



## V4 Cooperation in Ensuring Cyber Security – Analysis and Recommendations

Tomas Rezek, Tomasz Szatkowski, Joanna Świątkowska,  
Jozef Vyskoč, Maciej Ziarek  
Editor: Joanna Świątkowska

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## Introduction

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Izabela Albrycht – Chairman of the Board  
of the Kosciuszko Institute

Information and communications technology solutions influence every sphere of public and private life and are responsible for the proper functioning of modern states. On one hand, technological advancement has allowed an unprecedented development of civilisation. On the other hand, however, it has led to emergence of new threats, which must become the subject of actions and decisions of entities responsible for the security sphere.

Cyber security knows no boundaries – state-level only solutions are not sufficient. In order to meet the cyberthreats, international cooperation is necessary, and the regional alliances, like the Visegrad Group, constitute a key component, while also being a complementation of multilateral cooperation.

The main goal of this publication is to analyse the state of cyber security in Visegrad Group countries and to present recommendations contributing to its strengthening. The Czech Republic, Slovakia, Hungary and Poland are members of the European Union and NATO. Both of these entities have included the activities aimed at protection of cyber space in their agendas. The publication, besides the analysis of activities conducted in this sphere by NATO and the EU, also contains a presentation of possible areas of solidary activities of the Visegrad Group, aimed at further strengthening of cyber security at the international level, as well as within those organisations.

Furthermore, one of the essential purposes of the publication is to familiarise the readers with basic information on cyber space protection and to make them realise how important this area is, from the point of view of each citizen's security. Public awareness of threats is a critical part of prevention in the face of cyberthreats' globalisation.

The publication, by the virtue of its parameters, discusses the most important issues related to cyber security. Each of the chapters is a starting point for further, complex analyses, nevertheless, it constitutes a good portion of knowledge for all interested by this topic and the problems of the modern world security.

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All of the analyses are based on public information and focus on non-technical aspects of cyber space protection. The advantage of such approach is accessibility of the text and the possibility to capture the political science's aspect of the cyber security issue. Due to such perspective, the publication is a valuable and useful document for decision-makers, who, on the basis of its recommendations, may address the proper political solutions – both national and international. The report is also a source of practical knowledge for everyone interested in new trends in the field of international security.

While thanking our Partners for cooperation in preparation of the report, I invite you to familiarise yourselves with its contents, and to discuss the issue of cyber security, which has to become, next to economic, energy and military security, a key component of security strategies of particular countries and our “global village”.

## Selected Theses\*

The Kosciuszko Institute

### *Cyberthreats as a Challenge to the Security of the Contemporary World*

**Author: Joanna Świątkowska**

We currently live in a world where functioning and development of individuals, states and international organisations are based on the use of information and communication technology (ICT) systems. (...) As a result of technological development, apart from significant benefits, there have appeared new types of threats that have to be faced by the international community. One of the most important challenges confronted by states and other entities is to ensure the security of cyber space.

Cyberthreats have revolutionised the way people think about security, they have destroyed the old paradigms concerning the methods of its ensuring and modified the rules that govern international conflicts.

The main dangers related to cyber space are: cybercrime, cyberterrorism and cyberwar.

The above described problems can be overcome only through international and intersectoral cooperation. (...) On this assumption, one of the goals of the present publication is to draw attention to the fact that cyber security should be a common objective, also for the Visegrad Group countries.

### *Systematisation of Key Cyberthreats*

**Author: Maciej Ziarek**

Since the Internet has become a medium used in almost every domain of life, a risk that it may be used by cybercriminals for conducting attacks and getting illegal profits increases (...). Computer and mobile malware, spam and botnets are clearly part and parcel of the present-day Internet.

Botnets, (...) are networks of infected computers whose owners have no idea that their machines have been attacked. Such an infected computer is commonly termed as a zombie machine. (...) Its use depends on the intentions of its author who is nothing more than a cybercriminal.