



# **Cooperative and continuous foresight**

A proposal for a national foresight approach

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#### Abstract

On 3 June 2013 the Prime Minister's Office launched a project for a foresight model, as part of the Government Report on the Future. The aim was to build a national foresight approach which would provide elements contributing to Finland's competitive edge and its role as a pioneer. The purpose of the project was to address long-term foresight needs and objectives, parties, actors, interfaces, the work cycle, time periods studied, methods, procedures and costs, and to explore the potential need to alter the division of responsibilities between various actors.

The aim of the national foresight approach is to provide Finnish decision-makers with the best possible perspectives into the future, while enabling the public administration to create a basis for shaping the future by providing shared operating approaches and forums for foresight activities. Closer cooperation and shared processes between foresight actors could improve the effectiveness of foresight activities and raise the pace at which foresight information passes through the strategy stage into practice. Implementation will be expedited through trials which could be launched already in the foresight phase. The new operating approach could be implemented by the following means:

- 1. The Government appoints a Foresight Group comprising permanent and non-permanent members. The Government Foresight Group is tasked with coordination and innovation relating to Finnish foresight activities. A General Secretary assigned to the Prime Minister's Office performs preparatory work for and supports the group's decision-making. The results are regularly reported to permanent secretaries.
- 2. National foresight network will be extensive in scope and have a concrete mandate. Network members will form networks of their own according to need. Such networks can be either organisation- or theme-based and include representatives of various parties.
- 3. Foresight actors will be invited to convene at regular foresight forums in order to share and discuss topical, future-related themes and create new perspectives. Forum results will be widely communicated and foresight actors will form a tight, actively communicating network.
- 4. In addition to national level foresight, an international foresight report will be regularly produced by commissioning Finnish or foreign research. Such research may be based on a pre-defined theme, or explore new phenomena.
- 5. National foresight expertise will be supported by training organised and provided on an extensive basis. The foresight secretariat of the Prime Minister's Office will be responsible for organising this training.
- 6. The primary target audience of the understanding and perspectives generated by the new foresight approach will be the political actors regularly provided with foresight reviews. These foresight reviews will not aim to generate an understanding between actors, but to provide an overall picture of future possibilities and risks.
- 7. The possibility will be explored of creating an online portal known as Tulevaisuuskartasto.fi ("the future atlas"), for the distribution of foresight data, analysis and discussion. This portal may be built on the basis of an existing portal.
- 8. The effectiveness, topicality, objectivity and quality of the foresight approach must be regularly monitored and assessed.

#### Keywords

Foresight, Foresight future, National foresight network, Foresight Reviews, decision-making

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# **CONTENTS**

Forev	vord		8
1	NATIC	NAL FORESIGHT TO BECOME COOPERATIVE AND CONTINUOUS	10
2	TO DE 2.1 2.2	TION OF A CLEAR, FLEXIBLE NATIONAL FORESIGHT APPROACH AND A LINK CISION-MAKING	.14 .14 .15
3	VARIO 3.1 3.2 3.3 3.4 3.5	ONAL FORESIGHT DATA SHOULD BE GATHERED AND COMMUNICATED IN OUS WAYS	.19 .20 .21 .21
4		FORESIGHT APPROACH BUILT IN SMALL STEPS AND THROUGH TRIAL AND R	.27

## **Foreword**

On 3 June 2013 the Prime Minister's Office launched a project for a foresight model, as part of the Government Report on the Future. The aim was to build a national foresight approach which would provide elements contributing to Finland's competitive edge and its role as a pioneer. The purpose of the project was to address long-term foresight needs and objectives, parties, actors, interfaces, the work cycle, time periods studied, methods, procedures and costs, and to explore the potential need to alter the division of responsibilities between various actors.

The project working group included Head of Unit Taina Kulmala, Prime Minister's Office, (Chair); Director Paula Laine, Finnish Innovation Fund Sitra; Director Pentti Pulkkinen, Academy of Finland; Foresight Manager Pirjo Kyläkoski, Tekes – the Finnish Funding Agency for Technology and Innovation; Permanent Expert Olli Hietanen, Committee for the Future, Parliament of Finland; Head of Unit Tuomas Tapio, Prime Minister's Office; Ministerial Adviser Heli Saijets, Ministry of Employment and the Economy; Specialist Elina Kiiski Kataja, Finnish Innovation Fund Sitra; Senior Science Adviser Annamaija Lehvo, Academy of Finland; Chief Adviser Juha Suuronen, Tekes – the Finnish Funding Agency for Technology and Innovation; and as General Secretary of the project, Senior Specialist Ulla Rosenström, Prime Minister's Office. The Working Group convened eight times.

Preparation of a cooperative national foresight approach is partly based on Prime Minister Jyrki Katainen's Government Report on the Future, Well-being through sustainable growth (<a href="http://tuse.2030.fi/en/">http://tuse.2030.fi/en/</a>). The Government Report on the Future emphasises the role of the public administration as an enabler; the proposed new foresight approach is based on this role. Concrete proposals, on whose basis cooperative and continuous national foresight can be built and maintained formed the objective of the working group. Building and implementing foresight activities involves small steps forward via trial and error. The proposals made are partly based on existing processes.

The working group adopted an inclusive method; the foresight work involved more than hundred foresight participants in workshops and round table events. Furthermore, an assessment of the foresight phase of the Government Report on the Future, completed in the summer of 2013, provided useful information on the necessary framework for fruitful foresight activities (Ramboll, 2013, in Finnish only)

(http://vnk.fi/hankkeet/tulevaisuusselonteko/pdf/TUSE\_arviointiraportti.pdf).

