

RISCS Anticipation and Futures Literacy: Policy Workshop Report

RISCS held an online policy workshop on 14th July 2021 with 20 participants from Government, academia, and the wider community as part of the RISCS Anticipation theme led by Fellow Professor Genevieve Liveley.

Context

The RISCS 'Anticipation and Futures Literacy' Fellowship theme aims to improve understanding of the relationship between futures thinking and cybersecurity, develop expertise, map best practice, and build capacity to provide insights to improve cyber risk management. An overview of the work undertaken to date can be found on the RISCS website.¹

The aim of this two-hour session was to generate ideas for the Fellowship agenda on where futures literacy (FL) could benefit cyber security policy, and where it might be relevant to both academic and policy communities.

The workshop was based on the assumption that futures literacy is a core feature of effective cyber security policy. The session started with plenary discussions on what participants thought futures literate policy making in cyber security might look like. Breakout groups then considered how we could integrate futures literacy (FL) into cybersecurity policy making and any barriers/challenges that stand in the way.

This report summarises the discussion and the next steps for the Fellowship, grouped under five themes: changing civil service culture, providing education and training for policy makers, providing tools and resources, changing attitudes towards dealing with uncertainty, and creating a shared language for futures literate cyber security policy. Each section explains the vision, barriers, solutions and what we plan to take forward following the workshop.

What is Anticipation?

Anticipation is the academic discipline that deals with how we, as humans, reason about the future. It is broadly defined as using expectations about the future to inform action in the present.

What is Futures Literacy?

Futures Literacy (FL) is the skillset that guides anticipatory thinking and action. UNESCO calls FL an "essential competency for the 21st century". It is 'the skill that allows people to better understand the role of the future in what they see and do. Being futures literate empowers the imagination, enhances our ability to prepare, recover and invent as changes occur.'

One example of using futures literacy to empower the imagination is the creation of fictional future narrative scenarios – such as futures news media stories.

Prof Liveley has recently conducted this exercise as part of her work with CyRes and Futures Literacy through Narrative (FLiNT). They created a series of fictional narratives informed by robust current sociotechnical data on emerging and futures trends and inspired by real news stories.

Futures stories like these can help to focus minds on the importance of future preparedness when managing the risks and obligations for which boards and others are legally responsible. Such stories can help boards to identify learning points to inform action now, spot potential weaknesses in policies and plans, explore new ways to mitigate risks and harms, and build not only resilience but forward-thinking "prosilience".

¹ RISCS Showcase 2020 - Anticipation: <https://www.riscs.org.uk/anticipation-prospection/>

1. Changing civil service culture

Vision: Expectations for the use of FL in policy making are set by senior officials. There is institutional buy-in, ensuring that FL is embedded in teams and capacity is not lost when individuals move roles.

Barriers: It can be hard to get senior staff (Deputy Director Level) engaged given the initial time investment required to develop skills in FL, and as training is not mandatory. Reliance on individuals trained in FL can mean expertise is lost when they change roles. Tools for FL need to be more accessible and agile if they are to be used in fast-paced decision-making situations.

Solutions: Identifying means by which senior civil servants could be persuaded of the value of FL, to help establish a culture where FL is expected. One idea suggested to help demonstrate the value of FL quickly and in an accessible way was to develop a set of compelling FL case studies. It would also be useful to seek the perspective of senior civil servants to understand what tools might best help get them on board. Other potential solutions suggested included: a network of futures professionals; a 'training the trainer' model; FL 'champions'; and an alignment of FL with the civil service skills and competency framework. This could help to create buy-in amongst senior staff, along with examples of FL in practice.

We will:

- **Develop and share a set of compelling FL case studies.**
- **Help to build a network/community of senior officials and civil servants to champion FL.**
- **Explore options to align FL with the civil service skills and competency framework.**

Why do we need FL for cybersecurity?

Cyber security needs to grapple with broader questions about digital futures and consider the implications, threats, opportunities, and unanticipated events, of a range of different futures. This may be in relation to the evolution of current technology, emerging and future technology and also, critically, how developments in technology may interact with and impact on society, policy, organisations, and individuals.

