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Imaginative Scenario Planning
For Security and Law Enforcement Organisations

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This report was produced from the Imaginative Scenario Planning for Law Enforcement Organisations project, funded by CREST and led by Professors Math Noortmann (Coventry University) and Juliette Koning (Oxford Brookes University). More information about the project can be found at: https://crestresearch.ac.uk/projects/imaginative-scenario-planning/

About CREST
The Centre for Research and Evidence on Security Threats (CREST) is a national hub for understanding, countering and mitigating security threats. It is an independent centre, commissioned by the Economic and Social Research Council (ESRC) and funded in part by the UK security and intelligence agencies (ESRC Award: ES/N009614/1).

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**Foreword**

This project was awarded and financed by the Centre for Research and Evidence on Security Threats (CREST, [https://crestresearch.ac.uk](https://crestresearch.ac.uk)) on the basis of a general call for “Research for Understanding, Mitigating and Countering Security Threats” with a specific subtheme on “Scenario Planning and Prediction”.

It was developed and executed by: Prof Math Noortmann from the Centre for Trust, Peace and Social Relations (Coventry University, UK), Prof Juliette Koning from Oxford Brookes Business School (Oxford Brookes University, UK), Dr Joost Vervoort from the Copernicus Institute of Sustainable Development (Utrecht University, the Netherlands) and Dr Ingrid Hoofd from the Department of Media and Culture Studies (Utrecht University, The Netherlands). Birgit den Outer (Oxford University, the Netherlands) and Dr Joost Vervoort from the Copernicus Institute of Sustainable Development (Utrecht University, The Netherlands) and Dr Ingrid Hoofd from the Department of Media and Culture Studies (Utrecht University, The Netherlands) and Dr Ingrid Hoofd from the Department of Media and Culture Studies (Utrecht University, The Netherlands) and Dr Ingrid Hoofd from the Department of Media and Culture Studies (Utrecht University, The Netherlands).

The first draft of this publication was introduced to and discussed with 40 invited guest from academia, civil society and government, who provided valuable additional knowledge. Prof Cliff Oswick, Professor of Organisation Theory at Cass Business School (UK) and Neil Walsh of the United Nations Office on Drugs and Crime placed the future scenario planning in the context of organisational strategies and transnational organised crime.

The project is a wonderful example of the co-production of knowledge, across cultures, experiences and disciplinary approaches, which resulted in this report to be used for similar exercises in other law enforcement organisations or adapted for specific purposes.

Preparing for an unknown and intrinsically uncertain future requires a special logic and skill set. It requires imagination and creativity; out-of-the-box thinking. Next, it requires developing multiple scenarios and designing holistic strategies. And finally, it requires the building of an organisation that quickly adapts to new, unexpected developments and situations and that does not freeze when the future throws them that unforeseen curveball.

**Who anticipated:**
- bitcoin, 9/11, facebook, synthetic designer drugs, iPhone, Columbia, suicide bombings, Brexit, WikiLeaks, the global financial crisis, the collapse of the Soviet Union, and so on.

Scenario planning as a tool for security and law enforcement organisations to anticipate unpredictable futures is a new approach to managing potential security threats. Current research and policy documents indicate that future scenario planning is not widely practiced in these organisations; short term operational and tactical planning dominates policy and management. Law enforcement organisations that do investigate longer-term futures, tend to develop future strategies based on past trends. This inhibits the organisation’s capacity to anticipate future security incidents in an effective and flexible manner.

How can we anticipate and counter the diversity of forms in which such abstract and broad security threats as terrorism, cybercrime, organised crime and financial crime present themselves in our future? How does the police force look in our future? What technologies are available to commit and counter crime? What determines our global development: the economy, climate change, population growth, (cyber)technology, transport...? In order to engage these questions we, first of all, organised creative, collage-making focus groups with members of the Landelijke Politie (The Netherlands) and the National Crime Agency (United Kingdom) in order to unearth new data. Next, we organised a day-workshop with both groups to experiment with multiple scenario’s based on the focus group outcomes. Finally, we initiated a discussion on the outcomes of the scenario planning exercise at the End Conference.

We advise these organisations to prepare for hitherto unknown security threats and their unknown effects; and to do so in a way that (1) imagines a variety of possible futures, (2) undertakes a holistic analysis of those futures, and (3) strategically plans for the long term.
2. Scenario Planning: Practising with the Future

There are inherent problems that arise from using prediction as a strategy for determining how to mitigate future threat. Whilst success may be found predicting trends on a short-term basis, mid and long-term events are contingent on many interacting factors and prediction therefore becomes unreliable.

