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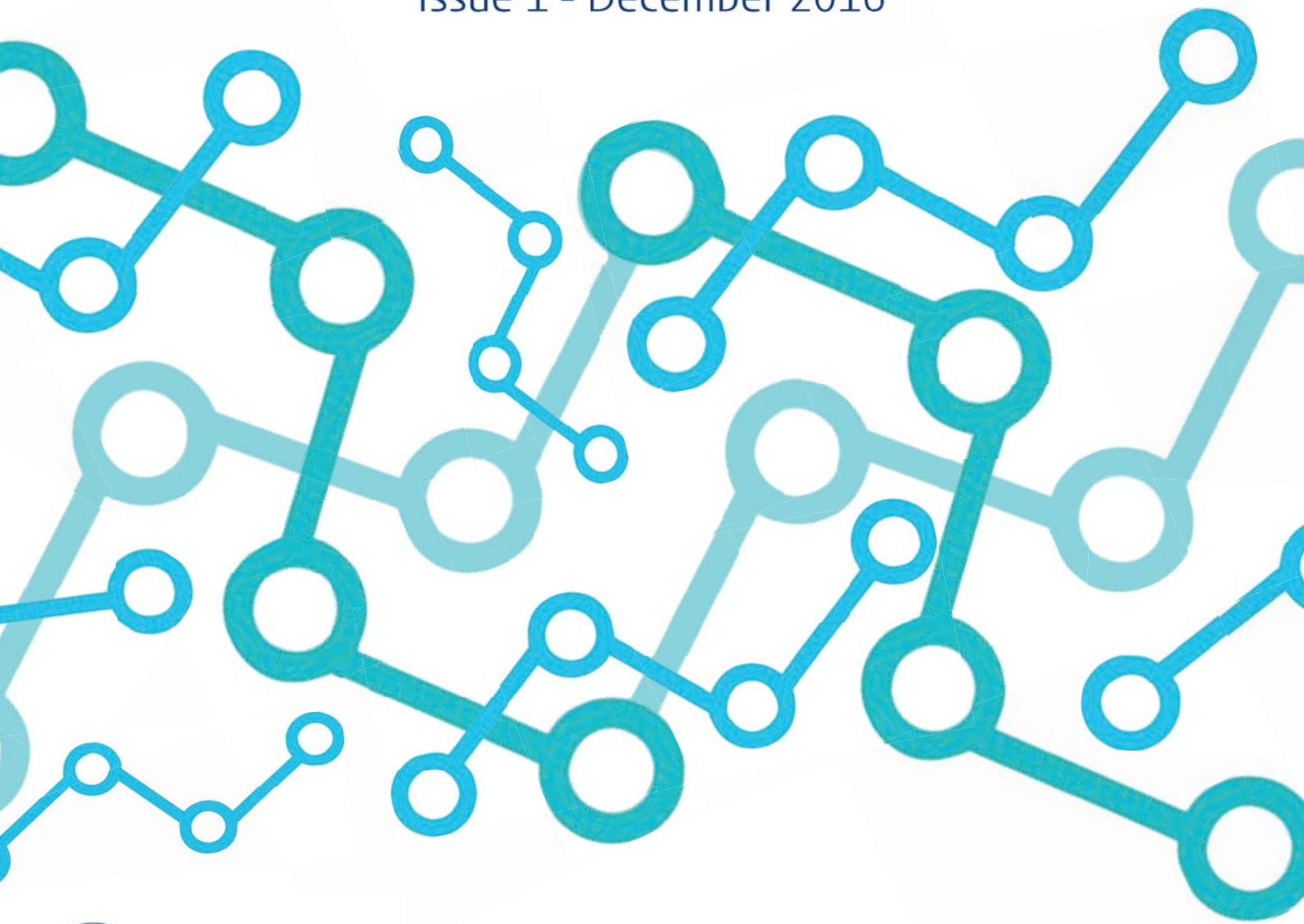

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This Special Issue of the Journal of Security and Global Affairs features the outcome of several workshops and lectures presented during the Institute of Security and Global Affairs Conference 'Who determines the security (research) agenda?' which was held on 9-10 November 2016 in The Hague, The Netherlands.