2. Providing education and training for policy makers

Vision: Policy makers understand the value of FL and have the skills and resources required to incorporate this into the policy making process. For example, when exploring new policies around emerging technologies, deep consideration is given to the anticipation of future trends that could affect the take up of these technologies and to the imagination of different applications of the technologies (intended and unintended) and wider implications for society.

Barriers: Training in FL has to compete with other tools and techniques. Understanding and appreciating how powerful FL can be requires a significant time investment from people who are already under time pressure. If FL is not valued by senior staff and there is no expectation that it will be used routinely in policy making and review, there is little incentive for staff to seek out or undertake training.

Solutions: Focusing on key teams who would benefit most from using FL in the short to medium term could be a practical alternative to attempting to make everyone an expert. Making futures toolkits more accessible and agile for policy makers and integrating FL to fit with existing techniques for futures work.

We will:

- **Identify key policy teams who might most benefit from embedding FL in their work and explore practical and deliverable training options.**
- **Help to build a network/community of policy makers to champion FL.**
- **Explore options to align FL with existing tools and techniques for futures work.**

3. Providing tools and resources

Vision: Consistent FL frameworks and a set of easy-to-use tools and/or checklists are readily available and promoted to civil servants but are applied flexibly. Existing resources (such as the GO-Science introductory futures toolkit)² and FL ‘champions’ are utilised widely.

Barriers: Accessing futures tools can be difficult if you don’t know where to find them. An investment of time and effort (in terms of training) might be required before they can be used effectively.

Solutions: Creating a single source for guidance and support on best practice and how to apply FL.

We will:

- **Develop and share a set of FL tools (including GO-Science resources).**
- **Help to build a network/community of senior officials and civil servants to champion FL and set the ‘gold standard’ in FL practice.**
- **Through RISCS, develop and lead a future research agenda on FL in cyber security policy.**

4. Changing attitudes towards uncertainty

Vision: Policy makers and senior decision makers acknowledge and understand that it is not always possible to have robust ‘evidence’ about the future and that futures data is necessarily uncertain. An understanding that FL is not about getting to one preferred future ‘end point’, but instead it requires being comfortable with uncertainty and making decisions more flexibly.

Barriers: People naturally have a preference for certainty and assume that futures work can deliver a set of clear options to choose from. There is a perceived political need for ‘evidence-informed policy making’ even when that data-based evidence is not always available or reliable.

Solutions: The FL use of metrics, probability yardsticks, or other signposts in futures work, and the creation of FL scenarios to explore the multi-order sociotechnical consequences of futures ‘targets’ as they materialise and/or branch out.

We will:

- **Develop and share guidelines on the FL use of metrics and yardsticks.**
- **Develop and share guidelines on the FL creation and use of scenarios.**

5. Creating a shared language

Vision: A shared understanding of the assumptions and different uses of language between sectors. For example, FL allows room for both risks and opportunities, or ‘growth’ and ‘decline’, to co-exist within the same futures scenario or model.

Barriers: The dialogue between policy makers and delivery teams can be poor. Bringing the right people together can be hard without pre-existing connections, and when people lack the capacity to engage. Both groups can unhelpfully separate the risks and opportunities which co-exist in futures scenarios.

² GO-Science introductory futures toolkit: <https://www.gov.uk/government/publications/futures-toolkit-for-policy-makers-and-analysts>

Solutions: Investment in creating a shared language for FL that works across different groups within policy making and other sectors (such as law enforcement and security). Framing FL to work for both risk mitigation and maximising opportunities.

We will:

- **Consult and develop a lexicon to provide a common FL language for futures work across sectors.**
- **Develop and nurture a collaborative 'community of thought-leadership' around the challenges of FL policy and delivery.**

Some of these ideas can be applied to the use of FL in policy making and government in general, rather than solely in the context of cyber security or technology. The RISCS Fellowship will strive for progress in integrating FL into cybersecurity policy making through the commitments to action outlined here and continue to work closely with others who are working to incorporate FL into policy making across a wide range of policy areas.

Contributors

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