Scenario planning offers an alternative solution to this issue. The usefulness of the technique is not dependent on the likelihood of the scenarios coming true, but the opportunity for security and law enforcement organisations to set flexible strategies to deal with them. It is the development of a flexible response that marks the success of this technique. See Figure 2.1

Scenarios are:
- Multiple plausible futures
- What-if stories of possible futures
- Explorations of crucial future uncertainties
- NOT predictions
- Complex systems thinking
- A futures technique
- Tools for building adaptive capacity

Scenarios: Beyond Prediction

Figure 2.1 Scenarios help move away from thinking about one most likely future – toward multiple futures based in multiple presents and pasts. Adapted from Vervoort et al. (2015).

...what you want this boat for?... to go in search of the unknown island... what unknown island?... The unknown island... nonsense there are no more unknown islands... they’re all on the maps... only the known islands are on the maps... what is this unknown island you want to go in search of?... if I could tell you that it wouldn’t be unknown... From Jose Saramago (1997) ‘THE TALE OF THE UNKNOWN ISLAND’
Human societies are by definition complex and dynamic, and need to cope with existing and future uncertainties. Security and law enforcement agencies need to anticipate certain future developments as part of their task to prevent and mitigate future security threats. Not only are future threats and risks uncertain; the future consequences of taking preventive and anticipatory action today, are also unknown. So how can these agencies work with the future?

### 3. The Basics of Engaging with an Uncertain Future: Six Key Recommendations

**DO NOT try to predict the future**

The default mode of any organisation faced with planning for the future is to look for prediction. For shorter-term futures and for tactical-level planning, prediction may be adequate – not perfect, but practically useful. However, when law enforcement agencies consider changes beyond the next few years, and what these changes mean for them, it is important that there is a widespread realisation that we are dealing with ‘deep’ or irredeemable uncertainty. We can’t resolve it completely.

**DO NOT rely on the biased present**

The present blinds us to the possibilities of the future, and we are often unaware of how the present limits our thinking. Current trends are the ingredients of a biased present. Relying on the likelihood that any one emerging trend will become a future reality is dangerous.

**DO think multiple futures**

A great way to get out of our biased present-based mindsets is to let many different, surprising, challenging futures bloom. Even if some of these futures do not avoid simply projecting our ideas about the present into the future, if we create many different futures, the set of futures as a whole is more likely to surface new insights.

**DO use creativity and imagination**

Even when we are engaging with multiple futures in order to move away from the present, we can become stuck due to our thought on how plausible the options may be. This can limit our thinking. We need to let go of the idea that we are trying to think about the most likely scenario, and just come up with as many ideas as possible. These scenarios that are difficult to imagine actually help us to understand the strengths, weaknesses and risks in an entirely new way.

**DO practise with futures: experiment, simulate, take perspectives**

Security and law enforcement organisations should practise with different futures to investigate and improve their abilities to adapt to uncertain futures. This means experimenting with such futures – how do these organisations actually respond to different situations? It also means including the perspectives of antagonists, members of the public, and so on.

**DO link futures back to present-day adaptive capacity – what needs to change?**

Whilst planning for every future contingency is impossible, the challenge lies in building a security or law enforcement organisation that has the adaptive capacity to deal with the future, however uncertain. Adaptive capacity is the ability of an organisation to adapt to constantly changing contextual, future, conditions. The lessons learned through practising with the future should connect back to present-day activities in a manner that actually allows the organisation to become better at adapting to uncertainty in a concrete sense – leading to new skills, capacities, ideas and strategies. The approaches outlined in this report should be used to critically investigate what goes on now in these organisations, as well as investigating plans for the future.
4. Working With Uncertain Futures: A Step-By-Step Guide

Any process that seeks to engage uncertain futures requires the capacity to imagine the future, build scenarios and adapt strategies. The following steps are indicative of building that capacity:

A. Ask organisational questions about your process
B. Use creative approaches to explore key drivers of change
C. Create scenario frameworks
D. Develop scenario narratives
E. Use scenarios to experiment with capacities and strategies

The project was deliberately designed as a sequence of three related activities: creative collage making, focus groups, a scenario planning workshop and an end event intended to discuss and operationalise findings and outcomes.

A. Ask organisational questions

Before you start, ask yourself:

What are we trying to achieve by thinking about the future?
Your goal can come from specific decision-making and priority-setting activities, or from raising new questions, capacity development and learning. Whatever the purpose, how the achievement (or failure) of the objectives will be measured needs to be considered.