The working group proposed a national foresight approach with an emphasis on practicality and implementation. Its key proposal recommends the use of various means to bring foresight actors together and create shared perspectives on future opportunities and actions.

# Summary of the working group's proposals

The aim of the national foresight approach is to provide Finnish decision-makers with the best possible perspectives into the future, while enabling the public administration to create a basis for shaping the future by providing shared operating approaches and forums for foresight activities. Closer cooperation and shared processes between foresight actors could improve the effectiveness of foresight activities and raise the pace at which foresight information passes through the strategy stage into practice. Implementation will be expedited through trials which could be launched already in the foresight phase. The new operating approach could be implemented by the following means:

- 1. The Government appoints a Foresight Group comprising permanent and non-permanent members. The Government Foresight Group is tasked with coordination and innovation relating to Finnish foresight activities. A General Secretary assigned to the Prime Minister's Office performs preparatory work for and supports the group's decision-making. The results are regularly reported to permanent secretaries.
- National foresight network will be extensive in scope and have a concrete mandate. Network members will form networks of their own according to need. Such networks can be either organisation- or theme-based and include representatives of various parties.
- Foresight actors will be invited to convene at regular foresight forums in order to share and discuss topical, future-related themes and create new perspectives. Forum results will be widely communicated and foresight actors will form a tight, actively communicating network.
- 4. In addition to national level foresight, an international foresight report will be regularly produced by commissioning Finnish or foreign research. Such research may be based on a pre-defined theme, or explore new phenomena.
- 5. National foresight expertise will be supported by training organised and provided on an extensive basis. The foresight secretariat of the Prime Minister's Office will be responsible for organising this training.
- 6. The primary target audience of the understanding and perspectives generated by the new foresight approach will be the political actors regularly provided with foresight reviews. These foresight reviews will not aim to generate an understanding between actors, but to provide an overall picture of future possibilities and risks.
- 7. The possibility will be explored of creating an online portal known as Tulevaisuuskartasto.fi ("the future atlas"), for the distribution of foresight data, analysis and discussion. This portal may be built on the basis of an existing portal.
- 8. The effectiveness, topicality, objectivity and quality of the foresight approach must be regularly monitored and assessed.

# 1 NATIONAL FORESIGHT TO BECOME COOPERATIVE AND CONTINUOUS

Why do we need a new foresight approach?

As the saying goes, 'knowledge is power' – those in possession of the facts fare best. However, information is now so abundant and easily gathered that large volumes of data and their management no longer guarantee success. This may lead us to update our saying to 'networks are power' – we gain new information through a mutual process of sharing and discussing the information we have, which we understand anew through further dialogue.

The dialogue sparked by the Government Report on the Future has formed the heart of foresight-based Finnish future policy. In many respects, Finland and Finnish organisations are among the world's leading producers of foresight data. On the other hand, many producers and users of foresight data find that it is fragmented and scattered. Fragmented data hampers the formation of the 'big picture' and may, on occasions, prevent the timely recognition of major developments. In addition, there is an inherent risk of overlapping work in the current system.

This report presents a proposal, prepared during the autumn of 2013, for a cooperative national foresight approach and explains the necessity of such an approach. The aim was to identify a foresight approach which would provide Finnish decision-makers with greater opportunities to benefit from foresight perspectives and data. A broad-based exchange of views on the future could also improve Finland's international competitiveness and help decision-makers and organisations to build a better future.

What do we understood by the term 'foresight'?

Foresight is preparedness for the future. It does not refer to forecasting or describing the likely course of events. It means building a common future on the most well-founded information or perspectives possible. Foresight data comes in various forms – speculative or visionary data, or data on probable scenarios. The most convincing data or perspectives are well-founded, of widely acknowledged significance or must spark off a public debate. As groundwork for building the future, we need extensive foresight data and perspectives in a usable form.

The working group defined cooperative foresight as a process aimed not at the creation of mutual understanding but at the achievement of shared processes for generating data and perspectives. The proposed foresight approach aims to create a situation in which every organisation and actor in need of foresight data and perspectives has access to initial data of equal quality. Such data will serve as a basis for making strategic decisions and for finding partners with whom a dialogue can begin. In cooperative foresight, the aim is to create a versatile, multivocal data collection that enables value-based choices.

In the related work, use was made of a range of definitions which provide an apt description of the proposed foresight approach. The Joint Research Centre (JRC) of the European Commission describes foresight on the basis of four characteristics (<a href="http://forlearn.jrc.ec.europa.eu/guide/1\_why-foresight/characteristics.htm">http://forlearn.jrc.ec.europa.eu/guide/1\_why-foresight/characteristics.htm</a>):

- Foresight is action-oriented. Foresight not only involves analysis or contemplation of the future, but also helps to shape it.
   Foresight is only worthwhile where there is a genuine possibility of shaping the future. Such a definition confirms that purely analytical studies of the future are insufficient but provide a necessary framework for foresight.
- Foresight is open to alternative futures. This means that the future is not predetermined, but can follow different paths depending on the decisions and choices made by various actors.
- 3. **Foresight is participatory.** In other words, foresight is not the preserve of experts or academics but involves everyone concerned with the issues at stake. Foresight results are communicated as broadly as possible and feedback is actively sought.
- 4. **Foresight is multidisciplinary.** Foresight is multi- and cross-disciplinary. In other words, the future cannot be understood if studied from one viewpoint only. National foresight is strongly rooted in multidisciplinarity.

Because the working group's activities were based on the assumption that foresight is long-term in nature, the data collection and communication methods described in this report apply to foresight stretching across more than a single government term. However, national foresight time-spans vary according to the type of data required.

