government Transformation Strategy 2017–2020¹⁴ is designed to lay the foundations for how digital systems are changing the relationship between citizens and the state. For each of the strategies presented, the role of innovation policy in generating social and economic benefits is highlighted. Themes related to climate, health and sustainable development in particular come to

⁹ https://www.gov.uk/government/publications/public-value-framework-and-supplementary-guidance

¹⁰ https://www.sgi-network.org/docs/2019/country/SGI2019 UK.pdf

¹¹ https://www.gov.uk/government/news/national-citizen-service

¹² https://www.legislation.gov.uk/ukpga/2011/20/contents/enacted

¹³ https://www.gov.uk/government/topical-events/the-uks-industrial-strategy

¹⁴ https://www.gov.uk/government/publications/government-transformation-strategy-2017-to-2020

the fore when talking about societal challenges. Several initiatives seek to promote wider participation in innovation projects.

In 2017, the first government strategy to achieve inclusive democracy was published. The Democratic Engagement Plan 2017 aims to identify and address constraints that prevent certain groups in society from participating in democratic arenas. ¹⁵ The project has spawned a number of new openings for inclusive innovation which NESTA in particular has been actively exporting to the world. One of the key applicators of the model is the United Nations Development Organization (UNDP), which has brought British thinking on inclusive innovation to developing countries. ¹⁶

The cornerstone of UK innovation and reform policy has been a collection of think tanks and development platforms. The UK Policy Lab creates analyses and ideas by deepening collaboration between the government and researchers. The aim is to strengthen the culture of experimentation in the public sector which will make it more open and flexible and improve the level of public participation. One of the much-cited models of the UK Policy Lab can be seen as a matrix of alternative policy instruments that helps governments to outline different forms of public intervention depending on the kind of impact they want to generate.

The What Works Network ¹⁸ consists of nine centres, each focusing on its own policy area. The research institute was established in 2013 with the aim of ensuring that the operation and use of public services are based on the best possible information. Where relevant or sufficient evidence is unavailable, decision makers should be encouraged to find out what works. An example of this is the National Institute for Health and Clinical Excellence (NICE), which provides the NHS and other health professionals with evidence-based guidance on best practices. ¹⁹

¹⁵https://assets.publishing.service.gov.uk/government/uploads/system/uploads/atta-chment_data/file/773362/DemocraticEngagement_RespectingProtectingAndPromotingOurDemocracy.pdf

¹⁶ https://medium.com/@undp.ric/working-on-the-engine-using-portfolio-sensemaking-to-accelerate-learning-b7275accf419

¹⁷ https://openpolicy.blog.gov.uk/category/policy-lab/

¹⁸https://disco-very.ucl.ac.uk/id/eprint/10055465/1/UK%20what%20works%20centres%20study%20final%20re-port%20july%202018.pdf

¹⁹ https://www.nice.org.uk/about

The UK's Government Digital Service (GDS)²⁰ is a unit responsible for digital reform within the administration and was a pioneer when it started in 2011. Similar concepts have taken off in other countries. The role of the Behavioural Insights Team (BIT) (also the Nudge Unit) is to bring a behavioural economics and psychology perspective to the implementation of government programmes.²¹ Underlying this is a broader understanding that the success of reforms, such as legislative reforms, often depends on changes in the behaviour of those entities being regulated (e.g., businesses and citizens). It is only through behavioural change that greater societal change can be achieved. The unit's goals are to increase not only the efficiency of implementation, but also, and above all, its effectiveness.

The change in the UK's governance system can be seen as somewhat ambivalent. However, it has been giving birth to global public administration reforms—even paradigm shifts, including New Public Management thinking, public-private partnership (PPP) models, hybrid governance, privatisation of public services, purchaser-provider solutions (arrangements regarding the relationship between the organisation that provides a service—especially health care—and the organisation that pays for the service), evidence-based policy-making, etc. The models are widespread and copied not only in other OECD countries, but also more broadly, for example, in emerging economies. There has however been growing criticism. Climate change, growing international threats and risks, interdependent wicked problems and growing public dissatisfaction with government have raised strong voices supporting a stronger state, called for tighter regulation and protection from global capitalism. Moreover, Britain's exit from the EU adds to the already difficult governance situation.

Although it was stated above that systemic change in the UK has taken place more at the level of doctrines, programmes and speech than at the level of concrete actions, management of the COVID-19 pandemic has recently shown that there is also a real need for action. Britain's future is uncertain, with Brexit meaning that fundamental administrative reform is necessary in so many areas. This can also be a great opportunity. A new kind of adaptive, systemic control, could result as old structures decay or collapse completely. The success of reform depends to a large extent on the skill of future governing regimes and the patience of citizens.

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²⁰ https://www.gov.uk/government/organisations/government-digital-service

²¹ https://www.bi.team/

Lessons for Finland

Denmark, Canada, Singapore and the UK are all embedded in different historical, so-cio-economic, and institutional settings, each have applied different public sector innovation policies and have formulated specific systemic governance practices. Despite their apparent differences (federalist *vs.* non-federalist, bipartisan *vs.* multi-party system, etc.), there are certain similarities in the systemic reform programmes and practices emerging from these four countries.

The lessons learned for Finland can be summarised in seven main findings:

- Lesson 1: Approach and define public sector innovation more broadly than just the development of governance systems or budgeting practices. All the case countries have applied a holistic reform policy and innovative systems thinking. In Denmark, it is understood that labour market reform is a critical starting point for reforming governance structures and enhancing Danish competitiveness. The Canadian public sector innovation agenda starts with an understanding of the overall architecture of the service system. Britain emphasises the concept of public value behind the reforms which is reflected in meeting the needs of citizens and businesses and as comprehensive services. Singapore's Smart Nation initiative is a strategic umbrella for digital governance reform, under which a number of separate development programmes and projects have been brought together. The guiding principle is that the whole is greater than the sum of its parts.
- Lesson 2: Encourage practices and leadership that accepts justified risks and failures, and especially learns from them. All the case countries have a strong public sector experimental culture. Operations are guided by controlled, well-founded and proportionate risk-taking and permission to fail. Government experiments are planned so that it is acceptable to fail. Most of the time, failures have been openly discussed. This is a precondition for collective learning. Naturally failure is not prioritised as such, rather learning from it is.
- Lesson 3: Launch reforms on the basis of evidence. Both Canada and the UK in particular have a strong evidence-informed decision-making culture. Both countries have rather developed and institutionalised evaluation systems. The systematic use of evaluation results, scientific research findings, and foresight information has given both Canada and the UK a rather good overall state-of-the-art picture of the baseline situation before defining the reform agenda. It is, however, important to remember that historical data do not necessarily provide the best evidence base for systems changes. It is therefore important to pay attention to pattern detection rather than scattered, atomistic data and information.

- Lesson 4. Think relationally. New systems emerge when actors are brought together in new patterns of relationships: centralised might become decentralised; indirect becomes direct; consumers become participants and producers as well; systems with rigid hierarchical structures become more fluid, networked and cooperative. Denmark and the UK have both successfully utilised networked governance models in their endeavours to build an adaptive systems governance culture.
- Lesson 5: Take advantage of digital opportunities. In all the case
 countries, the digitalisation of public administration and public services
 has been raised to the forefront of reform policy and systems change.
 Intelligent solutions not only increase better access to services and
 streamline operations, but also open up new possibilities for flexible and
 adaptive steering models.
- Lesson 6: Decentralise when you want to generate innovation; centralise when you want to ensure that reforms will be implemented and coordinated. The key to successful systemic reforms in all comparator countries is the creation of a balance between centralisation and decentralisation. Systems are often hard to change because power, relationships and resources are locked together in a reinforcing pattern in accordance with their current purpose. Systems start to change when this pattern is disrupted and opened up. Then a new configuration can emerge. Singapore and, to some extent, Canada offer centralised solutions but do so primarily at the level of policies and conceptualisation. Implementation efficiency is best in Singapore due to the small size of the country and the centralised power structure. Denmark and Britain make the best use of local and regional experiments.

