

First International Conference on Cyber Crisis Cooperation: Cyber Exercises

Report

11 July 2012

On June 27, 2012, ENISA organized the 1st International Conference on Cyber Crisis Cooperation: Cyber Exercises. Seventeen speakers and approximately 65 participants were present at the conference which was held in Paris, France. There was interesting line of speakers and discussions on cyber exercises. The event presented an excellent opportunity for the participants to share thoughts, opinions and expertise in the field of cyber crisis cooperation, focusing on cyber exercises. ENISA would like to thank them all for their contribution.

The objectives for the Conference were:

- a) Exchange of good practices in the field of international cyber crisis cooperation, specifically focusing on cyber exercises.
- b) Bring together the stakeholders that organise and have experience in cyber exercises in order to explore cooperation between them.
- c) Identify gaps and challenges in the field of international cyber crisis cooperation and in particular on cyber exercises.

The conference achieved these objectives, and is proud that this first attempt to bring together the global cyber exercise community was successful. ENISA aims to organize a follow-up of this conference in the years to come.

The line-up of speakers during the conference was (in order of their presentations during the event):

- Evangelos OUZOUNIS (Head of Resilience and CIIP Unit, ENISA - EU)
- Ann-Sofie RONNLUND (DG CONNECT, European Commission - EU)
- Arjen BOIN (Utrecht University - NL)
- Koki YOSHIDA (NISC - Japan)
- Wolfgang ROEHRIG (European Defence Agency - EU)
- Reggie MCKINNEY (DHS - USA)
- Susanne JANTSCH (BSI - Germany)
- Martin GÜRTLER (NATO/CCDCOE)
- Derron STÉPHANE (Federal Chancellery - Switzerland)
- Diego Fernández VÁZQUEZ (ISDEFE - Spain)
- Miguel Ángel ABAD (CNPIC - Spain)
- Chris C. DEMCHAK (US Naval War College - USA)
- Adrien OGEE (ANSSI - France)
- Michael BILZOR (US Naval Academy - USA)
- Daisuke INOUE (NICT - Japan)
- Thierry BENOIST (European Commission, JRC - EU)
- Panagiotis TRIMINTZIOS (ENISA - EU)

The individual presentations of the speakers are available online on the website of the Conference¹.

¹ <http://www.enisa.europa.eu/activities/Resilience-and-CIIP/cyber-crisis-cooperation/cyber-exercise-stocktaking/cyber-exercise-conference>

Main comments and recommendations during the Conference²

The keynote speakers provided an overview of the related policy works mainly in EU and the relevant work of ENISA and the European Commission in the field of cyber crisis cooperation and cyber exercises.

The main Conference included four main themes. The first theme was *New World of Cyber Crisis and Exercises*. The speakers provided both an academic and a practical overview of the new challenges in the field of cyber crisis and cyber exercises. The presentations in the second theme addressed *Cyber Exercises Case Studies*. Speakers presented cyber exercises carried out at different levels (national and international, operational and strategic) and the lessons learned of these exercises. The third theme focused on *Technical Aspects of Cyber Exercises*. The speakers presented technical exercise management tools, incident analysis and the use of virtual reality. The conference concluded with an open session about the future of cyber exercises. ENISA moderated this session in which the participants provided their opinion and thoughts on the future of cyber exercises.

During the conference some additional information to the audience was suggested, such as:

- The ENISA white paper with high level recommendations on *Cyber Security Strategies*. Available here: <http://www.enisa.europa.eu/media/news-items/cyber-security-strategies>
- A video about the cyber exercise Locked Shields (Martin Gürtler - NATO/CCDCOE). Available here: <http://vimeo.com/42610977>
- The HERMES OEx, the exercise project management approach (Derron Stéphane - Federal Chancellery Switzerland) that includes project management templates for exercise planning: http://www.hermes.admin.ch/services-en/hilfsmittel/hermes-for-the-organisation-of-exercise-projects-hermes-oex?set_language=en&cl=en
- The EXITO exercise management software (Thierry Benoist - European Commission, JRC), which is available at DG Joint Research Centre's website: <http://sta.jrc.ec.europa.eu/index.php/exito-request-form>

The open session of the Conference aimed to discuss on the following questions about the future of Cyber Exercises:

Which are the main challenges generally when organizing Cyber Exercises?

- One of the main challenges is the fact that cyber crises are transboundary crises. These types of crisis cross the boundaries of countries, sectors and complexities. A huge challenge is the organization of an exercise that can test all different complexities of a transboundary crisis, specifically testing different levels (*technical, operational/tactical and strategic/political*) together.
- A second challenge mentioned was the promotion of the virtual reality and gaming world in Cyber Exercises.
- The involvement of the private sector in cyber exercises was mentioned as a challenge.
- Finally, a challenge is the fact that it often occurs that large (national and international) cyber crisis exercises take place during the same week or month. The challenge here is to coordinate the exercise schedules of the cyber exercise community in order to be able to learn from each other.

How can we share good practices in the field of Cyber Exercises?

Some ideas were provided about how to share good practices in the field of Cyber Exercises.

² Please note that this is not a summary of all presentations. Most presentations of the speakers are available to download at the website of the event.

- A first idea was to cooperate more with the private sector and share good practices between the public and private sector.
- Another suggestion was to establish a (virtual) database for sharing good practices of cyber crisis exercises. Participants know this might provide different challenges due to confidentiality issues; however, all deemed this an interesting suggestion and is helpful for the cyber exercise community.
- A final idea was that members of the Cyber Exercise community can be invited to attend each other's exercises in order to learn from them, exchange information and retrieve lessons for the future.

Would you propose organising more International Conferences like this one?

The Conference participants expressed their compliments for this first international conference in the field of cyber exercises and asked for a continuation of this Conference in the years to come. Some suggestions to improve the level of its quality include:

- More time dedicated to open discussions and panels.
- The private sector should stronger presence in the programme of future conferences in order to learn from their exercises, gaps and challenges, and to share practices between the public and the private sector.

Stocktaking of Cyber Exercises

In addition to the conference, ENISA is carrying out a project regarding the stocktaking of national and international cyber exercises inside and outside the European Union. The project will result in a stocktaking guide and a global map of cyber exercises. This report is planned to be published around the summer of 2012 at:

<http://www.enisa.europa.eu/activities/Resilience-and-CIIP/cyber-crisis-cooperation/cyber-exercise-stocktaking>