Foresight helps us to envisage possible futures shaped by various forces and thinking, and which we can use a range of methods to grasp. National foresight activities make use of the full range of future scenarios, in line with the situation and content in question; the proposals made offer no critique of the various methodologies applied. Several methodologies, which address different questions in various ways, are used.

The objective and success factors of cooperative foresight

The aim is to provide Finnish decision-makers with the best possible perspectives into the future, while the public administration facilitates the shaping of the future by providing shared approaches and common forums for foresight activities.

The objective of cooperative national foresight is to generate usable foresight data for strategic decision-makers. This will be done reliably, transparently and swiftly in order to ensure that the available data is up-to-date and enables decision-makers to address even unforeseen developments quickly. Use of foresight data in strategic decision-making will be expedited through trials initiated in the foresight phase.

Another aim is to provide users with horizontal, comprehensive and clearly presented data linked to the decision-making process. At the same time, foresight data and perspectives will be generated which are of benefit to society and the general public. Businesses may also

benefit from shared perspectives: they will be interested in hearing what various phenomena mean for the sector, the enterprise itself or its products.

Foresight activities can be made more effective by bringing foresight actors together in closer cooperation and joint processes, based on the sum total of the activities involved in the related processes and collaboration, and resulting in a major cascade effect.

The cooperative foresight approach is open, covering all societal activities and policy sectors. It is built on the basis of

- · cooperation and dialogue between various actors,
- the availability and reliability of information,
- agile and continuous production of foresight data and the ability to create perspectives,
- the ability of various actors react rapidly to challenges,
- the willingness and ability of decision-makers to benefit from foresight while making decisions.

Political decision-makers are the key customers of the perspectives generated on the basis of this approach. Organisations and players involved in national foresight, and whose work benefits from shared foresight materials and expertise, form the next circle of customers. The third circle covers society in general, whereby the general public, organisations and businesses become foresight customers.

SOCIETY The Tulevaisuuskartasto.fi ACTORS future atlas PARTICIPATING IN THE FORESIGHTAPPROACH Education POLITICAL **DECISION-**Foresight reviews MAKING **Forums** Picture of international situation commissioned from experts

**Figure 1** The customers of cooperative foresight.

The working group identified the success factors described below, using them as the basis for the proposal for a new foresight approach that will be presented in sections 2 and 3.

#### **Table 1** The success factors of national foresight.

The key success factors of the new foresight approach:

- 1. Foresight materials and perspectives generated with public funding are made more available for shared use in general, and for distribution by other actors.
- 2. Rather than simply compiling data in a single place, the new approach of national foresight generates perspectives.
- 3. Foresight has a strong, timely link to decision-making.
- 4. For the sake of credibility and to encourage commitment, foresight work is open.
- 5. The foresight approach is based on participation, networks, new operating models and cooperation.
- 6. Foresight activities are performed flexibly and spontaneously, bearing the enduser and the human perspective in mind.
- 7. The processes and content of the new approach are developed and updated.
- 8. The cooperative foresight approach and its contents are regularly assessed from a global perspective, with an emphasis on international contacts in the related material.
- 9. Foresight activities require the resources and commitment of various parties.
- 10. The new approach is recognised and decision-makers are willing and able to apply foresight perspectives to future possibilities, threats and potential risks on a broader basis...

In addition, a broader set of objectives has been identified in terms of cooperative national foresight. These include improving the public administration's and decision-makers' ability to use foresight data in their work and the transparent sharing of foresight data and perspectives by the public administration. Cooperation, shared processes and sharing of increased expertise could improve the quality of foresight work and create efficiencies by eliminating overlaps. Further objectives include resetting the public debate and empowering civil society through the more transparent sharing of foresight perspectives.

#### Risks associated with the proposed foresight approach

There are also risks associated with the proposed foresight approach. For example, shared distribution of information may lead to information overload, resistance may arise to making foresight materials publicly available, or selection of the correct foresight data periods may not prove possible. Furthermore, the proposed foresight approach may result in unwieldy bureaucracy and, despite its high quality, fail to initiate change or engage the required actors. Another major risk involves failure to identify suitable experts and engage them when needed.

Content-related risks include poor quality or usability of materials and analyses, or non-compatible processes and process phases. However, the greatest risk is that the generated material is not utilised in political decision-making or in the strategy work of the organisations involved. To mitigate these risks, the users of the new foresight approach must continuously discuss potential development needs and high quality activities should be ensured at all levels. A major hindrance to the adoption of the new foresight approach may arise if society does not feel the need for future scenarios and foresight. There is also the risk of ponderous adoption of the new approach, allowing positive experiences of broader, cooperative foresight achieved during the current electoral term to fade.

From the risk management viewpoint, it is critical that the compilation and sharing of cooperative foresight data is built on cooperation between networks and a shared ambition: the creation of a better future. A coordinator of joint activities will be essential to the proper functioning of the networks in question. In particular, the coordinator's tasks will include securing the commitment of various actors and enlisting support for processes that promote the use of foresight data within both decision-making forums and participating organisations. Bearing in mind that the very purpose of foresight is to spark off discussion of weak signals and their consequences (even unpleasant ones), leadership of foresight processes will require expertise and courage.

# 2 CREATION OF A CLEAR, FLEXIBLE NATIONAL FORESIGHT APPROACH AND A LINK TO DECISION-MAKING

## 2.1 The new foresight approach will be based on interaction and networks

The first step in initiating cooperative foresight will involve the definition of a structure and approach that ensure its continuity. Responsibility for the national foresight process should be unequivocally assigned to someone with both the enthusiasm and resources to coordinate the process. The actor responsible for the project should be a dynamic, agile and implementation-oriented user of data on forthcoming change.