4 From conventional to humble policy making

To overcome the challenges presented in the previous chapters, we here outline a novel policy-making approach that systematises existing well-functioning practices within the Finnish Government and links them to core processes in the political-administrative system: a **humble approach to policy-making**.

Humble policy-making requires the Government to build a **thin consensus** around framework goals to ensure societal commitment and long-term political collaboration. This is achieved through deliberation, strategic political steering and new forms of collaboration with the Parliament.

Humble policy-making requires the Government to devolve finding workable solutions to those actors outside of central government, who have first-hand experience of the problem at hand. This is achieved by designing **smart incentives for collaborative problem solving**, and by building **feedback loops through peer-learning**.

Humble policy-making requires the Government to enable a **revision of framework goals** in the light of continuously updated new information about the policy problem. Revision must take place through transparent communications.

Humble policy-making requires **consistent political capital**. As such, it is best implemented when dealing with policy problems and goals characterised by high strategic importance (for both Government and society) and a high degree of complexity and uncertainty.

The findings presented in the chapters show that the most pressing obstacle for addressing wicked problems is not a lack of effective policy instruments, but insufficient policy-making processes that lead to unsatisfactory policy outcomes. The existing governance model suffers from political short-termism and a siloed institutional structure, which feeds into a culture of infallibility and a lack of systemic understanding of societal phenomena. For the Government to formulate policies that address the most pressing questions of the 21st century at the national level, it must first address the structural and cultural problems of its policy-making processes. In short, solving wicked problems requires policy-making that moves away from the illusion of top-down steering into a networked policy-making model – for example by deploying a so-called humble approach to policy-making.

The notion of humble policy-making is based on professor Charles F. Sabel's theory of experimentalist governance, which looks at experimentalism not only as the use of

policy experiments, but more broadly as a form of governance that is based on continuous iteration and learning (see e.g. Sabel & Zeitlin, 2012; Sabel, 2012; Sabel et al., 2015). The distinctiveness of humble policy-making emerges in contrast to the conventional approach to policy-making.

Conventional policy-making assumes that effective policies can be designed ex ante in a linear process. The aim is to create policies that are definitive as they enter into force. Enforcement takes place by comparing actual behaviour to requirements, and sanctioning divergence. Policy-making rests on the confidence in the Government's ability to learn from the past in order to successfully anticipate and steer the future.

Humble policy-making moves from the opposite assumption: it argues that complex problems are characterized by uncertainty, and that we cannot know how different policy-solutions will play out in the real world. The aim is to structure policy-making processes as a continuous investigation of different options that are tested in the contexts where they will be implemented. Enforcement takes place by designing incentives that induce development and revision of the policy. Policy-making departs from the acknowledgment of the Government's fallibility, and rests on the process' capacity to build trust and foster continuous learning.

Table 3. Main differences between conventional and humble policy-making

	Conventional policy-making	Humble policy-making
Goal of deliberation	To resolve problems	To create a (thin) consensus on the framing of a problem
Policy goals	Definitive	Framework goals in which a common direction is agreed upon, and mandate is given to experimentation
Knowledge-base	Knowledge acquired ex ante	Knowledge acquired throughout the process and after enactment
Goal of enforcement	To detect deviations from fixed policies	To detect gaps and ambiguities in current policies and practices to enable revision of them
Method of enforcement	Sanctions to induce proscribed behaviour	Incentives are designed to induce continuous development through peer learning

4.1 Humble policy-making as a process for the Finnish context

There are multiple Finnish examples of policy domains in which a humble approach to policy-making has helped solve substantial societal problems, for example in the Finnish educational system (Sabel et al., 2011). However, none of these examples articulated the approach in a general way. Hence, although we can identify sporadic elements of humble policy-making, the country lacks a systematic approach for utilising it. Unlocking its full potential requires that its core principles are institutionalised within Government's practices, and connected to relevant functions and processes in the overall political-administrative system. In the following subsections, we advance four conditions which must be fulfilled for the Government to practice humble policy-making, and suggestions for how these conditions can be fulfilled in the Finnish context.

Condition 1: Thin consensus around framework goals

A thin consensus around framework goals means that there is a shared understanding of a problem statement, a direction that the parties are willing to work towards, and the values that underpin the reform, while the measures for reaching the framework goals are left open for further inquiry. Moving the focus from specific policy instruments to strategic framework goals is a promising way to create broad commitment to shared societal goals outside the Government. This can be achieved: 1) by placing deliberation at the core of policy-making; 2) by Governmental commitment to strategic and humble steering, rather than detail-oriented goal definition; and 3) by promoting thin, but broad political consensus through new forms of collaboration with the Parliament.

Political steering in Finland has already taken substantial steps towards being more strategic and systemic and less centred around details and policy instruments. For example, the negotiation process behind the formation of 2015's Government followed the recommendations of OHRA -report, pinning down broad framework goals and specifying metrics for their accomplishment only in the Government's action plan (Finnish Government, 2014). Today, the Government of Prime Minister Sanna Marin is committed to all of these propositions. To further advance a humble approach to policy-making, new forms of citizen deliberation – like representative deliberative assemblies – could be experimented with; strategic political steering could be combined with a clearer commitment to humble policy-making; and information asymmetry between the Government and Parliamentary committees could be addressed better.

Condition 2: Accountable autonomy by devolving problem-solving to key stakeholders

Once the broad framework goals and a direction for the policy agenda have been decided upon at the political level, finding solutions should be devolved to those stake-holders who – either within or outside government – have first-hand knowledge and experience of the issue. To enable this form of *accountable autonomy* (Fung, 2001), a balance has to be found between the stakeholders' autonomy in pursuing the framework goals as they see fit, and well-designed incentives and feedback loops that support the process and make them accountable. This requires the Government to establish well-defined roles and clear responsibilities for each actor involved, and to design feedback loops that enable knowledge accumulation and continuous learning. This subsection addresses the issue of responsibility, while the following section addresses feedback loops.

To ensure a clear division of responsibilities and broad commitment, three aspects must be taken into account: 1) providing mandate, ownership and responsibility for those stakeholders who facilitate the humble policy-making process; 2) beginning the process by creating a launch plan that divides a complex issue in tangible sub-issues, and identifies a preliminary set of stakeholders for each of them; and 3) designing incentives that effectively induces the participation of stakeholders in joint problem-solving, such as so-called *smart incentives*.

Smart incentives are designed so that participation in problem-solving should pay off and be rewarding, while staying outside of a collaboration should, by default, be costly. As an example, setting a bold goal – such as reducing emissions of a certain type by a target date, and committing the regulator to adjust the goal as the range of actually feasible solutions becomes clearer – can powerfully incentivise participation. Actors already determined to innovate will race each other to be first and have the benefit of shaping the standards; those who were hesitating will join in for fear of being left out. It is important to note that incentives can look very different in different policy contexts. Furthermore, even within the same policy context different types of actors will need varying incentives to participate.

A case that illustrates the problems of incentives without a penalty default come from the general central government transfers to local levels of government. Current steering mechanisms give the central Government tools to intervene if municipalities face economic problems, but they are rarely used as incentives to ensure the quality of public service. Instead of top-down financial steering, smart incentive mechanisms can be designed to ensure that stakeholders participate in the humble policy-making process and continuously develop and share mutual learning.