Who are the users of the process?
Different groups of users will have different methodological preferences, different amounts of time they can allocate to the process and different time-horizons as their focus. Developing futures with users has proven to be the most successful approach as the futures created are then owned and understood by all involved. Users are more likely to take scenarios, collages and other imagined futures seriously if they are involved in generating them.

Be careful about the creation of future scenarios by specialist teams without the involvement of those who are meant to make decisions based on the futures created.

What are the capacities associated with the process?
Who are the people organising the foresight process and what are their capacities and experiences, what methods are they familiar with and should they learn? Are they able to effectively integrate the foresight process into relevant decision-making processes and how easily replicable does the foresight process need to be?

Based on these questions, what is the scope of the process?
What time horizon is considered? What are the boundaries of the societal system(s) that are being discussed? These questions will help with the next steps and help prevent that the entire world has to be taken into account.

Our project process was aimed at quickly familiarising key members of Dutch and UK law enforcement organisations with the basic elements of working with uncertain futures. To do this, the process was designed to be accessible — and much room was left for discussing the approaches themselves. Most participants had experience with approaches for exploring the futures — some were themselves specialists seeking to use the approach for supporting others. The scope of the process focused generally on the challenges for law enforcement in the Netherlands and the UK over the next two decades.
B. Using creative approaches to
(1) explore the future and/or specific future issues, and
(2) to identify drivers of change

A key challenge at the beginning of a process of exploring the future is determining what is relevant to investigate. What are the developments, processes, movements and major changes that will have an impact on the system of focus over the time period being investigated? We’ve already mentioned the issue that many people have a hard time getting out of the present when thinking about challenging futures.

Our recommendations:

1. **Use an approach that stimulates lateral and creative thinking** for the identification of key issues and driving factors that frame explorations of the future. Below, we describe one such an approach: creative collaging. Multiple approaches can also be combined to ensure complementarity. Extensive desk research can support this.

2. **More issues/driving factors is better**. It is important to be exhaustive – creating a long list of driving factors is often valuable, because people will come up with the most obvious driving factors first – those that are already most commonly used in everyday practice. Ensure diversity of driving factors by asking which dimensions (cultural, social, technological, financial etc.) might still be missing. In this phase, having too many driving factors is not a problem – selection happens in the next step.

3. **Include driving factors that may seem rather far removed from the system** being focused on – for instance, factors changing economic conditions or global geopolitical forces that may impact a local or national context.

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**Creative collaging**

Collage: is the process of using fragments of found images or materials and gluing them to a flat surface to portray phenomena. This is a great approach for lateral and creative thinking about key issues and drivers.

- **How to ‘do’ it:**
  - Flick through magazines (with lots of pictures) and cut out pictures and slogans that relate to your imagined ‘future’ or even better let the images from the magazines inspire you: what images spark ideas about a far-away future?
  - Assemble the selected images into one collective picture (the collage) by gluing the selected images to a larger paper in any way you want.
  - Explain the collage to the other participants: what do each of the images express, what are the little stories behind each, why were they selected, how do they relate to each other? It is suggested to record this conversation in order to capture all the details later.

- **What does creative collage making offer** (after Butler-Kisber & Poldma, 2010):
  - Direct involvement from the participants on the issues they find relevant.
  - More intuitive engagement; arranging image fragments can reveal unconscious connections and new understandings.
  - Ways to make tacit knowledge and ideas explicit.
  - A challenge to linear thinking associated with more traditional approaches.
  - Free association(s).
  - Different conceptualisations of a phenomenon and a more nuanced understanding.

- **Collage-making in a group or as an individual:**
  - **Group**: allows discussion on selecting images, group members can query each other; some groups discuss what to look for first, others prefer to each select images and then discuss these for final selection. One disadvantage: the process can be taken over by a dominant group member (and thus less voice of others).
  - **Individual**: provides all the space to follow one’s own ideas and thoughts, but lacks the interactive engagement with others and opportunity to be challenged.

- **What is done with the collage:**
  - Groups (individuals) explain their collage to the other groups (individuals).
  - Participants can question the points made, offer their observer interpretations.
  - The open expression of ideas through a pictorial representation allows a whole range of attitudes, beliefs and feelings to emerge and to be explored, thus generating greater understanding of others’ perceptions of the same situation.
In two focus groups with law enforcement organisations in the Netherlands and the UK, creative collaging was used to explore future contexts for law enforcement. The results from this process were then used to map drivers for future scenarios. The collaging had two parts: what does the world look like in 2040; what are main threats and drivers in that world?