Facing contemporary security and global affairs challenges such as terrorism, cyber-attacks and hybrid warfare requires dialogue and collaboration between various disciplines within academia, as well as between academia and other stakeholders in the public and private sector. Such collaborations raise new questions and dilemmas, for instance about roles and responsibilities of stakeholders. One of the most important questions is what security issues or challenges to focus on and who should take the lead? The Leiden University's Institute of Security and Global Affairs (ISGA) focused on these questions during its opening conference. ISGA welcomed more than 200 actors from the security and global affairs field to discuss the central question 'Who determines the security (research) agenda?'. More information on the conference and a digital booklet full with pictures can be found here.

Promoting and protecting cyber security interests

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1. Vital interests

For the Kingdom of the Netherlands six vital or strategic interests are at stake according to its national and international security strategies: territorial integrity, physical, economic and ecological security, social and political stability and a stable and effective international legal order. Due to developments in information and communication technologies, social behaviour, public as well as private, changed dramatically over the last decades. The Internet of things is just one of these examples of evolution in this respect. These changes impact on the Netherlands' vital interests (DESI, 2016). Apart from acknowledging the relevance of cyber security as essential for national security, demonstrated by the promulgation of two thematic National Cyber Security Strategies (I and II), we are actually conceding that cyber security has become the seventh vital interest for the Kingdom.

2. Threats and countermeasures

Threats to cyber security originate from a diversity of actors and, quite obvious, for various motives ascribed to those actors. Those actors, which may involve state and non-state entities - including the persons involved ('hackers') - will be inspired or driven by motives ranging from enhancing security on the one hand, to testing, training, boasting, activism, economic profit, sabotage, propaganda, subversion, theft, terrorism, espionage and (military) conflict on the other (Ducheine, 2015).

These threats require a multidisciplinary response, a comprehensive effort by public as well as private partners. These response are now formulated in Cyber Security Strategies worldwide.[1] The paradigms offer distinguishes framework for public and – were applicable – private organisation to promote and protect cyber security interests. Looking at cyber activities at the state level, a number of distinct paradigms are applicable to describe cyber operations (Klimberg & Mirtl, 2013). These paradigms are demonstrated in national cyber security strategies worldwide (CCD CEO, 2014), as well as through the instrumental use of cyber capabilities in furtherance of states' (other vital) interests.[2] These paradigms can be depicted as parts of a continuum, a spectrum, or to put it differently, as part of a state's comprehensive efforts in cyberspace (AIV & CAVV, 2011). The paradigms are complementary

[2] E.g. the use of Stuxnet against Iran.

and overlapping.[3] These paradigms represent one (or more) of the institutional frameworks enabling governments (or public authorities) to conduct activities within democratic societies. They thus offer a legal and social framework for (governmental) behaviour, that is, as with all social interaction, subject to adjustments that are initiated or inspired by changes in the security landscape (including 'new' threats), public opinion, international, societal and technological trends. As such, these frameworks reflect the *Zeitgeist* regarding topics that have reached the political agenda and require or enable governmental action (Rothman & Brinkel, 2012).

3. Imperfections and conflict of interests

For public bodies operating under the rule of law, legislation authorising and tasking these bodies is required as soon are governmental action impact upon citizens' rights and privileges. Inevitably, legislation in each of the paradigms may be incomplete and lagging behind social behaviour and technological opportunities. The legislator, enabling the executive branch by providing tasks and powers, is the pinnacle of the balance of conflicts between three interrelated perspectives. Firstly, security demands or ambitions require tasking accompanied by powers. Secondly, security comes at a price: either financially trough taxation to through infringements on other rights or privileges (i.a. privacy), as these security providing bodies require manpower, funds and powers. Thirdly, security offers benefits, as economy, society and social behaviour gain from security. Economic prosperity and individual or collective wellbeing may be the result of a secure place to do live and to do business.

4. In the discussion (Q&A): Cyber warfare

It is evident that cyber warfare proper should be reserved for the paradigm of military conflict.[4] Cyber warfare involves 'warfare proper' and 'operations other than war', including peace support (and enforcement) operations related to conflict (Gill & Fleck, 2015). Thus 'cyber warfare' can be defined as "employment of cyber capabilities with the primary purpose of achieving [military] objectives in or by the use of cyberspace" (Schmitt, 2013).

In response to cyber threats, cyber warfare is the *ultimum remedium*, and highly unlikely, as the other paradigms will prevail. However, as of now, most, if not all military operations abroad will be supplemented with cyber capabilities of some kind.

[3] Klimberg and Mirtl p 15, referring to these paradigms as 'mandates'.

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