Foresight leadership should be interactive and network-based. Such an approach will in turn require the use of new procedures, expertise and resources. Key areas of expertise are as follows:

- process expertise and leadership,
- networking skills,
- foresight expertise,
- strategy expertise,
- implementation expertise.

In addition to the coordinating body, the network of national foresight actors should be strengthened. The most natural means of achieving this would be to expand the existing national foresight network and clarify its mandate. For example, such a mandate might include the production of thematic foresight data, brainstorming in new foresight forums and development of foresight data distribution. In expanding the network, the key idea would be to enable as many players and perspectives as possible to meet and, in an optimal scenario, to generate new perspectives.

An overview of the proposed foresight actors is given below in Figure 2 and further details on the related structure will be given in the following sections of the report. The foresight actors include a Government Foresight Group engaged in assembling key actors and supporting the development of national foresight. The activities of the Government Foresight Group will be enabled by a General Secretary whose key partner is the foresight network. The foresight network will include a broad selection of Finnish foresight actors and will serve as a link between them. This network will enable encounters between foresight actors from various sectors and reaches of society. Such encounters will ensure that the best experts are

involved in supporting decision-making and sharing their visions of the future, which will lay the ground for the foresight activities of other participants.

Basing the new foresight approach on networks, centralisation and a shared knowledge base will provide the flexibility required to fulfil the needs of various users of foresight data. Both full-time foresight actors and occasional participants will be able to meet through such networks, discussions and shared materials.

UNIVERSITIES

GOVERNMENT FORE SIGHT GROUP
CHAIRPERSON
Permanent and non-permanent members

TEA working
Ayency for
General Secretary + X
Ministry of x

Meding of
the
Permanent
Secretaries

TEA working
group.\*

FORESIGHT NETWORK

Ministry of y

Theme

FUTURE
WATCH

SITRA

THEME

Regions

MEDIA

MINISTRIES

RESEARCH
INSTITUTIONS

XXXX

**Figure 2** The actors engaged in cooperative foresight.

# 2.2 Foresight will be coordinated by the Government Foresight Group

Description of the Government Foresight Group

The working group proposes that a new body would be established to coordinate the currently fragmented foresight activities. In the future, national foresight should be led by a group given the working title of 'Government Foresight Group' by this report. This Government Foresight Group would be tasked with building cooperation between different foresight actors. It would achieve this by committing such actors to more extensive participation in public debate and to sharing and analysing foresight data and perspectives.

A high-level chairperson should be appointed to the group, which should also have a General Secretary located in the Prime Minister's Office, who is highly familiar with foresight and has a passion for development. Members should include Finnish forerunners in foresight, such as various ministries, research institutions and individuals. In addition, foresight opinion formers, such as representatives of businesses, national and regional foresight actors, media

representatives and academics, would serve as non-permanent members. Experts in the operational aspects of actual foresight work would meet through the national foresight network (2.3).

The working group proposes that the ownership and overall coordination of the new foresight approach be assigned to the Prime Minister's Office. In the opinion of the working group, the Prime Minister's Office fulfils the requirements and criteria set for the actor responsible for the overall process. Further support is lent to this proposal by the close connection between the Prime Minister's Office and the coordination of the Government Programme and other key strategic government processes via, for example, secretarial duties in meetings between permanent secretaries and the Office's leadership of the Government working group for the coordination of research, foresight and assessment activities (TEA working group).

Furthermore, as a step taken in the implementation of the the Government Report on the Future, the new foresight approach would strongly support the continuity of the Report. Continuous foresight could lighten the process underlying the Government Report on the Future, eliminating the need for at least some foresight data collection and analysis (see 3.6).

The new foresight approach would be primarily funded by the Prime Minister's Office, whose procurement practices would govern competitive tenders and any other processes required. This would not prevent close partners from applying their various contracting practices to the management of different parts and modules of the process. Although the Prime Minister's Office may finance procurements by other actors, it will not compensate for working hours. The cooperative foresight approach could also be coupled with new instruments used in the funding of governmental decision-making and strategic research (<a href="http://valtioneuvosto.fi/ajankohtaista/tiedotteet/tiedotte/fi.jsp?oid=393357">http://valtioneuvosto.fi/ajankohtaista/tiedotteet/tiedotte/fi.jsp?oid=393357</a>).

The Government Foresight Group would be established in early 2014. This will require secretarial resources from the Prime Minister's Office. In terms of workload, coordination of the Government Foresight Group will require approximately 4 person-days per month, at least in the initial stage.

#### The task of the Government Foresight Group

The Government Foresight Group should act as a visionary, inspiring leader for Finnish foresight data producers and users. It would be in charge of the national foresight process and its development, regularly reporting its results to permanent secretaries. One of its core tasks would be to foster the translation of perspectives into choices and actions.

The Chairperson would be supported by a Secretariat transparently engaged in preparing needs-based content themes and prioritisation proposals for consideration – in the light of the foresight network's expertise – by the Government Foresight Group. The Secretariat would also prepare foresight reviews (3.4), as well as tasks for delegation to the foresight network.

Procurement and funding related to cooperative foresight activities would also fall within the Government Foresight Group's remit.

# 2.3 The foresight network will include a broad range of societal foresight actors

The composition of the network

The National Foresight Network has already been operating for some time, with the aim of fostering public discussion, research and decisions on the new challenges and opportunities facing Finnish society. The working group proposes that the existing network be developed to enable the broader activation of participation by foresight actors in public foresight discussions and activities.

