Presenting the Study "Considerations on Challenges and Future Directions in Cybersecurity" at the European Commission

Ioan-Cosmin MIHAI

The Romanian Association for Information Security Assurance

The study "*Considerations on Challenges and Future Directions in Cybersecurity*", developed under the aegis of the *Romanian Association for Information Security Assurance (RAISA),* in partnership with the *Romanian National Computer Security Incident Response Team (CERT-RO)* and the *National Cyberint Center within the Romanian Intelligence Service*, was presented at the *European Commission*, Bruxelles, Belgium, on November 27, 2019.

The study "*Considerations on Challenges and Future Directions in Cybersecurity*" was developed on the occasion of the Romanian Presidency of the Council of the European Union and represents a cooperation exercise in the cybersecurity field.

This study stands for a joint effort of experts from the public, private and academic fields to develop a cybersecurity framework for education, innovation, cooperation and human resource management and to reveal future challenges and strategic directions in this area.

The added value of the study is given by the analysis of future cybersecurity directions from the perspective of the experts from the public, private and academic institutions.

The study carries out the current analysis of the main development directions in the field of cybersecurity, presented by authors with expertise from international institutions – the European Commission, the Cybercrime Programme Office of the Council of Europe (C-PROC), CERT-EU, the National Cyber Forensics and Training Alliance (NCFTA) – US, the National Cyber Security Centre (NCSC) – UK, the Southeast European Law Enforcement Center (SELEC), the Lancaster University – and national – the Romanian Academy, the University Politehnica of Bucharest, Babeş-Bolyai University, "Carol I" National Defence University, "Alexandru Ioan Cuza" Police Academy, the General Secretariat of the Government, the Romanian National Computer Security Incident Response Team (CERT-RO), the National Cyberint Center, the Special Telecommunications Service, the National Authority for Management and Regulation in Communications of Romania (ANCOM), the Ministry of Internal Affairs, the Romanian Police, the National Institute for Research and Development in Informatics (ICI), the European Institute of Romania, the Financial Supervision Authority, the Institute of Financial Studies, Orange, Fortinet, Bitdefender.

The 30 articles from the study are grouped into two sections:

- "*Cybersecurity Framework*", which analyzes the directions with critical role in developing a solid culture of cybersecurity: "*Education and Awareness*", "*Innovation and Research*", "*International Cooperation*", and "*Human Layer*";
- "*Cybersecurity Directions*", which deals with the current state and the possible developments of some directions in the field of cybersecurity: "*National Cyber Security*", "*Cyber Defense*", "*Cyber Resilience*", "*Cyber Crime*", "*Cyber Diplomacy*", and "*Data Protection*".

The beneficiaries of this study can be the public administration, academia and the private sector, both at national and European level, as well as the cybersecurity experts.

The study "*Considerations on Challenges and Future Directions in Cybersecurity*" can be accessed at the following addresses:

- https://www.raisa.org/documents/CybersecurityRO2019.pdf;
- https://www.cert.ro/doc/CybersecurityRO2019.pdf;
- https://www.sri.ro/assets/files/cyberint/CybersecurityRO2019.pdf.