**Remarks by participants on collage making:**
- The collage-making produced rich data in a relatively short period of time
- Collage making takes you out of your normal way of working
- In particular the exchange with the others was of interest to me; we are all somehow stuck in our own ideas, the arguments of others were really provocative and enriching
- Leafing through the magazines made me ‘change’ my mind on what to choose; gave me new associations

As a result of the creative collaging several, maybe less-predictable, future threats came up:
- Growing joblessness among middle class will see increase in crime
- Separation of body and mind – online identities separate the physical and cognitive
- Water and electricity wars will break out
- Tech-savvy specialised crime becomes mainstream
- Increase of vigilantism (supported by governments, end of policing)
- Notwithstanding the advance in technology, traditional crime will stay (gun/knife)
- It will be easier to lead double lives and thus for criminality to go by unnoticed
- Space tourism, hacking of rockets, space mining (debris attacks planet earth)
- Manipulation of science to create criminals
- Manipulation of food to create chaos and deadly viruses
- Dark side of algorithms and self-thinking machines: spying for insurance and space satellites that will disrupt infrastructure or let them crash
- It is getting easier to influence people, and for people to be influenced

**Drivers of future security challenges**
The drivers of future security threats include both expected and less expected drivers. This is not a problem as for the scenario-planning exercise a large number of drivers is useful.

**Technology stood out as the ‘word cloud’ below shows:**

*Technology/big data/digitalisation/drones/algorithms/online-ness: seen as main driver for societal changes such as vulnerability of people/groups; growing divides; retreating into homes; loneliness; growing anonymity and leading double lives – creates new threats based on technology (cybercrime, data/technology manipulation, digital warfare) and society (going about things unnoticed; vulnerable people who can be exploited; minions and vigilantism).*

**Environment/climate change:** finite resources; global warming; extreme disasters – increase of fights and wars over scarcity such as water wars/electricity wars, bio-crimes, commodity crimes etc.

**Society/people:** aging population; isolation and loneliness; austerity; gender; societal divides – creates civil unrest, being judged before judgment, mass mobs, new criminals/new victims; communication (truth-finding and democratisation of information).

**Economics/politics/finance:** China; economics rule; leadership; nationalism; political pressure – impact on law enforcement, changing law systems (naming/shaming); digital finance.

**Examples of using creative tools in law enforcement**
In the field of law enforcement, practitioners are constantly confronted with extreme or previously unimaginable situations. Eidinow & Ramirez (2016) describe how the aesthetics of creative methods can help practitioners think through the limits of what might happen in crime and policing, and subsequently communicate their thoughts to others. Another frequently used example of a creative aid in both law enforcement and in the military (where it was first used) is gaming. Games and scenarios have a number of futures-related features in common, as Walker (1990) describes in his article on the two. Games enable law enforcement officers to explore future (crisis) situations, and repeat through trial and error what in reality could never be ‘practised’ in such a way. The appendix to this report contains a more elaborate explanation of games as a way to engage with futures.
C. Create multiple scenarios

Many driving factors will be important for developing scenarios but the selection of some key drivers is needed for the initial structuring of diverse scenario sets. To determine these driving factors, first, a choice has to be made on how the scenarios will be structured. A number of methods exist:

**Two axes:** a classic and often-used approach to scenario development is the creation of a set of four scenarios by taking two drivers of change, developing two alternative future states for each of these drivers, and combining the two drivers and their alternative states into a set of four alternative scenario worlds – see figure 4.2.11

**Multiple scenario sets:** the development of a large number of scenario sets – based in different combinations of drivers – allows the emergence of many entirely different ways to investigate the future. If plans and capacities are tested against multiple sets of scenarios that are each framed by entirely different sets of assumptions, these plans and capacities are exposed to many quite diverse future conditions.

**Selecting drivers that form the basis of scenarios:** no matter what method is used, the first step is always the selection of key driving factors. Two main questions for this selection are:

1. which driving factors are expected to have a high impact on the system in question
2. which driving factors are expected to be highly uncertain – in the sense that a driving factor may unpredictably develop in significantly different directions?

For the use of scenarios in security and law enforcement contexts, we propose a third question:

3. which driving factors are the least commonly used in present day practice?

This specific question will help surface the new and unfamiliar drivers of change.

