

## Summaries

*Justitiële verkenningen* (Judicial explorations) is published six times a year by the Research and Documentation Centre of the Dutch Ministry of Justice and Security in cooperation with Boom juridisch. Each issue focuses on a central theme related to judicial policy. The section Summaries contains abstracts of the internationally most relevant articles of each issue. The central theme of this issue (no. 4, 2019) is *Exploring and predicting the future*.

### **Future risks for national security**

*Minke Meijnders, Leendert Gooijer and Hanneke Duijnhoven*

What are the most important threats for national security in the following years? What do we foresee for the longer term? How are threats interrelated? In this article, we discuss the work of the Dutch Network of Safety and Security Analysts (ANV), which deals with this type of questions since 2011. The main task of this multidisciplinary network is to provide input for the National Security Strategy. It does so by providing an Integrated Risk analysis and a Horizon scan National Security. The authors discuss the foresight-methods used by the network (scenario studies and horizon scanning techniques), as well as the most important conclusions from both studies.

### **Making predictions with big data models. On the pitfalls for policy makers**

*Susan van den Braak and Sunil Choenni*

In the field of policymaking, there is a growing need to take advantage of the opportunities that big data predictions offer. A strong point of big data is that the large amounts of data that are collected nowadays can be re-used to find new insights. However, for effective use in policymaking it is also important to take into account the relating limitations and challenges. For example, the quality of the data used can be a problem. Outdated data and data of which the semantics have changed, may result in predictions that are no longer correct. In addition, it is difficult to apply predictions to individual cases or people. In this article authors provide various practical recommendations for dealing with these problems. As long as people are aware of the limita-

tions and handle the results with care, big data models can be a useful addition to traditional methods in the field of policymaking.

### **The design of future proof systems in the security domain using system modelling**

*Erik Pruyt*

This article focusses on the question whether quantitative modelling and simulation is useful for judicial forecasting, ex-ante testing of judicial policies, and (re)designing chains of organisations like the judicial chain. Specific attention is given to methods that can be used in the face of complexity and deep uncertainty. That is, when facing many substantial uncertainties. Complexity and uncertainty are first of all focused on. Subsequently, modelling methods for dealing with complexity and uncertainty are discussed in more detail, examples are given, and the process needed to build such models in a participatory way is discussed.

### **Towards a more effective use of quantified predictions through a Cyber Forecasting Tournament**

*Regina Joseph, Marieke Klaver, Judith van de Kuijt and Diederik van Luijk*

Threats, vulnerabilities, and new forms of attack within the cyber domain develop rapidly. To keep up with and respond to these trends, cyber security professionals must demonstrate reaction velocity, accuracy and a high tolerance for complexity. Publicly available information (PAI) can serve as an important aid to personnel engaged in cyber security analysis. However, evaluation of cyber analytical capacity – a pre-requisite for any measurement of quality or improvement – is still inchoate. This article covers the concept and design of an initial phase of research begun in October 2018 in The Netherlands to measure and improve cyber analysis techniques. The research program features a forecasting tournament to record participants' probabilistic estimates on future cyber outcomes based exclusively on PAI knowledge acquisition. This phase of research seeks to address whether analysts' predictions are more accurate in certain subjects within the cyber domain than in others and to assess how predictive accuracy in the cyber domain compares to accuracy in other domains in which forecasting tournaments have been organized.

**Network trendwaching as a tool for exploring new forms of financial crime**

*Andrea Wiegman*

Trendwatching is a tool to get a better grip on what happens next and as such it is used by the Dutch Financial and Fiscal Investigation Service (FIOD) to explore possible futures of financial crime with a time lap of two years. The author describes how trendwatching works. In this case a platform Trends4fi ([www.trends4fi.org](http://www.trends4fi.org)) was created with a website, a mobile app and trend groups to generate foresights in cooperation with connected networks from public and private organisations. This is called network trendwatching, in fact a social intelligence tool designed to generate as much new information and new insights on developments which might have an impact on financial crime and the fight against it.

**Book review: With the knowledge of tomorrow**

*Bob van der Vecht*

This is a review of the book *Met de kennis van morgen. Toekomst verkennen voor de Nederlandse overheid* ('With the knowledge of tomorrow. Exploring the future for the Dutch government'), published at the end of 2018. The bundle contains ten contributions written by authors working at various Dutch advisory boards and planning agencies. The articles do not discuss subjects belonging to the Justice and Security domain. But they are certainly relevant in terms of methods and approach.