All member organisations of the current National Foresight Network have expressed their desire to continue. In addition, the network could be expanded by inviting the participation of bodies such as ministries.

From the viewpoint of the entire network, participation by the ministries is essential since this would enable the smooth sharing of information, tasks and expertise across organisational boundaries.

The goal is an open, lively network. Before the new network is established, a light brainstorming session and workshop survey will be conducted within the existing National Foresight Network, in order to forge cooperative practices and goals and to chart the organisations which should be included in an expanded network.

The network should also be cost-efficient, light and flexible. As the network expands, consideration should be given to ways of rendering it as efficient as possible and to the facilities required for physical and electronic interaction.

The working group proposes that the work of the network be organised according to a cluster cooperation model. Based on such a model, network members will represent foresight clusters that are either organisation or theme-based (e.g. the internal foresight function of the Finnish Innovation Fund Sitra or a ministry, or a theme, such as public health, compiled from across the clusters). The foresight clusters will convene independently and provide the network with foresight data, or will receive data and assignments from the network. All operations will be characterised by interaction and active communication, with an emphasis on encounters and diverse perspectives.

The working group proposes that the expanded network begin operating in mid-2014. The expanded network will require approximately 6 person-days per month from the actor responsible.

#### **Box 1** A more concrete description of the foresight network operations.

In addition to their own foresight work, the foresight network and its clusters will convene to address clearly defined tasks set for teams and to formulate and propose new ideas. For example, the network will be tasked with producing thematic foresight data, brainstorming within new foresight forums and improving the dissemination of foresight data. A key idea is that the network will enable the collision of highly diverse perspectives. Opinions will also be exchanged on electronic discussion forums and workspaces, for example through a mutually agreed "monthly clock".

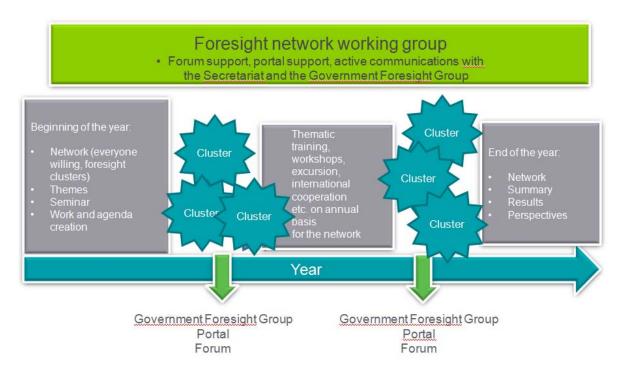
Although the network will be able to lengthen the time between meetings, the meetings themselves can also be lengthened. The network can also convene (physically or online) upon receiving a rapid assignment from political actors. Such meetings will involve willing actors relevant to the topic in question. Annual thematic excursions and training at least partly subject to a fee (depending on the network's resources) can also be organised for members.

Network members should be provided with clear motivation to participate in network activities. This might include the prospect of new data, an interesting expert network and the opportunity to influence foresight reviews, forums and the portal.

An overview of the foresight network's activities is given in the figure below. The underlying idea is that different actors work independently, choosing whether to participate and contribute on a case-specific basis. However, the Government Foresight Group will provide the network with special themes, to which the network and clusters will be invited to contribute. Meanwhile, the network will convene two to three times a year in meetings that enable collaborative work, the sharing of information and extensive networking between actors. Network members will work independently between meetings but, should they wish, will be able to tap into the network's channel, structures and peer expertise for the continuous refinement and sharing of information.

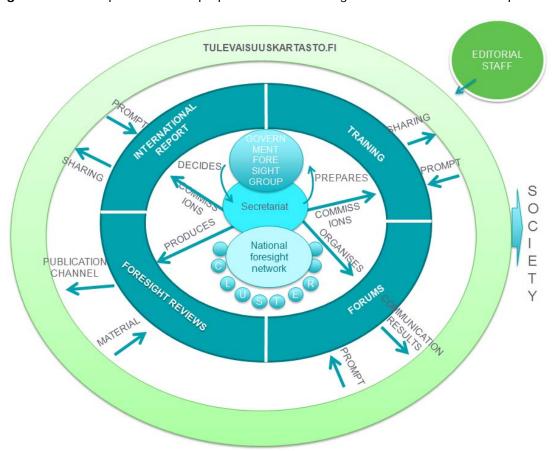
The operating model will be further specified after the establishment of the new foresight network. All network participants will have the opportunity to become involved in creating the network's working practices and culture. At the same time, the foresight activities, methods and time frames of the various network members will be thoroughly charted.

**Figure 3** An example of the foresight network's operating model.



# 3 NATIONAL FORESIGHT DATA SHOULD BE GATHERED AND COMMUNICATED IN VARIOUS WAYS

This section will present five ways of more efficiently gathering and communicating the foresight data generated by various actors. Some of these methods are new, while others improve existing methods. Figure 4 summarises the proposals (foresight forums, international reports, training, foresight reviews and the future atlas) and describes their roles in relation to the above actors (the Government Foresight Group, the Secretariat, the foresight network).



**Figure 4** Components of the proposed national foresight and their interrelationships.

## 3.1 Foresight forums will bring foresight actors together

The working group proposes the organisation of regular foresight forums that would bring together foresight actors. These should be scheduled to serve the information needs of the ministries and the Government, among other bodies. Information must be available when needed. Foresight forums must be open and connect activities undertaken by experts, businesses and civic society to societal decision-making.