**Making driver combinations for scenarios:** the next step is – which drivers, when combined, make the most challenging and useful scenarios? Some combinations of drivers create sets of four scenarios where all scenarios show the promise to be useful – but others might create a scenario set where two scenarios are less interesting. Try out different combinations and select pairs of drivers.

**Defining polar opposites for each driver:** This is an important step. For each driver, define polar opposites that ensure the most interesting and useful exploration of that driver. For each driver, there are many possibilities. For instance – the driver ‘world economy’ could be defined as ‘strong economic development’ versus ‘weak economic development’; but it could also be defined as ‘stable global economy’ versus ‘volatile global economy’ – creating entirely different scenarios. Therefore, while defining the polar opposites for each driver, keep in mind what the goal of the scenario exercise is: What are you trying to investigate? Also, consider how these polar opposites will interact with those of the other driver in the scenario set.

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**Figure 4.2** Two-axes, four scenarios. Source: Rockefeller Foundation (2010: 16)

This approach is accessible and has proven its worth. However, it has the limitation that the set of futures is dominated by just two drivers of change.

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11 C. Create multiple scenarios

IMAGINATIVE SCENARIO PLANNING

16

IMAGINATIVE SCENARIO PLANNING
In a combined workshop with participants from Dutch and UK law enforcement organisations, we used the collaging process described in the previous box as a source of drivers (see Table 4.1 below).

<table>
<thead>
<tr>
<th>Migration</th>
<th>Space</th>
<th>Changing energy systems</th>
<th>Age of leadership</th>
<th>Role of algorithms</th>
</tr>
</thead>
<tbody>
<tr>
<td>International conflict</td>
<td>Religion</td>
<td>Water scarcity</td>
<td>Change in warfare</td>
<td>Virtualisation of life</td>
</tr>
<tr>
<td>Inequality</td>
<td>Nationalism</td>
<td>Material scarcity</td>
<td>Possibilities for community organisation</td>
<td>Fluidity of gender identities</td>
</tr>
<tr>
<td>Climate change</td>
<td>Vigilantism</td>
<td>New ways of self-organisation</td>
<td>Biodiversity loss (awareness)</td>
<td>Role &amp; structure of families</td>
</tr>
<tr>
<td>Ageing population</td>
<td>Civil disobedience</td>
<td>Technological capacity of criminals</td>
<td>Longevity / life expectancy</td>
<td>Individualisation</td>
</tr>
<tr>
<td>Online living &amp; ordering</td>
<td>Mental health</td>
<td>Difference in tech-savviness between generations</td>
<td>Alternative / non-modern lifestyles</td>
<td>Surveillance vs. privacy</td>
</tr>
<tr>
<td>Changes in money &amp; currency</td>
<td>Reliability of public information</td>
<td>Evolution of information availability</td>
<td>New ways for social intimacy</td>
<td>Availability of advanced biotechnology</td>
</tr>
<tr>
<td>Isolation</td>
<td>Societal coherence &amp; trust</td>
<td>Fundamental changes in (global) political system</td>
<td>Work / life balance</td>
<td>Changes in economic structure</td>
</tr>
<tr>
<td>Robotisation</td>
<td>Control over Artificial Intelligence</td>
<td>Gender balance in leadership roles</td>
<td>Manufacturability of online identity</td>
<td>Changes in healthcare</td>
</tr>
<tr>
<td>Changing labour market</td>
<td>New opportunities for cybercrime</td>
<td>Gender balance in global workforce</td>
<td>Possibilities for invisibility in online sphere</td>
<td>Quantum computing</td>
</tr>
</tbody>
</table>

*Table 4.1. Drivers of future security threats*

The participants were then invited to place 3 different stickers (see Picture 4.3 above) next to the drivers that they thought would:

- have the most uncertainty associated with them (green)
- would have the most potential impact on the issues discussed (blue)
- are least discussed in law enforcement (orange)

The drivers that received most stickers were thus selected to be taken forward into the scenario planning process are highlighted in bold in Table 4.1 opposite.
D. Developing scenario narratives

Once a scenario framework has been created, scenario narratives must be developed to investigate what happens in each scenario and the consequences of each scenario for the objectives of the process. Given some time (anywhere from 2-3 hours) we recommend the following approach to narrative development:

1. Starting at the end, with the time horizon of the project in mind, create a vivid scenario world where the basic dynamics of how the scenario works are clearly understood. If certain drivers of change combine to create a future world, how would this world function? What are the most salient elements of this future? What would life be like in this future world? Try to engage the imaginations of those involved first to bring this future to life. See also the section about games and role-playing below.