Condition 3: Creating feedback loops

From a humble approach, knowledge-based decision-making means that knowledge is acquired throughout the process, as we cannot in advance have full knowledge of what works and what does not. While it is important that knowledge flows vertically from the key stakeholders up to the political level, it is equally important that knowledge moves horizontally between key stakeholders involved in the problem-solving process. To do so, feedback loops can be created through structured dialogue and peer learning among the stakeholders, in which knowledge is accumulated and actions corrected in light of information from others. In exchange for autonomy, key stakeholders commit to comparing their own advances to their peers' experiences, which allows participants to benefit from mutual clarification of the strengths and weaknesses of each approach in face of the others'.

Recalling the previous example of public service provision at the municipal level, the risk for unequal treatment of citizens is high if sufficient feedback and support mechanisms to ensure continuous learning and development are not provided. This can be addressed through peer learning structures that address the issue of feedback loops, revealing strengths and weaknesses of each solution as well as the trade-offs between them.

Condition 4: Revision of framework goals

Revision of framework goals when presented with new information should be made into a normal practice within decision-making regarding complex issues. Even if evaluation of strategic political goals and their metrics is currently done in the yearly assessment of the Government's action plan, a revision of overly rigid political statements may prove politically costly. Conversely, being open to more flexible revision of strategic-oriented goals can come with substantial advantages for political actors, as it gives them wider room to manoeuvre and opens the door to new forms of collaboration.

To normalise the revision of political goals in light of new information, a new kind of culture within the political-administrative system is required. Put in practice, this means that key steering documents should be formulated in an open-ended way, and that communications about the setting and revision of goals should be transparent throughout the humble policy-making process. The humble approach needs to be communicated openly from the very beginning, and the learning curve of the Government opened for public scrutiny in a way that allows revision to be seen and perceived by the wider public as a proof of continuous learning in Government.

4.2 Conclusion: when should humble policy-making be applied in Finland?

Humble policy-making is at its core an approach to solve societal problems that are characterised by complexity and uncertainty. The most important prerequisite for the humble approach to work is the presence of a thin consensus on a shared direction and the values that underpin it. As there might well be policy issues in which ideological differences and vested interests entrench actors outside of any common ground, this confines the scope of issues the approach can deal with. Still, even in these cases, collaboration can be initiated on sub-issues of a broader policy agenda. This may generate trust that creates a stronger foundation for building consensus on other, more heated policy areas. Moreover, an attentive implementation of the humble approach should begin by experimenting it on a selection of prioritized policy issues, in order to avoid friction with conventional policy-making. Classifying policy goals by degree of uncertainty and strategic importance, the more complex and uncertain a policy issue is, the more useful it is to approach it through humility. Furthermore, the goal must hold high strategic value for the Government and be backed by broad societal support, as humble policy-making requires consistent political capital.

5 Future-proofing policy instruments for systems navigation

In previous sections we highlighted a number of enablers and bottlenecks in respect of anticipatory governance and, in relation to future policy instruments and steering mechanisms, identified them as better suited to the phenomenon-driven policy design of the systems-based policy era while being humbler in their approach.

The Covid-19 crisis has clearly provided a stern test in respect of the putative systems-driven model advanced here, testing both good governance principles and resilience more generally.

The future-proofing of policy instruments is intended to identify whether they are fit-for-purpose, context-sensitive and relevant to the complex policy challenges at hand. In the case of testing governance practice for its ability to respond to the needs of anticipatory governance, it quickly becomes evident that Covid-19 provides an interesting test-case environment in this respect.

The Covid-19 crisis experience and its implications for anticipatory governance has generated a number of contradictions and paradoxes. The main issues, where observations and conclusions have already been made include the predominance of issues connected to *jurisdiction and the predominance of legislative steering and leadership and communications*

The Finnish governance system seems to have stood firm in the face of the crisis, as our ability to deal with external changes and the Finnish Covid-19 response has generally been judged as among the most successful in international comparison. The need for renewal may be hampered by the perceived ability to respond to an external crisis however as the systems-based character of response is not that significant. Instead, the Finnish mode of traditional resilience is often considered as applicable here, where a crisis provides the necessary incentive to coordinate across sectors. A number of views have also been expressed according to which civil servants were able to adapt a more 'humble' approach, where one could also identify at least a degree of the lowering of boundary fences between various sectors and their civil servants.

A level of diversity in respect of policy instruments, tools and methods seems to be essential for resilience though, paradoxically, the degree of diversity actually used for steering seems to be restricted by the crisis. Modern government, with its access to an increasingly systems-based toolbox and a multi-level governance system of agen-

cies and implementing bodies at its disposal, clearly has the ability to deploy a multifaceted range of actions, measures and instruments. Their ability to respond to external and internal pressures and complexities is an element of the future-proofing of government steering and systems navigation as a whole and as such, the diversity of policy instruments becomes a key feature of futures anticipation. This emergent diversity also opens up possibilities for adaptive space (Uhl-Bien & Arena 2018 and Schultze & Pinkow 2020), where systems-based thinking and action is enabled through the contrasting tensions seeking to formulate a dynamic balance. During our study, we were particularly inspired by the UK Policy Lab's model summarising the many roles and styles of intervention and have sought to summarise some of the examples we have come across during the study in this framework.

Figure 4. Styles of government intervention, UK Policy Lab's model

	Early intervention	Design, piloting	Scaling up, mainstreaming	Acting in mature markets and ecosystems
Government as COLLABORATOR working with others to build evidence and develop ideas	Champion, i.e. build casefor change and retain alliances for action	Convening power, i.e. drawtogether expertise from across system	Connecting networks, i.e. encourage government experts and citizens to co- create change	Co-producing, i.e. co-deliver by steering different actors from across the system to deliver outcomes
Government as STEWARD steering a sector through influence and information	Agenda setting, i.e. build awareness and confidence in new opportunities by providing thought leadership	Strategy and skills planning, i.e. prepare for changing workforce demands and consequences of change	Educating and informing, i.e. ensure regulation is sufficiently understood and citizens know what's available for them.	Giving a voice, i.e. creating platforms for citizens and stakeholders to protect vested rights and interests.
Government as CUSTOMER buying goods and commission services	Catalyst, i.e. review, identify and invest in key opportunities with strategic value	Standard setting, i.e. develop standards for data collection and presentation	User centred commissioner, i.e. understanding citizens needs and contracting services that deliver best impact	Levering buying power, i.e. utilise public procurement to encourage investment and protect consumer rights.
Government as PROVIDER designing, providing, and modifying public services	Innovator, i.e. create test beds, sandboxes and trials in real world settings	Service redesign, i.e. establish legitimacy for more human centred services, harnessing political will for change	Service provider, i.e. provide services directly or indirectly through funding and target setting	Choice architect, i.e. nudging behaviour so that the default is both attractive and easy
Government as FUNDER stimulating or leading investment	Early adopter, i.e. invest in the early exploration of new opportunities with strategic value	Fiscal incentives, i.e. direct finance to stimulate new thinking that can drive future opportunities	Grants and subsidies, i.e. incentivise behaviour change through grants or other incentives	Platform provision, i.e. scale up proven ideas through existing infrastructure and publicservices
Government as REGULATOR regulating a sector and coordinating enforcement	Encourage voluntary codes, i.e. self-regulation, without legislation, allowing for greaterflexibility	Governance, i.e. ensure regulation supports the conditions for change and delivers the policy intent	Building aregulatory environment, i.e. ensure regulation enables the intended policy outcomes	Compliance, i.e. support enforcement and harmonise regulatory compliance environment
Government as LEGISLATOR making laws and amending legislation	Green papers, i.e. publish proposals for discussion with stakeholders and the public	White papers & draft bills, i.e. publish proposals for consultation and pre-legislative scrutiny	Primary and secondary legislation, i.e. support a bill through parliament and enact legislation	Amendrules, i.e. statutory instruments (rules, orders) created by delegated authorities (e.g. secretary of state)

STYLES OF GOVERNMENT INTERVENTION AND MULTIPLE ROLES OF THE PUBLIC SECTOR

(Model designed by PolicyLabUK, https://openpolicy.blog.gov.uk/2017/09/22/designing-policy/)



The diversity of roles is significant as it also relates to the more structural aspects of our capacity to renew our society and our economy. Whilst our main focus in this report has not been on economic adjustment and competitiveness, there is a perceived connection between the two.