Foresight forums should attract strong international participation that promotes the foresight's content, broader perspectives and the development of the forum participants' expertise. Over the years, the ultimate goal is to profile the forums as globally attractive events. The quality of the summaries and analyses created in these forums should be high

enough to gain followers, circulation and an international audience including the media. In other words, the forums should foster the national and international exchange and combination of information. They would also provide material for the preparation of foresight reviews and a foresight atlas (3.4 and 3.5), timed to support administrative needs.

Organisation of a foresight forum will require the contributions of the Government Foresight Group, network and Secretariat. The estimated workload will depend on the scale of the forum and the difficulty of the questions it aims to address.

#### **Box 2** An example of a foresight forum's contents and organisation.

The main responsibility for organising each forum should lie with a single national foresight actor, even if the impetus for the event is provided by the foresight network and its planning is led by the Government Foresight Group. Practical arrangements should be entrusted to an appointed project team that might, by agreement and insofar as possible, include members of the foresight network. The contents could also be crowdsourced.

Forums should be held annually and by parliamentary term, accounting for the needs of the public administration and businesses. Account should be taken of events such as elections and special decision-making processes, such as the mid-term strategy review session, the Government Report on the Future and future reviews by the ministries. The first forum will be held in early 2015, just before the subsequent general election, to create a novel opportunity for public debate on the future. Later, in 2017, long-term foresight data could be generated in connection with the centenary of Finnish independence, and a jubilee foresight forum with a broad international focus could be organised.

These should be dynamic events with renowned speakers, small groups, interesting participants and innovative workshops dedicated to applying futures research methods. It has been suggested that the forums should include 'sales pitches', directed at decision-makers, for new solutions and practices. This idea, borrowed from the Slush festival, already covers the festival's foresight element.

# 3.2 National foresight needs global perspectives

National foresight activities will be more useful to decision-makers if the activities are combined with a sufficiently global perspective and expertise. Contributions can be solicited by monitoring foresight beyond Finland's borders. The foresight content generated should be challenged by regularly commissioned reports examining Finland's future in a global context. These reports should focus on compiling and challenging the information published in the future atlas and refined during the foresight process.

The topicality, objectivity and quality of the foresight approach must be subject to regular monitoring and assessment. International perspectives should be sought on the basis of key themes in the Finnish foresight debate and as a source of the latest foresight issues. Furthermore, both the content and methods associated with the new foresight approach should be assessed in light of international experiences. Both assessment perspectives could be related to the funding instruments created during the Government's research funding reform.

When the new foresight approach is launched, resourcing will be required for international cooperation, sparring and evaluation. The related annual costs cannot be estimated at this stage.

## 3.3 Regular training maintains high-quality foresight expertise

High-quality foresight requires high-quality foresight expertise which supports both the creation and practical application of foresight data. For this reason, the working group is of the opinion that national foresight expertise should be strengthened and foresight training should be extensively integrated into the national foresight approach under planning. Development of expertise will incur costs in the form of relatively low-cost training events organised on a cooperative basis. The initial phase will involve estimated annual costs of EUR 50,000. Foresight expertise could be enhanced as follows:

- 1. Between the actors that produce and use foresight data (e.g. creative practices and foresight and futures research methods)
- 2. As a general competence futures knowledge (included, for example, in the curricula of comprehensive schools and at other levels of education))

#### **Box 3** Potential foresight training topics.

- Regular half-day events for example during foresight forums or meetings of the foresight network – at which different actors can share their best foresight practices, hear about the latest trends or learn about practical foresight methods and means of communicating them.
- Additional futures education in comprehensive schools.
- More investments in futures studies and foresight education in universities, institutions of higher education and universities of applied sciences and vocational education.

The aim is to continuously develop the expertise of Finnish actors, engage in the broader-based consultation of experts visiting Finland and develop facilitating skills and methodology expertise.

Although training of those involved in the process could be held within the framework of the foresight network, the related funding should be agreed separately. In any case, the above foresight forums could include a training element, perhaps by applying several methods simultaneously to the resolution of problems under common themes. This would reveal the benefits and drawbacks of different methods.

# 3.4 Foresight reviews will be tailored for politicians

The key aim of national foresight will be to create perspectives and data that provide decision-makers with better and more extensive support. In this respect, a challenge lies in the communication of foresight to those who prepare and make decisions and in their reception of such foresight. To solve this problem, the working group proposes that, based on the entire process described in this report, politicians be provided with foresight reviews designed to generate relevant, tailored information for decision-makers. Such reports would selectively combine perspectives created at different phases of the national foresight process.

Foresight reviews would not constitute policy recommendations but genuine briefings on a topical, foresight-related issue of which decision-makers should be aware.

There would be three types of foresight reports:

- 1 Offering-based
- 2 Demand-based
- 3 Regular (e.g. monthly, annual or in the rhythm of policy-making)

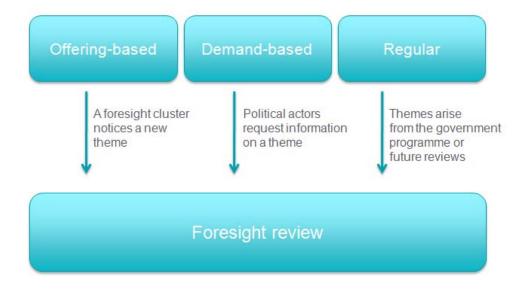
An offering-based foresight review would be generated as part of the processes engaged in by the foresight network or foresight portal. Such a review could be connected to a political theme under preparation and on which significant information is available, or to a phenomenon raising concern among foresight experts and which needs to be flagged up or accounted for within ongoing processes.