2. How did this future scenario world develop? Develop the timeline from the future world imagined in the previous step to the present. This can be done by ‘back-casting’ – start with the future condition, then imagine the dynamics important at a time just before that, and a time just before that, and so on until the present is reached. Note: many of the insights of a scenario’s relevance for the present are typically found in this development of a scenario narrative that connects futures to the present!

3. What does the scenario mean for various variables of interest? In this third step, develop the scenario in more detail by exploring what the scenario would mean for various concrete and specific key variables and indicators of interest to the project.
E. Use scenarios to experiment with capacities and strategies

Collaging and scenarios are only useful to security and law enforcement organisations if they critically examine the capacities and strategies of their organisations.

Testing present capacities: The gap between long-term futures and the focus in law enforcement on present-day problems can be resolved by using scenarios to investigate current capacities of these organisations. This can be done by using the scenarios (for future security threats) that were developed in order to imagine how the organisation could/should respond to each scenario. Helpful questions include:

- Where would present-day capacities fall short?
- Would there be time and resources to change and adapt to each challenge?

Different scenario contexts could be used for a high-level strategic conversation focusing on the main features of the organisation. But scenarios can also be used for in-depth and detailed reviews of organisational capacities – for instance by examining existing approaches and protocols step by step through the perspective of each scenario. Simulation gaming and role playing (see also below) can be particularly useful. See Section 5 for more detail on how to engage your organisation with scenario-planning.

Experimenting with new strategies aimed at shaping the future organisation:

Next to the testing of present-day organisational capacities, scenarios are also commonly used for robustness-testing of new plans and strategies. This can be done as follows:

1. A draft strategy can be reviewed against various scenarios. Each scenario will highlight different strengths and weaknesses in the strategy, and will lead to different recommendations. The more diverse the sets of scenarios, the more diverse the recommendations for strategy improvement will be.

2. The next step is to compare results across all different scenarios and evaluate 1) what common weaknesses and strengths are identified across all scenarios; 2) which recommendations for strategy improvement come up across the different scenarios; and 3) which challenges and opportunities emerge only in very specific scenario contexts but are nonetheless valuable to consider for the revision of the strategy or plan.

Game and roleplaying approaches for strategy testing can be particularly useful given that the strategy in question is not yet implemented. When players take on antagonistic actor roles, implementation problems, loopholes and unintended consequences can surface. Similarly, when players take on new/future roles that are to be created as part of new organisational capacities, problems with the execution of future strategies can be identified.
Formulating plans in the context of scenarios

After having discussed and described the details of each scenario, the project workshop groups were asked to come up with a set of organisational strategies which law enforcement organisations would be able to employ in response to the threats inherent in each scenario. Group 3 [that worked with ‘isolation’ and algorithms’ as shown above] formulated the following set of policies:

- Use algorithms to get insight into behaviour and predict behaviour
- Collaborate between public and private sector to prevent or reduce crime
- Stimulate communities in organising their own safety, so this is not just done by the government
- Prepare for different risk-groups that may use physical violence
- Antagonistic roles of government and people should shift to become more collaborative
- Influence the mindset of (dangerous) individuals

Role change: responding to plans

After discussing and determining the various scenarios in their own groups, one member of every group was requested to remain at their original table, while their partner moved tables. The remaining group member had to explain to a new partner all four scenarios and the responses that were formulated. This new partner then took on an antagonistic role, such as a criminal or terrorist, based on their own scenario set – in other words, not the scenario set that the plan had been based on – and try to counter, circumvent, sabotage or otherwise deal with the plan proposed. These role-playing participants had to punch as many holes in the plan as they could – resulting in a new set of critiques that was often unanticipated by the maker of the plan, which was based on a different scenario set.

The goal of this exercise was to make it very clear to participants that plans formulated in response to any one set of scenarios would still be vulnerable to threats coming from other sets of scenarios – highlighting the need for flexibility in strategies; and the need for exploring many diverse futures.