Our need to renew governance is directly connected to the economic pressures and contextual factors influencing our labour market, economic structures, sustainability and innovation capacity. In February the Ministry of Finance published its review "Unlocking Finland's economic growth", which highlighted the increasing lag of the Finnish economic system and relative rigidities of the labour market and competitiveness, also in terms of its creative renewal when compared with its main competitors and peers. Finland ranks only moderately when it comes to understanding and adapting to the need for economic and social reforms, the effectiveness of SMEs; on an international scale, the share of start-ups and the entrepreneurship of managers. The Finnish weaknesses identified included the low employment rate, a high proportion of the long-term and youth unemployed and perceivably inflexible employment policies. One of the main lessons of the study was that those aspiring to be among the most competitive countries do not can't afford to perform poorly in any area. So, the innovative and anticipatory governance should be accompanied with genuine capacity and willingness for renewal, which builds on the close connection to labour market policies, innovation and education policies, making also the agenda of renewal more systemsand phenomenon-based.

The various roles enabling more systems navigation through a more diverse set of measures and policy instruments in the Finnish context clearly also depend on the type of societal situation and purpose of intervention. There are areas where the environment, demand and preparedness, but also the pressing nature of societal challenges and knowledge needs is such that more experimentation is called for, whilst in other areas the operational environment allows for more "business-as-usual" solutions, mainstream RDI tools, information and intelligence gathering and sharing, At times of crisis more experimental solutions may be called for, though at times more mainstream and legalistic aspects of the system become prevalent.

Table 4. Styles of government intervention, Finnish government steering and its diverse instruments available

Role and context	Ideation / experimentation	Business as usual	Reform	Crisis
Government as collaborator: working with others to build evidence and develop ideas	Situation room – concept in bringing together stakeholders and co-creating solutions for different phenomena	OECD collaboration through Country Reviews, OPSI, Innovation Policy Platform	Providing rules and code of conducts for coordinating and reconciling different modes of governance (hierarchiesmarketsnetworks) by involving local and regional level partners in designing, shaping and steering of governance networks.	"Dialogues for Exceptional Times" (poikkeusajan dialogit)
Government as steward: steering across sectors (and in relation to particular phenomena or target groups) through knowledge production, influence and information	Experimentation platforms and Labs (e.g. Work 2.0 Lab or numerous local platforms for experimentation and change management)	Situation awareness (digital tools, task forces and human teams), facilitating information flows and feedback loops from different layers of governance system. Shared assessment tools (e.g. evaluation tool for assessing the Rights of the Child, Ministry of Justice)	Council of Regulatory Impact Analysis Phenomenon- based budgeting targeting Agenda2030 (or other selected strategic agenda issues) Science Panels	Joint information and communication strategy, Fast Expert Teams Government situation analysis and research funding for studying the effects of Covid-19

Role and context	Ideation / experimentation	Business as usual	Reform	Crisis
Government as customer: buying goods and commission services	KEINO Networks and its decentralised change-agents	VN TEAS, Strategic Research and stakeholder engagement + dialogue	Green Deals Impact driven procurement through e.g. Social Impact Bonds (SIB)	National Emergency Supply Agency, its strategic planning and steering
Government as provider: designing, providing, and modifying public services	Service Labs, D9, KEINO network Situation Room for Digitalisation	Strategic programme to promote a circular economy, roadmap for implementing the 2030 Agenda for Sustainable Development (and other similar programmes and roadmaps, roadmap for learning etc.)	Social and Health (SOTE)-reform Social Security Reform (SOTE and predecessor TOIMI) Local government pilots on employment	Koronavilkku- application
Government as funder: stimulating or leading investment	Tax incentives for R&D Participatory budgeting Place to experiment – small scale funding for experimentation	Guidelines and criteria for innovative and sustainable procurement Tax incentives for energy efficient procurement	New experiments for employment sector, co-funded by the state and local authorities, implemented using an integrated model and criteria	Programme for Sustainable Growth Corona funding to businesses, BF and EU Innovation Funding
Government as regulator: regulating across sectors and coordinating enforcement?	Guidelines for legislation that allows for experimentation (http://kokeiluohje .finlex.fi/)	Procurement legislation, green procurement	Mobility as a Service, MaaS Green Deals	Restrictions on travel during Covid19 crisis

Role and context	Ideation / experimentation	Business as usual	Reform	Crisis
Government as legislator:	Situation Centres as a common space for ideation, experimentation and learning to work together	Impact Evaluation on legislation	Situation room pilots	State of Emergency legislation in spring 2020
making laws and amending legislation			Open Committees and hearings	
			Participatory budgeting (locally) and phenomenon- based budgeting (nationally)	

The Covid-19 crisis has been a particularly poignant reminder of the need to consider the context and gaol of policy, when the choices between the various instruments to be used are made. We have identified Covid-19 as a reminder of absolute necessity for more anticipatory governance, in particular in terms of seeking to live with uncertainty and rather than seeking to control, encouraging policymakers to seek for ways of living with uncertainty and asking how they can help to create the conditions from which good outcomes are more likely to emerge.²²

5.1 Covid-19 – the ultimate "test" of anticipatory governance?

The Covid-19 case has provided us with an interesting backdrop against which to assess the potential for systems-thinking and renewal in line with the anticipatory governance approach. The lessons learned were considered both relevant and interesting in relation to the policy needs and challenges of recent times, e.g., climate change, sustainability and carbon neutrality. Could the sense of urgency (in respect of Covid-19) be replicated and learned from? Are there opportunities for the structural reform and adjustment that the Covid-19 crisis response implies which could help us to better adjust the available resources to serve the transformative reform work re-

namely 2019: https://www.vtv.fi/en/blog/young-professionals-looking-to-the-future-fore-sight-activities-help-central-government-to-develop/; https://medium.com/centre-for-public-impact/the-power-of-ignorance-in-policymaking-d2782583f090.

²² This shift towards more anticipation and a shift from oversight to insight and foresight, is brilliantly described in Adrian Brown's and Ines Gullichsen's blogs from a time prior to Covid-19,

quired to move from acute treatment to more universal systemic capacities and competencies, such as learning to manage ignorance, living with uncertainty, the 'digital leap' and place-independent working practice.

In order to investigate what has actually occurred in respect of Covid-19 governance and systems steering, we held group interviews with ministries and workshops with stakeholders, where the key questions included for example: how has the Covid-19 crisis influenced the various public sector roles related to this issue as well as; which roles do you think have been highlighted (positively or negatively); which roles should be strengthened, especially in the development of future governance models; what have we learned from the crisis and how could we make best use of the positive energy and learning that has been produced within the system. We have also used other reports and surveys published around this topic (e.g. Deloitte 2021; Mörttinen 2021;

Trust and resilience have been among the key concepts studied in connection with governance during the Covid-19 crisis. It has generally been agreed that during a pandemic, mutual trust is essential for the success of any policy response. Citizens need to trust experts in order to help them understand and respond to the problem, governments to coordinate policy instruments and make choices about levels of coercion and other citizens as they cooperate to minimize infection rates through responsible personal behaviours (Cairney & Wellstead 2020).

In addition to trust and resilience, the status of evidence has also emerged as a key factor in responding to the crisis. There have been calls for a better overall picture of the current situation to be publicised, as well as for greater situational awareness and strategic intelligence. As progression of the pandemic has made calls for a better overall picture increasingly prescient there have also been calls for the new practices that have emerged during the crisis, e.g., Fast Expert Teams, science panels, etc., to be more broadly utilised beyond the scope of the pandemic. Could these methods and tools be used to introduce a 'State of the Nation' -report, where transdisciplinary evidence could be compiled, without it going through a political sieve? Could the evidence-informed practice be enriched by the experiences of Covid-19?

There are a number of rather conflicting and often quite inconclusive examples of day-to-day governance practice and government steering in respect of the Covid-19 crisis. Paradoxically there are indications of the governance practices becoming *both* less and more systems-driven.

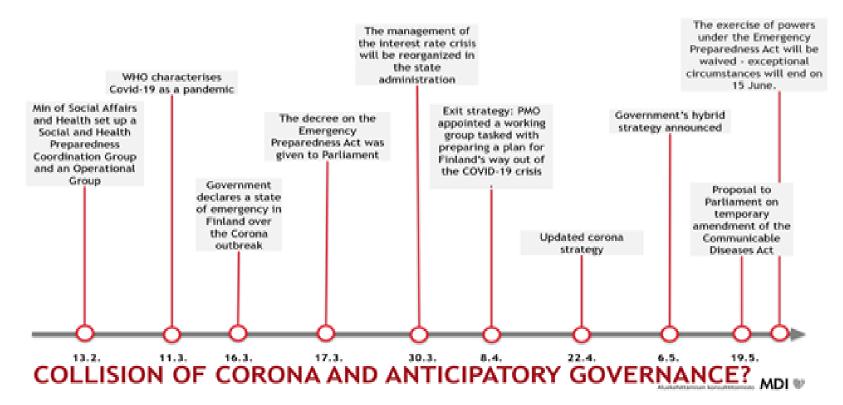


Figure 5. Timeline of Covid-19 response during the 1st phase of the crisis

Predominance of issues linked to legislation and jurisdiction

It is obvious that the Covid-19 crisis has significantly impacted government steering, both positively and negatively. Despite the gradual shift towards more systems-driven thinking and steering, as alluded to above, something which is in tune with the necessary diversity of policy instruments and methods applied, in times of crisis more rigid and traditional governance models tend to take precedence. The role of competencies as part of crisis management is viewed in two main ways: on the one hand, there is concern that sectoral abilities to adequately respond to crises and their competencies to do so have been over-emphasised, generally at the cost of a more systems-based approach, while on the other, sector-based competencies and clarity of jurisdiction and its boundaries are considered particularly important in a crisis situation. Time and time again, the need for clarity in respect of competing competences is emphasised, rather than the ability to carve out solutions that are more systems-based and crosssectoral. Various networks which could be change-inducing even in times of crisis, are often associated more with normal conditions, rather than viewed as valuable in times of crisis. Indeed, clear hierarchies are often view with some relief by some actors, as they make it easier to view solutions as relatively straightforward, thus also serving the need to predefine roles.

Competition between ministries has increased (co-operation has at the same time also increased) while the quality of the interaction between ministries and subordinate administrations has been tested (preparedness, foresight, effectiveness of guidance).

Recent years have witnessed an increasingly strong consensus develop around the idea that in order to renew the welfare state all of the avenues and opportunities available for policy design need to be utilised. Experimental governance, new methods and practices for policy experimentation and evidence-informed policy design have been emergent for some time in mainstream policy discourse and practice. Yet the Covid-19 crisis has sparked a lively debate about the nature of the legislation, legality of intervention measures and Rule of Law and the need to ensure the stable nature of governance, often at the cost of policy innovation and experimentation. The discourse emphasising the importance of the strong rule of law and the constitutional protection of citizens' equality as elements of the Finnish system is well documented. The main challenge faced by the crisis measures has been the need to ensure their anchoring in the legal systems. The legality of decisions has, at the same time, been examined more critically than usual, with the principle of legality and the rule of law, as well as questions relating to the limits of jurisdiction, official responsibilities and accountability all heavily emphasised. The predominance of the legislative approach may however be ill-suited to the need for public administration to be fleet-footed, innovative, resilient, proactive and one step ahead of real-time processes.

Assessment of the situation is oscillating between the need for a broad picture vs. deep expertise

Clearly there are tensions here between the need for a broad overall picture (systemic and trans-disciplinary knowledge) and a deep situation analysis (sector-specific, mono-disciplinary knowledge). The jurisdiction and job descriptions of ministries can be very narrow making trans-sectoral work and the formation of a common picture a challenging task. Covid-19 forces us to view both the system as a whole and the broad picture from a number of parallel perspectives both at the level of management and the Government as well as from that of the core tasks of the industries involved.

There was a considerable effort put into providing an evidence base, which would be multi-disciplinary and engaged at both ends of the spectrum insight-foresight. On 8th of April 202020, the Ministry of Social Affairs and Health established a COVID-19 epidemic situation modelling group to provide an up-to-date overview of the epidemic and its epidemiological aspects, as well as assessments of the impact of restrictive and management measures on the course of the epidemic. The main objective of the group was to provide a knowledge base in line with its mission and to support the planning activities of the Ministry's leadership and the Prime Minister's Office regarding measures needed to deal with the crisis and to prepare for the exit strategy viavis the restrictive measures, as well as drawing conclusions for the more long-term epidemic management and aftercare. Numerous different working groups and reports were subsequently established and compiled to support crisis impact assessment and recovery planning (e.g. Vihriälä et al. (2020, Exit and Reconstruction Task Force 2020a and 2020b).

While the 'Corona Spring' period clearly emphasised the need for and value of joint preparation and joint action with a common knowledge base actively sought, the feeling across those ministries engaged in the Steering2020 dialogues was that this work has predominantly been undertaken on the basis of individual ministries' own starting points with their sectoral concerns and mandates determining the solutions initially sought and ultimately implemented. There are however also positive signs of cross-sectoral coordination here, e.g., the human resources have been mobilised and targeted (also across sectors) where there is the greatest need.

Leadership issues are central to ensuring the quality and appropriateness of steering: openness, transparency, knowledge base and communication are emphasised.

It is thus no exaggeration to suggest that in times crisis such as that of the current pandemic, leadership can often seemingly be characterised by indecision and contradiction. Covid-19 has stripped away the illusion of manageability and emphasised the essential value of resilience and an ability to live with uncertainty (questions have arisen such as, what can we realistically promise, with certainty, to the citizens?). Covid-19 has been perceived as a truly common challenge motivating more strategic and holistic thinking. This thinking has however yet to emerge at the operational level. In addition, the pandemic has confirmed the perception that complex phenomena are accompanied by different requirements for producing, accessing and using knowledge. Again, however the methods and practices remain at this stage, emergent. Management and leadership in times of crisis is necessarily different from that in normal conditions, but at the same time it is argued that exceptional conditions should be managed as far as possible with normal condition structures and tools. The crisis has once again been contradictory in its implications: at one and the same time it has highlighted both a longing for *strong steering* and the need to *let go*.

Communications

When a crisis emerges, the test of governance and coordination is perhaps most visible to those on the outside through the way in which communications are approached. While there has been a call for a more unified strategy across the government departments prior to Covid-19 crisis, the crisis has highlighted the importance of transparency and openness in the administration and finally, providing something of a litmus test for a 'joint communication strategy across the government'. Some ministries - in particular the Ministry of Social Affairs and Health - have become an everyday presence in Finnish living rooms as it both through its political and civil service leaders, spoke directly to the population. Public pressure has however called for closer interplay and coordination. The complicated nature of issues relating to jurisdiction and responsibility, as well as the uncertainty in respect of evidence, has made communication both risky and difficult. Yet the open strategy has been largely accepted and appreciated by both citizens and societal stakeholders alike, while good practices have been identified across the levels of governance, from a genuinely centre-of-government approach to communications and regionally similar systems approaches, e.g., joint communication function of the ELY centres.

5.2 Concluding on the impacts and effects of Covid-19 and anticipatory governance

As argued above, the paradoxes and contractions associated with the Covid-19 response are apparent across government. Longing for certainty and predictability vs. uncertainty and unpredictability in respect of the Covid-19 crisis and the attendant societal situation has perhaps been the most obvious response. This has become particularly visible in the need for citizens to know with certainty vs. the uncertainty of the information available, as well as in the call for in-depth detailed knowledge vs. 'the big picture'. There have also been calls for a common snapshot of what is going on and for explanations in respect of what the implications and policy options are for the future, at the same time as the narrowness and sector-specificity of the knowledge called for and the importance of specific disciplinary knowledge vs. the inadequacy of specific disciplinary knowledge has been acutely felt.

The various tools and roles available to policy-makers in policy design terms and when choosing between policy instruments are in stark contrast to the relative limitedness and conservative nature of the choices made. Legislation as the predominant steering method and the clarity of competencies vs. other, less formal methods of coordination and steering (bring to the fore the question of **what in fact constitutes steering?**)

The strong legal basis and detailed (sector-specific) legislation required in a crisis situation *vs.* the adaptive and flexible guidance and management of anticipatory and innovative governance are once again in conflict here. As argued by Mörttinen (2021, 8) in the memorandum on Covid-19 and governance, whilst the pandemic also emphatically requires cross-administrative reactions, which are in Finland hampered by compartmentalised administrative practice and a chronic problem with the quality of the legislation-drafting process, the room for innovation and learning can be restricted. The need to consult different actors while engaging people and organisations in a dialogue to ensure the consensus needed for policy choices has also been seen to be in conflict with the pressure to act effectively and in a timely fashion. Expert panels, hearings and methods for open citizens' dialogue have been utilised as tools to ensure consensus around and the legitimacy of actions and policy measures, while the need to have such dialogue processes available at all times has also been acknowledged.

Situational expertise vs. widely applicable scientific evidence has been one of the paradoxes, where the central government has needed to become humbler and more open to external influences. Emphasis on management hierarches and centrality vs.

the relevance of regional and local examples and practical applications and appreciation of the importance of decentralisation have also become increasingly important. Many good examples of Covid-19 responses are found on the regional and local levels and, as such, the crisis could actually be a turning point in terms of illustrating the potential inherent in local and regional solutions.

6 Conclusions and policy implications

6.1 Reframing systems thinking and discourse

The analysis provided in this report builds on the lessons learned from governance research, analysis of both recent and current cases of governance renewal and international benchmarks as well as developing both conceptual and actionable tools for a systems-driven governance renewal programme, better suited to complex operational environments and external and internal crises. We have sought to formulate ideas and models for action that could increase the resilience and anticipatory capacity of our system as a whole.

The complexity of our governance system is generally perceived as increasing due to two core factors. Firstly, the interconnectedness of the operating environment of public administration, due to increased globalization and the development of information and communications technology resulting in local phenomena having potentially important repercussions on a global level. And secondly, the increasing amount of information being generated, its ambiguity and the speed of information flows pose significant challenges to the ability to handle uncertainty and instability associated with the operating environment. This uncertainty and volatility also give rise to the pressing need to design, craft and take into use a more diverse set of steering mechanisms, governance tools and policy instruments.

A new policy-making approach is proposed here building on the existing well-functioning practices within the Finnish Government, linking them to core processes in the political-administrative system: *a humble approach to policy-making*. Humble policy-making requires the Government to build a thin consensus around framework goals to ensure societal commitment and political collaboration. This is achieved through citizens' deliberation, strategic-oriented goal definition, collaboration with Parliament and by involving internal and external stakeholders in a search for the policy best solutions. This is to be achieved by ensuring clear roles and responsibilities (accountable autonomy) and enabling continuous peer learning (through feedback loops). Humble policy-making requires the Government to enable revision of framework goals in light of continuously updated new information about the policy problem. This is achieved by communicating the humble approach in a very transparent way. Humble policy-making requires consistent political capital. As such, it is best implemented when

dealing with policy problems and goals characterised by high strategic importance (for both Government and society) and a high degree of complexity and uncertainty.

The reframing is already taking place. The keys to creating a more systems-driven and anticipatory steering approach already exist, but successfully putting them into practice in concrete day-to-day work and implementation frameworks remains elusive. Soft measures such as collaboration and networks are firmly established and active, but the closer one gets to (previously predominantly) legislative and regulative issues, the less likely it is that system capacity can be turned into concrete policy action. In many cases the decentralised levels of governance (local and regional levels) seem to be more agile in adopting new governance practice.

Decentralisation was recommended both in the international benchmarking section and in the Covid-19 analysis. A balance between centralisation and decentralisation seems to contribute to generating innovation and to ensuring the further scaling up and broader implementation of innovations. The key to successful systemic reforms in all benchmarked countries has been the balance between centralisation and decentralisation. Systems are often hard to change because power, relationships and resources are locked together in a reinforcing pattern according to their current purpose. Systems start to change when this pattern is disrupted and opened up. The local and regional level can be the best partner for governance renewal and it should be more fully appreciated as such, thereby also giving it more leeway in autonomous and experimental implementation terms.

6.2 Striking a balance – addressing the multilevel nature of our governance system

One of the interesting conclusions from the international benchmarks was that one should adjust to governance change by thinking and acting more relationally. New systems emerge when actors are brought together in new patterns of relationships: centralised solutions may become decentralised; indirect ones become direct; consumers become participants and producers; and systems with rigid hierarchical structures become more fluid, networked and cooperative. This would entail paying heed to complexity and to a more systems-driven approach to governance as a whole.

It appears however that experimentalist governance is more apparent in the agencies and decentralised levels of local and regional levels than at the central government level which remains rather sceptical of the possibilities of experimentation, seeing it in contrast to legislative requirements, as being against the predominant working culture

of the government, as well as in some cases overly focused on funding issues (as experiments usually rely on project funding).

From the international benchmarks we can conclude that there are other countries with similarly multi-level governance models, which seem to be better at learning from local and regional level experiments (in particular UK and Denmark). Finland seems to be improving in this regard, but this could be more systematic: meso level shared rules and reporting practices, evaluation using standardised methods and models could be an additional boost to learn from the local and regional level experiments.

6.3 Utilising the full range of tools available

The international benchmarks provided us with more food for thought when it comes to steering, governance and policy. There are a number of conclusions to be drawn from them emphasising the need for a varied toolbox and diversity of available policy instruments. It was concluded in this context that public sector innovation needs to be seen as a broad spectrum of available practices, rather than merely as a regulatory or budget-driven process. The main lever of renewal varies across countries: while reforming governance structures and enhancing competitiveness through a thorough labour market reform has been the Danish way, the Canadian public sector has taken the architecture of the service system as the central focus of its innovation agenda. The UK in turn has emphasised the centrality of 'public value', reflected in meeting the needs of citizens and businesses through comprehensive service renewal. Singapore's 'Smart Nation' in turn has been built around a strategic umbrella of digital governance reform.

These international examples provide an interesting contrast to the Finnish strategies. The main lever and central focus of the Finnish governance agenda and renewal programme has been outlined in the public sector strategy for renewal as a pledge for the public sector to "construct sustainable everyday life for the future and a functioning and safe society for all circumstances" (Public Governance Strategy, published in December 2020). This strategy may reflect Finnish society's humble approach to renewal: aiming for functionality and everyday contentment, rather than grandiose schemes and ambitious innovation agendas.

One of the main conclusions from the benchmarking process relates to the prevailing culture of governance. The need to more seamlessly incorporate experiments and evidence into mainstream practice is clearly necessary. It is not customary for the Finnish governance system to provide support to, or incentives for, risk-taking, nor to ac-

cept failures. All of the benchmarked countries have a strong public sector experimental culture. Operations are guided by controlled risk-taking and permission to fail. Policy experiments are designed and planned for collective learning. It was also concluded in terms of international good practice that one should launch experiments based on evidence. Canada and the UK in particular have strong evidence-informed decision-making cultures, with well-developed, mature and institutionalised evaluation systems. It is particularly important here to remember that historical data does not necessarily provide the best evidence base for future systems changes and therefore it is of the utmost importance that sufficient attention is given to pattern detection rather than scattered, atomistic data and information.

The systems-thinking challenge is widely acknowledged, but the tools to address it are not mainstream and have not yet been fully exploited in key governance processes (especially budgeting or legislative preparation). We suggest that the tools that are easiest to implement across organisations and policy sectors are soft tools of evidence-informed policy-making (such as broad-based committees of expert-driven fast expert teams), while more legislative tools such as uniform methodologies for Impact assessments or permanent panel structures remain exceptions to the rule (e.g., Climate Change and Sustainability and the Fast Expert Teams established during the Covid-19 crisis remain among the notable exceptions here).

Initiatives to strengthen cross-government and longer-term goal-setting have also been identified, in structural reforms, in the political agenda, i.e., in the government programme and in the daily life of civil servants but, as yet, no general mechanisms are available to promote systems thinking across the organisations concerned and the ministry interviews indicate that systems-based practices still remain exceptions to the rule. One of the best examples of this type of cross-sectoral working practice is Work 2.0. Lab. Institutional support related to bringing systemic thinking to the executive level is still not however in place.

Systems-based interventions (in their most simple form, measures based on the identification of a clear change goal and which impact thinking to sup-port achieving it) remain in their infancy, though some are identifiable (Agenda2030 is the most off-cited good example). Promising practice can also be identified, for instance, in the proliferation of effectiveness or mission-based thinking and social impact investments undertaken by the Ministry of Employment and the Economy among others.

As for the evidence-base, research, evaluation and monitoring need to be developed in a more systematic and systems-based fashion, in order to truly see the whole range of methods available for steering thus providing the necessary elements and options to fill the policy and methodological toolbox. This is not only however a matter

of policy instruments, but also of how the future is approached utilising foresight and anticipation *vis-à-vis* potential environmental risks and future crises.

Maximising the use of diversity of fit-for-purpose methods brings us back to the international benchmarks and recommendations based on them.

To summarise from the lessons of international benchmarks, one can conclude some general lessons for government steering and anticipatory governance in the Finnish government steering case, which could help to shift the steering towards a systems navigation mode:

Lesson 1: Innovation should be embedded in the overall architecture of the service system, the notion of public value and impact (Pyykkönen 2016, Kulju et al. 2019). Innovation is not only found in the processes and products of public services and procurement, it can also be a cultural trait, relating to the notion of public value and impact (i.e. how do we determine what is the role of the public sector and government steering, where it brings the most value and how its value could be increased and scaled up). This broader notion of innovation could thus be integrated across the board by paying more attention to effects and impacts of all major policy reforms and changes, which if integrated in all policy design and could help to highlight and increase the awareness of impact thinking (e.g. systems mapping and impact evaluation).

Lesson 2: Encourage practices and leadership that accepts justified risks and failures, and especially learns from them. As argued earlier, experimentation is not of intrinsic value, but it should be seen as a necessary learning process. The degree of complexity of a particular policy challenge should be accompanied with a similar degree of small scale and early design phase experimentation.

Lesson 3: Launch reforms on the basis of evidence. Drawing relevant lessons through the entire policy cycle and design is enabled by systematic evaluation and assessment, as well as a balanced and systematic combination of oversight, insight and foresight. It is equally necessary to distinguish and learn to accept ignorance or lack of evidence: future ills can seldom be cured with past medicine.

Lesson 4: Think relationally and embrace complexity. Systems navigation is only possible when we are aware of the shifts and patterns emerging (actors forming new patterns of relationships: what was once centralised becoming decentralised; indirect becoming direct; consumers becoming producers, rigid hierarchical structures becoming fractured and more fluid). Systems thinking and phenomenon-based policy design could be the new normal in forging a more adaptive and resilient public sector, where humble policy-making becomes more of a norm rather than exception.

Lesson 5: Take advantage of digital opportunities. In all the case countries, the digitalisation of public administration and public services has been raised to the forefront of reform policy and systems change. Intelligent solutions should be part of the anticipatory governance practice as a whole, e.g. use of Al and live data and digital solutions for monitoring, assessing, evaluating, designing and following up patterns and shifts in service needs, use, access and satisfaction.

Lesson 6: Decentralise for timely implementation, and centralise for tested and evidence-based solutions across the country. The key to successful systemic reforms in all benchmarking countries was the creation of a balance between centralisation and decentralisation. Whilst international benchmarks are inspiring, they are seldom ready-to-use or direct-to-implementation. Finnish government steering and policy design could benefit from our relative regional diversity, as well as homogeneity: regional and local experimentation and governance renewal could be an asset in policy design and systems navigation.

6.4 Being better prepared – anticipatory governance and resilience

Making full use of digital opportunities, intelligent solutions increasing better access to services, streamlining operations but also opening up new possibilities for flexible and adaptive steering models are thus called for. This would improve the anticipatory capacity of our governance system as a whole.

Capacities which make it easier to coordinate and integrate policy efforts across sectors as well as from the point of view of service users, the citizens, companies and third sector bodies need to be boosted via a concerted effort, as they are not yet mainstream. Incentives should be introduced that make it more attractive to policy actors, including government ministries to act in a systems-based manner, rather than remaining wedded to their sectoral interests.

Foresight itself and the capacities for adjustment as a whole need to be developed. The Covid-19 crisis has provided opportunities for testing the capacities for anticipatory governance, as well as a more systems-based ability to promote renewal. The foresight capacities need to be mainstreamed across the state governance structure and its agencies at different levels. This is particularly important to ensure a timely and accurate analysis of the mid-term and long-term future prospects of the economy as well as situational awareness across society as a whole.

The culture of political short-termism still dominates and the Covid-19 crisis does not seem to have substantially dented it. This type of major cultural change cannot be pushed by government steering by the ministries alone, rather, willingness and commitment are required from the political level. As was pointed out in the analysis of 'humble policy-making', processes that invite citizens to deliberate are crucial elements in ensuring a more long-term commitment to both policy goals and cultural changes. If there is societal consensus around the importance of a reform agenda, the political domain is likely to follow. The same incentives should be utilised to promote a more systems-driven approach to policy-making.

The lessons learned from the Covid-19 crisis leave us optimistic that the thus far *ad hoc* responses as regards systems-based solutions will become more formalised in the near future. Paradoxically perhaps, while practice during the Covid-19 crisis fell back on more sector-based and clearly defined solutions based on traditional administrative competences, the pressing need to think and act more adroitly across sectors and to ensure better anticipatory capacity across the government and society more broadly was, nevertheless, increasingly acknowledged.

Appendix 1: Glossary / Sanasto

ACCOUNTABLE AUTONOMY (vastuullinen autonomia)

Refers to a model in which stakeholders are given the freedom to promote framework goals in the way that they see fit, as long as the politically set boundary conditions are met.

ANTICIPATORY GOVERNANCE (ennakoiva hallinta)

The framework developed in this project, largely inspired by the OECD's anticipatory innovation governance approach. Consists of planning, implementing and promoting more future-alert public administration and public policy, using the methods of futures work, involving network management and the whole range of means and methods associated with innovative public management.

ANTICIPATORY INNOVATION (ennakoiva innovointi)

An approach developed by the Observatory of Public Sector Innovation (OPSI), referring to acting upon knowledge about the future by creating something new that has the potential to impact public values.

ANTICIPATORY INNOVATION GOVERNANCE (ennakoiva innovaatiohallinta)

The structures and mechanisms in place that allows and promotes anticipatory innovation to occur alongside other types of innovation.

BROAD FRAMEWORK GOAL (laaja tavoitteisto)

Determines the goal to be pursued and the limits within which the goal is to be achieved. The goal set is necessary broad, as it can be adjusted as and when required.

COMPLEXITY (kompleksisuus)

Differs from complicated systems in that while complicated systems may consist of many parts, when these parts interact with each other, they do not impact or change the other part. In contrast, in a complex system, the parts do impact each other and thus can no longer be separated from each other after entanglement (See Vartiainen & Raisio, eds. (2020): Leadership in a Complex World, Gaudeamus; Axelrod & Cohen

20000: Harnessing Complexity: Organizational Implications of a Scientific Frontier, Basic Books).

DELIBERATION (deliberaatio, puntarointi)

An equal, multi-stakeholder debate based on weighing up the best arguments to support decision-making.

EXPERIMENTALIST GOVERNANCE THEORY (kokeilevan hallinnan teoria)

The theoretical premise of the humble governance model, originally introduced by Charles F. Sabel.

FEEDBACK LOOP (palauteprosessi)

The mechanism that ensures that information flows through the system.

GOVERNANCE (hallinta)

Merriam Webster's dictionary defines governance as the act or process of governing or overseeing the control and direction of something (such as a country or an organisation); refers broadly to the processes, structures and institutions of public power, as well as to ways of steering and interacting with the surrounding society.

HUMBLE APPROACH (to policy making) (nöyrä lähestymistapa toimintapolitiikan valmisteluun ja toteutukseen)

An approach to problem-solving developed in the Steering2020 project by Demos Helsinki, in which policy-making is built as iterative, deliberative and collaborative process.

HYBRID GOVERNANCE (hybridi hallinta)

The optimal governance system is a combination of the three administrative paradigms discussed in this review, as none of them alone can respond to the issues raised by increasing societal complexity.

LAUNCH PLAN (lähtösuunnitelma)

Divides the broad framework goal into sub-objectives and identifies the key stakeholders for each objective.

MULTI-LEVEL GOVERNANCE (monentason hallinta)

Power is distributed between local, regional, national, supranational and global levels (e.g. on the EU-state-municipalities axis) and/or different actors of the same level of government (e.g. governmental agencies on different sectors) (Vartiainen et al. 2020).

PEER LEARNING (vertaisoppiminen)

A feedback process in which stakeholders commit to comparing and cross-evaluating their approaches.

PHENOMENON-BASED POLICY-MAKING (ilmiölähtöinen politiikkavalmistelu/toimintapolitiikka)

Policy-making that addresses cross-sectoral themes as parts of larger systems and issues, thus anticipating wicked problems, finding solutions to promote people's well-being and identifying changing boundary-crossing service needs in society. The characteristics and advantages of such a policy-making approach include: 1) the capacity for better policy consistency and coherence which can, in turn, be more effective in achieving policy impacts; 2) the systems-approach: making the causalities, root causes and interconnections more visible and in so doing, focusing greater attention on the knowledge- and evidence base of policies; and 3) creating a more open and inclusive dialogue across the various sectors and policy spheres – each of which can be seen as having an intrinsic value of their own – leading, perhaps, to more inclusive policies and a more deliberative-style of public policy-making.

POLICY EXPERIMENT (politiikkakokeilu)

Refers to the systematic experimentation of policy measures and drawing lessons from them.

POLICY GOAL (politiikkatavoite)

Politically set objective for action.

POLICY-MAKING

The term refers to the processes in which policy objectives are designed and set, as well as the policy preparation, implementation, monitoring and evaluation.

Huom. Sanalle "policy-making" ei ole suoraa suomennosta, viittaa siihen suunnitelmallisen sosiaalisen järjestyksen kokonaisuuteen tavoitteenmuodostuksesta toimeenpanoon ja seurantaan ja arviointiin, jolla politiikkatavoitteista luodaan suuntaviivoja ja toimenpiteitä eri sektoreilla, kuten koulutuspolitiikka, elinkeinopolitiikka, terveys- ja sosiaalipolitiikka. Tässä hankkeessa käytetty muodossa toimintapolitiikka tai politiikkavalmistelu.

POLYCENTRIC GOVERNANCE (monikeskuksinen hallinta)

Overlapping centres of decision-making have power over the same subjects, but also act together or may end up in a conflict. Polycentricity has multiple benefits, such as adaptability, useful overlapping that acts as a backup of functions and broader possibilities for connecting with citizens.

PUBLIC ADMINISTRATION (julkinen hallinto)

Refers to ministries, administrative agencies and institutions at different levels of government.

(THE LAW OF) REQUISITE COMPLEXITY ("Ashby's Law) (riittävän kompleksisuuden laki, Ashbyn laki)

The public administration should correspond to complex reality by being complex enough itself, while the complexity of solutions offered should be proportionate to and commensurable with the complexity of the problems addressed.

SITUATION AWARENESS (yhteinen tilannekuva)

As defined by the Prime Minister's Office, keeping decision-makers abreast of developments is part of the general management of situation awareness.

STAKEHOLDER (sidosryhmä)

Refers broadly to those actors who have first-hand understanding and expertise in respect of a particular problem to be solved.

STEERING (ohjaus)

The process(es) of organising, directing or regulating the activities or course of a project or an entity.

"SYSTEMS (/Systems-driven) FOCUS" (Systeemisyys / systeeminen tarkennus)

Shifting focus from solving individual, separate policy problems or providing partial solutions and piecemeal understanding of parts of a phenomenon (e.g. costs incurred because of health problems or unemployment which may be part of a larger, more complex, phenomenon of exclusion and segregation; families not getting help when needed or help being provided in a fragmented fashion) as opposed to seeing the policy challenges as parts of a larger, more complex whole, seeking to grasp interdependencies and interactions between parts of the complex phenomenon, as well as the multi-faceted linkages and feedback loops.

SYSTEMS NAVIGATION (järjestelmänavigointi)

Development of collaborative and citizen-based solutions to governance and policy conundrums which allow the agents in a governance system to circumvent unnecessary hierarchies and sectoral barriers and by so doing, to achieve more appropriate and more phenomenon-based policy solutions in an increasingly complex policy environment.

SYSTEMS THINKING (systeemiajattelu)

Thinking that seeks to identify systems and understand how systems work, predict their behaviour and use potential elements for systems change as levers for transformation.

THIN CONSENSUS (perustava konsensus)

Refers to a shared will and commitment to promoting the open setting of shared goals.

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