A demand-based foresight review would address tailored themes such as those requested by decision-makers.

For example, regular foresight reports could be connected to the political decision-making cycle during an electoral term (preparation for the government discussion on spending limits, some policy definitions issued as reports or themes that are relevant to decision-making and which may be subject to rapid change). Regular reviews, for which particular user groups could be identified (special advisers, officials, etc.), could even be published monthly, in a more 'passive' manner. It would be important to ensure the high quality and attractiveness of these reviews. They should not be too cumbersome, but produce genuine additional value.

No separate fees should be paid to participants for the production of the reviews, since participants will at any rate benefit from collaboration, learning, networks and having the opportunity to shape the future. Preparation of the reviews will also require input from the foresight General Secretary.

**Figure 5** The creation of foresight reviews.



#### **Box 4** A potential preparation process for a foresight review.

The foresight General Secretary of the Prime Minister's Office will prepare reviews in collaboration with other key review actors. Whereas the primary objective will be to compile data already collected or generated, the creation of new research-based information may also be involved. The presentation of interesting and even contradictory views will be important: these will provide a challenge and even shed light on weak signals, opportunities and risks. This will ensure that even unpleasant issues are brought to light, thereby reducing the risk of politicisation.

The reviews should be communicated in a visual manner and new communication methods such as text, social media messages or spoken voice files should be tried out. Depending on the user, the same content can be distributed using different formats. A separate report should be prepared on the different formats used, perhaps in collaboration with a skilful service designer.

When the Government Programme is being drafted, key themes will be identified within the network and atlas, with the objective of preparing foresight reviews on the basis of such themes within a year. The themes will accord with the key objectives of the Government Programme. The related schedules will be defined based on the estimated decision-making schedule. In the autumn of 2015, the Government will have a perspective paper, prepared in the spring of 2015, that challenges and confirms the development trends anticipated in the ministries' future reviews. These perspectives can be further challenged or confirmed by opening them up, by means of crowdsourcing, to wider public debate.

## 3.5 The future atlas website provides an overview of foresight data

The working group's discussions and the feedback it has received have prompted it to propose an online site for the compilation, analysis and distribution of information. The working title of this site is the 'future atlas' (Tulevaisuuskartasto.fi). At best, the future atlas could become a lively centre of foresight activities. The starting point is that those who provide the site with information will also benefit from it in their own work. The bigger the group of information producers committed in the work of the future atlas, the more versatile will be the information presented and used. The future atlas could be used to store information regarded as significant to decision-makers. Such information could be embedded in broader contexts, refined and analysed.

Operating as a website, the future atlas would be an efficient means of assembling foresight information for various users. Foresight data and information on the grounds for decisions and choices would be transparently disseminated. The atlas would shed light on the foresight activities of different players and could eliminate duplicate work. A shared foresight atlas would also add to the number of horizontal perspectives and make information easier to find.

#### **Box 5** Preliminary content of the future atlas.

Both foresight clusters and individual producers of information could freely contribute information to the foresight atlas on the basis of commonly agreed principles. These would include the provision of reliable metadata and obtaining the permission of the information's owner to publish and use such data. The authors, organisation and methods behind each set of data would have to be specified. This would be accompanied by a brief description of key and rapidly applicable foresight observations. Information producers would be authenticated as future atlas users. On the other hand, steps must be taken to ensure that the authentication process does not hamper the addition of new information to the portal.

Key questions include: in what kinds of categories and under what criteria will data be grouped. A phenomenon-based approach would be the most useful one for most information users. This approach should take account of the interdependence of various phenomena. It would also be important to examine the relevance of data entered into the future atlas, the scope of its influence and its time-frame.

The atlas's user interface and presentation of data must be intuitive and attractive. In addition, the atlas may display different future paths, perspectives and alternatives. Information could be provided in the form, say, of content documents, links, scenarios, blogs and discussions. The future atlas should also provide gateways to key data resources.

A properly functioning internal search engine would make information easier to find. Account should also be taken of the fact that some foresight data could rapidly age while other data may remain relevant for years.

The future atlas must be interactive, enabling collaboration and discussion of its contents. Different actors could share topical issues and address urgent matters to each other via this shared forum. They could also engage in discussions via the various social media forums (Facebook groups, Twitter and others) linked to the atlas. Users will also be able to upload information into shared wikis. The future atlas should include a voting function allowing hot discussion topics to be highlighted on the frontpage. Furthermore, the atlas could be used to prepare an expert analysis based on reliable, transparent methods. For example, foresight could be visualised through games provided for younger user groups in particular.

#### Development of the future atlas

The working group proposes the following goal: a future atlas should be launched in 2015, with a high-quality user interface, a growing number of users and providing clearly benefits for various actors. In addition, the working group proposes that the new foresight network and Government Foresight Group discuss the need for and development policies of the future atlas.

#### **Box 6** Development of the future atlas.

Administration of the future atlas requires strong expertise in phenomenon-based information management. The future atlas should form the core of foresight activities. With the support of editorial staff, the General Secretary should be in charge of the future atlas as a whole. Consideration should be given at the very outset to the team needed for the high-quality editing and practical maintenance of the website, as well as the physical location of this team.

One of the key requirements for long-term foresight is the use of a variety of data resources such as data banks. Clarification should be obtained of which data resources will be beneficial to foresight activities and steps should be taken to ensure that links are created to such resources from the future atlas. The possibility to add new data produced during foresight activities should also be investigated. A key question from the viewpoint of the entire process is that of whether foresight actors can benefit from the opportunities provided by big data.

It is recommended that the future atlas be built on an existing, well-known Finnish platform already in use – such as 2030.fi or foresight.fi – or a design based on a foreign portal. However, a sufficiently versatile and high-quality future atlas is likely to require the construction of a more complex platform. If it is agreed that the platform will be based on the needs of various actors, its estimated cost will be EUR 100,000. Although the Prime Minister's Office will finance the groundwork for the future atlas, it will not act as its administrator, which should be separately assigned.

Content added to the future atlas could be in Finnish, Swedish or English but, despite the potentially multilingual nature of such content, the future atlas itself should be created in Finnish.

## 3.6 The new foresight approach will affect current foresight processes

#### Government Report on the Future

The Government Report on the Future forms part of the Government and Parliament's dialogue on the future. Published by the Government for submission to Parliament once each electoral term, the Report usually extends well beyond a single term of government. The Report is prepared by the Prime Minister's Office in the manner separately agreed for each governmental term. Its preparation customarily involves a long foresight phase, whose results are used when drafting the Report's policy definitions. The Prime Minister's Office has also promoted the implementation of the Government Report on the Future, with the implementation process being reported in the subsequent government term.

During the current government term, officials and political actors involved in the preparation of the Government Report have stated that the process should be lightened and more closely related to the Government's priorities. If we are to shape the future, we need faster action and learning through doing, rather than more planning. From now on, the production and communication of information should be more agile, and be focused on and benefit more from new methods. Furthermore, the Parliamentary Committee for the Future has become more networked and has begun generating in-depth content analyses. Consideration must therefore be given to how this will change the ongoing dialogue on the future.

If the new foresight approach is adopted, a new breed of flexible and extensive dialogue on the future will be enabled. The approach could simplify the preparation process for the Government Report on the Future and create scope for choices and visionary reporting.

#### The ministries' future reviews

The ministries have produced future reviews in support of government negotiations since 2003. However, according to surveys conducted in the autumn of 2013, political actors have not used these as widely as expected. Based on the survey conclusions, the contents of the 2014 reviews will be harmonised in terms of their structure, schedule and communications.

Production of future reviews is likely to continue. Their contents could be used in the national foresight process in a way that permits the first foresight forums of 2015 to address the reviews as a combined whole. For its part, the foresight portal could support the ministries as they prepare their future reviews, while disseminating valuable foresight data and perspectives generated by the ministries to the general public for discussion and application. If the new foresight approach is adopted, it will simplify the preparation and, if desired, may even partially replace future reviews by the ministries.

#### Interface with the Team Finland Future Watch service

Because the Future Watch and national foresight approach offer abundant opportunities for cooperation, their efforts should be closely entwined. Since both collect and produce similar foresight data, the same actors could meet in foresight clusters and at training events and forums. In addition, while they frequently have the same basic information, their foresight time frames are rather different: Future Watch looks some two to five years ahead, while national foresight clearly addresses a longer time span of at least eight years. In this sense, these two foresight processes complement each other very well.

#### **Box 7** Introduction to the Team Finland Future Watch service.

Team Finland Future Watch is a foresight service intended to support the business development activities of enterprises by providing them with foresight data from around the world. This helps companies to assess the impact of possible developments on their business and facilitate inputs to their innovation activities. Most smaller companies lack the resources required to gather or acquire information of this kind. The strength of Future Watch lies in its extensive international networks: missions operating under the Ministry of Foreign Affairs and the foreign offices of the actors under the Ministry of Employment and the Economy participate in the compilation and analysis of information. Information produced by Future Watch also benefits the internal strategic planning of actors that have participated in information gathering.

Future Watch uses the Trendwiki online tool to compile and analyse foresight data. In addition to information offered, businesses can turn information to insight by participating in special "future sessions" and other events. Material from these events, as well as other reviews produced by Future Watch, are freely available on the Team Finland Future Watch website. Team Finland Future Watch, which covers the business sector in particular, is an important part of the foresight network.

# 4 NEW FORESIGHT APPROACH BUILT IN SMALL STEPS AND THROUGH TRIAL AND ERROR

A new foresight approach will be built in small steps and through trial and error, rather than overnight. The key idea behind the launch of cooperative national foresight activities is to benefit from functional structures and processes already existing in Finland. Examples of these include the current National Foresight Network and the possibility to refine existing foresight websites into a shared foresight atlas.

The various phases of the network's launch are described in the relevant, foregoing sections. In sum, the initial step would involve appointing a Government Foresight Group and the related Secretariat and creating a new foresight network. Discussion of the needs and development directions of the future atlas should also begin immediately. Meanwhile, the first foresight review will be published in the autumn of 2014 at the earliest and the first forum will be held in 2015. Continuous training and research should be integrated with the foresight approach at a later date.

A schedule should be established of around four years or so and a slightly more detailed annual schedule should be set for foresight activities.

The working group proposes that the new national foresight approach be experimentally launched by taking the initial steps listed below. The launch will be monitored and the first experiences reported to the ministerial working group for the Government Report on the Future.

- 1. The Prime Minister's Office will appoint a working group on the Government Foresight Group as proposed.
- 2. A national foresight network will be formed and assigned a mandate.
- 3. The network and the Government Foresight Group will be tasked with organising the first foresight forum in early 2015.
- 4. Discussions on the need and development plans for a storage site for foresight materials will be held by the Government Foresight Group and foresight network by the end of 2014.
- 5. To ensure that the aforementioned steps are taken, a fixed-term part-time foresight General Secretary's position, lasting until the end of the electoral term, will be created in the Prime Minister's Office.



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