The guest at Group 3’s table had the following additions and points of critique:

- Not everyone can be influenced as easily, but these measures assume so.
- There is sense of inequality in the battle of the individual against algorithms.
- There is a real danger of criminals intentionally giving false information and make their behaviour look a certain way but do something else meanwhile, e.g. a lone wolf makes it look like he is joining a group.
- Education can either show algorithms as benign or evil – which to go for?
- What is our role when we no longer need analysts (due to technology)?
- Perhaps we should have 27 year olds in leadership roles?
- Everything takes too long (from ideas about the future to getting to action).
- There is a real danger of criminals intentionally giving false information and make their behaviour look a certain way but do something else meanwhile, E.g. a lone wolf makes it look like he is joining a group.
- Education can either show algorithms as benign or evil – which to go for?
- What is our role when we no longer need analysts (due to technology)?
- Perhaps we should have 27 year olds in leadership roles?
- Everything takes too long (from ideas about the future to getting to action).

Example

Biros et al. (2005) 14 give an example of the way in which organisational capacities can be tested further through simulation and practice. They use military scenarios to “stress-test” the detection of deception of law enforcement officials by criminals. After thoroughly testing organisational capacity to address the potential futures emerging from scenarios or other futures methods, it is time to restructure the organisation accordingly, Buono & Kerber (2010) 15 provide a table that clearly outlines various options for restructuring an organisation to build its capacity for other future changes in dynamic fields such as law enforcement and security.

The creative collage making discussion with the Dutch and British law enforcement participants, also raised questions about the organisation. A key feature concerned how security organisations and their leadership can be brought on board for more radical and longer term future scenario-planning. The ‘word cloud’ from the focus group discussion below shows organisation came up quite frequently:

Figure 5.1. Word cloud focus groups The Hague (in Dutch) (2017)

So, what are the main organisational issues and how can these be addressed?

5. The Security and Law Enforcement Organisation: Change and Capacity Development?

The project identified the following problems of law enforcement organisations:

- The world moves faster than the adaptive capacity in law enforcement and security organisations
- Police forces and law enforcement (and legal systems) are mainly reactive
- Profiles for personnel are decided beforehand, there is little room for surprising hires – a huge HRM issue. Do we have the ‘right brains’ in the organisation?
- What is our role when we no longer need analysts (due to technology)?
- Current managers/leaders are no longer ‘fresh’, they have moved through the organisation and are ‘socialised’, can no longer think outside the box.
- Perhaps we should have 27 year olds in leadership roles?
- Everything takes too long (from ideas about the future to getting to action).
For traditional employers, Millennials pose new problems. Command-and-control is out. Having grown up with constant feedback from parents and teachers, they want dialogue, not orders, and a world of work that offers more opportunity and less hierarchy, and always new ways of doing things. (Davidson, 2014) 

Key suggestions to start the process of working on the adaptive capacity (and organisational development) include 1) a move towards dialogue, 2) the use of appreciative inquiry in the organisation and 3) looking for alternatives to strong leadership.

1. A dialogic approach
[from diagnostic to dialogic]

This new dialogic organisational development direction highlights some pertinent elements that are well-suited to work with multiple scenario planning: its generative, emergent and multi-directional features seem a good fit.

“I think the collage thing is perfect dialogic technique, so I think it fits really well.” (Cliff Oswick at End Conference, 2018)
3. Beyond strong leadership [from top-down to distributive leadership]

It is not about being against leadership or hierarchy; it should be about “thinking of occasions we need to actively suspend it in organisations, just for a short period of time, to create space, to do some stuff, whether it’s future scenario planning in organisational change, or whatever it may be, for some fixed stuff!” (Cliff Oswick at End Conference, 2018). Oswick highlighted that is also about: involving people who want to be involved; there has to be shared purpose and its should be a positive change (as that is when people will come on board). There is clearly a move away from transactional to relational leadership and management which will unleash creativity and innovation; a much desired feature for law enforcement organisations in their important task of addressing (and tackling) future security threats! See figure 5.5 for all the details.

Figure 5.5 innovation, management and change; Presentation Cliff Oswick (Project End Conference 2018)

We would like to end this report with a comment by our key-note speaker Neil Walsh and we can only hope his remark will find resonance in your organisation(s)!

“Your toolkit if that’s out there … it is a sort of thing that really helps us and helps governments around the world to make decisions … what you have done in this, it has a really important part in the play.”

6. More Approaches (Appendix)

Games: tools for practising, experimentation, simulation

This report proposes that in the use of foresight in the context of law enforcement and security organisations, the focus should be on practising and experimenting with the future. We have introduced ways to create future scenarios as conditions for such practising and experimentation. Simulation games can serve as a next step – for interactive engagement with these futures. Gaming approaches are especially useful for the evaluation of present-day capacities if there is an interest in generating uncertainty and challenge by having people play antagonistic roles, and/or if there is an interest in creating simulations that help investigate how various individuals and teams would actually respond to different scenarios.

Games have a history in policy and planning, including military contexts and games share many of the analytical and/or experiential benefits of modelling and scenarios. What is unique about games in the context of strategy and planning is their focus on subjective actor perspectives, and on rule systems. These unique traits mean that game players can step into different roles and interact with others and the game, exploring the consequences of policies and strategies.

However, when players can only play set roles within games pre-designed by experts, games have important limitations as a tool for investigating systems of governance. A finished game has a specific “procedural rhetoric” – the game rules explain how the game designers have conceptualised the systems that the game seeks to represent and the players can only accept and act within this pre-designed system. By contrast, when game co-design, rather than game play alone, is used as a method for inquiry and experimentation between diverse actors, this can lead to a process of actively questioning how current and potential future systems work. What are the rules, roles, responsibilities and relationships in the system that the game is representing? And what happens when the rules and roles are changed to try to make a system (such as a security or law enforcement organisation) more adaptive?

Though games as simulations to practise with the future offer unique possibilities to experiment both with rules and roles, the former is the most complicated and time-intensive to do. However, “open” interactive role playing with a group of people can be organised very easily. In such a process, a group of people simply take on different roles in a scenario and simulate how they would interact with each other. An open role-playing process in which a scenario is explored can create key insight into the challenges and possibilities created for law enforcement in each scenario from different subjective perspectives.

We would like to recommend that whatever purpose simulation games might be used for in a law enforcement setting, they should always be multi-player games or roleplays, rather than single-player games. The complexity offered by having multiple players interacting with each other, facilitated by different levels of game systems, is really invaluable.

Furthermore, we recommend developing a new game that is suited to a specific purpose; or alternatively have a very flexible game that can be adjusted and applied to different case studies in a similar context. Then, depending on the purpose of the foresight process, we recommend the following approaches:

1. Developing a game with a focus on rules. This is mostly useful when rules and systems are the subject of investigation and testing, both in terms of finding problems with existing rules and systems and testing new proposed approaches. This could be a board game that is only rules-based, a board game that involves some decision making, a fully digital computer game, or a computer game that also involves real-world interaction between players.

2. Developing a game with a focus on role-playing, but with light rules to facilitate participation. This is mostly useful when the focus is on different actor objectives, interests and perspectives, but the players need some structure (like a game economy and win conditions) to be able to roleplay effectively.
Multi-driver scenario development

There are many other approaches to the development of scenarios next to those described in section 4 of this report. These approaches are often less accessible, but they have their own specific benefits. One such approach is to build scenario sets that integrate many different driving factors in a single set of scenarios. The key advantage of such approaches is that if those creating scenarios are asked to consider unusual combinations of many different driving factors at once, the chance that they create truly novel futures is much higher. The drawback is that the creation of truly diverse driver combinations in a systematic manner often requires mathematical algorithms—because of tens of thousands of scenario possibilities exist in such multidimensional scenario sets, making the combination of drivers more of a black box process for those involved.

Using scenarios to identify weak signals of different futures in the present

An entirely different way to use future scenarios to guide present-day strategy is the use of future scenarios as filters for horizon scanning.

Horizon scanning is an approach that is used in many sectors, including law enforcement, to identify ‘weak signals’ of possible futures, for instance by trawling online media, technology websites and other sources of information. Weak signals are emerging trends and activities that could be indicative of where future developments may go—if these activities and trends scale up and out. The challenge with horizon scanning, however, is that there are no clear ways to filter and distinguish such weak signals without context. Colleagues at the University of Oxford have however researched the potential of combining scenarios and horizon-scanning for the following reason: scenarios can be used as future perspectives to try to filter and understand different weak signals that emerge from horizon scanning. Which weak signals correspond with which scenario? Ramirez et al. (2015) argue that because of this filtering capacity, future scenarios can also be used as narratives to capture the attention of organisational leadership. A list of weak signals may not signify much to leadership, but an analysis of how weak signals correspond to different narratives of the future produces more strategic insights.
7. References and Further Reading

There is a growing body of literature on futures methods and specifically on the methods outlined in this report. This list contains the key publications that were used for each section of this report, as well as further reading that goes beyond this report and into the foundations of futures work.

In-text references


Further recommended reading

Scenario-planning


Organisations/law enforcement


Hogeboom, H. (2014). Toekomstonderzoek binnen de Politie; Focus op Feiten van Fictie?

Creative methods


From presentation Cliff Oswick:


