



RIISING TO UKRAINE'S CYBERSECURITY CHALLENGE THROUGH CO-CREATION

THE ISSUE

Ukraine is no stranger to cyber threats, and has long been considered a testing ground for such attacks, particularly in the energy sector. In 2015, a significant cyberattack plunged a quarter of a million homes into darkness. Two years later, Ukraine was ground zero for the devastating NotPetya malware attack, which unleashed some \$10 billion in damage globally, including on corporate giants Maersk, FedEx, and Merck. Against this backdrop, the United States has been working to ramp up Ukraine's cybersecurity protection with funding and technical support.

According to Bobby Jefferson, chief technology officer at DAI Global Health, "Ukraine's cybersecurity profile is different compared to many other countries. The aggressors are trying many methods to disrupt the daily life of Ukrainians."

Dr. Robert Peacock, a cybersecurity expert at Florida International University, put it this way: "Ukraine has a hostile neighbor testing world-class technology against the country. It is in our interest to support the development of strong cybersecurity defenses."

This imminent danger led USAID to issue a Broad Agency Announcement (BAA) and, eventually, launch the Cybersecurity for Critical Infrastructure program in May 2020. The effort aims to solve three crucial and co-dependent challenges in Ukraine: strengthening the cyber environment, developing a cybersecurity workforce, and building a resilient cybersecurity industry.

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DR. ROBERT PEACOCK,
FLORIDA INTERNATIONAL
UNIVERSITY

THE STAGE

Maria Televantos, USAID/Ukraine Contracting Officer, said the design team took great care in developing the BAA because cybersecurity is a new development area for both the Mission and the Agency. "We recognized USAID's limited cybersecurity expertise and chose the BAA process to leverage innovative ideas from experts in the private sector and other nontraditional partners," she said.

In essence, the BAA served as a road map not only to define the challenges, but also to outline the parameters and technical competencies of organizations competing for invitations to the co-creation and possible awards.

Any collaboration on such major development challenges begins with extensive preparation. In the case of the Ukraine exercise, USAID's team lead, John Harris, said the BAA development itself was, in essence, a co-creation to define the issues and determine the participants.

"It took many days of research and coordination among Mission team members," he said. "We reached out to interagency partners and other cyber experts in the U.S. Government to ensure we built upon prior programming and to assemble a team with the appropriate mix of skills and experience.

"Potential co-creators were selected on the strength of the expressions of interest submitted in response to the BAA. The EOIs had to contain an innovative research development idea that would meaningfully contribute to Ukraine's cyber defenses."

Applicants were also asked to provide an overview of the team that would implement an approach, any co-investment resources that could be mobilized, and a profile of the experts who would attend and contribute to the co-creation workshop. In order to encourage participation from nontraditional partners, the Mission required that organizations interested in participating in the co-creation workshop submit their own EOI. As a result, the Mission's review team was able to evaluate individual ideas from niche organizations rather than larger coalition submissions, thus ensuring that the broadest possible range of partners and perspectives were represented at the co-creation workshop.

The Mission evaluated a broad spectrum of submissions from the private sector, NGOs, and universities, including international and Ukrainian organizations. "It's important to have the right people in the room for co-creation. We were very intentional about the range of expertise and not having too many groups. We wanted the team to be able to coalesce around a single award," Harris said.

After a rigorous review of the EOIs, the Mission invited partners from different sectors to participate in the co-creation workshop: DAI Global, Florida International University, cyber experts, including Schweitzer Engineering Laboratories and Veterans First Initiative, and locally based SocialBoost and Information Systems Security Partners (ISSP). To build momentum toward a single, comprehensive concept, only one representative from each organization was invited to attend the co-creation workshop.

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MARIA TELEVANTOS,
USAID/UKRAINE

STEP 1: THE EOI

An expression of interest (EOI) is the basis for selecting co-creation participants. This advice from USAID experts can help partners:

- Follow instructions as to form and substance.
- Keep sight of the BAA challenge.
- Be succinct. A long submission will not get more attention.
- Offer a unique idea specific to the problem and context; do not be generic.
- Document your relevant track record and qualifications.
- Demonstrate how your solution addresses a critical challenge in an innovative way.

THE DYNAMICS

The group gathered in Kyiv, Ukraine's capital, over five days filled with collaborative discussions and idea exchanges. The process moved from initiation—getting acquainted and examining the problem—to synthesizing and prioritizing potential interventions to finalizing a plan in 40 hours of intense debate, not counting talks over lunch and dinner.

While co-creators were selected on the strength of their EOIs, there was no guarantee that their ideas would be included in the final concept. In fact, co-creators were urged to “leave their concepts outside the door” to encourage a free exchange of ideas. An early session on “mourning your EOI” allowed participants to move beyond their original proposals and truly embrace the co-creative approach.

The first workshop exercises focused on participants getting to know each other to build camaraderie, in addition to reviewing the EOIs to more clearly define the project scope and analyze each potential partner's approaches.

The second day was devoted to a free flow of “outside the box” ideas, subjecting them to a series of “what if” questions to discern feasibility and practicality. It was an exercise in what can be done and what has been tried elsewhere relevant to Ukraine. The ideas were grouped into themes.

By midpoint in the process, the clusters of ideas were ready for testing to determine their feasibility. On the fourth day, with several options on the table, it was time to choose the best and discuss implementation.

“The facilitation and brainstorming exercises cultivated productive partnerships and steered stakeholders toward the common goal of a more cyber-resilient Ukraine,” Televantos said.

“The solution is all the more compelling because of the diversity of voices that came together to create it,” she added. “It was the result of dialogue between the private sector, civil society, academia, as well as traditional development partners.”

Oleh Derevianko, the founder of ISSP and a former government official with a decade of cybersecurity experience, called it a stimulating, constructive experience with a great atmosphere.

“When we decided to participate, we saw it as a business opportunity and felt we would benefit from the networking possibilities,” said Derevianko, whose company was one of two Ukrainian businesses in the co-creation. “We came to see it as an excellent opportunity to contribute to our country's national security.”

THE PROCESS

Every co-creation takes on its own personality as to structure, form, and rules. The Ukraine exercise was no different, and the team designed it with several elements they believe contributed to its success.

“One should never underestimate the difficulty of the co-creation process, but also never underestimate the opportunities it presents,” Harris said. “With an open mind, a dose of humility, and a lot of hard work, we were able to create, cluster, and deliver consensus around an idea, drawing upon the input of industry experts and key Ukrainian stakeholders.”

Richard Crespín, the CEO and a facilitator at CollaborateUp, kept the participants on track and funneled the co-creation into a single (and successful) concept note.

An early hurdle to overcome was that some participants “wanted to admire the problem for too long,” said Olga Luchuk-Vysotska, Mission Acquisition and Assistance Specialist. “When there are so many aspects to the discussion, it is difficult to move to a viable concept.”

“Co-creation is, in essence, threading the needle to discover new ideas and create shared values,” Crespín said. “The process takes work. One of the primary values of co-creation comes from getting new players to the table.”

Harris was also impressed. “The quality of the concept note, as well as the entire BAA process and co-creation week, was fabulous,” he said. “There were challenges, but the results were very innovative.”

On the co-creation's final day, the participants' ideas had to withstand the intense scrutiny of a “Shark Tank,” presenting their concept to USAID top officials at the Mission. “This really brought people together to a consolidated solution,” Harris said.

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THE SOLUTION

Over the next four years, the project will address legislative and regulatory gaps in Ukraine's cybersecurity policy, improve sector governance, and expand collaboration between stakeholders. It will also support cybersecurity institutions and build technical capacity in critical infrastructure industries. Another important focus area is closing workforce gaps by strengthening cybersecurity-related academic programs and developing industry training programs focused on responding to immediate vulnerabilities.

"The final result reflected the spirit of co-creation, made more powerful by the diversity of the concepts and organizations that formed it, and the range of approaches each brought to the table," Harris said.

Cybersecurity is a relatively new area for USAID, and one that is growing in importance among development practitioners around the world. The Ukraine cybersecurity BAA and co-creation, focusing on private sector engagement with participants from government and academia, represent a test for future development programs to combat cyber threats.

LESSONS LEARNED

- Invest in preparation at the beginning of the process. Your decisions as you put together the BAA and choose potential partners will put you on the path to effective co-creation.
- Invite partners that complement each other while offering a variety of opinions.
- Limit the participants to experts who can advance your ultimate project goals.
- Ensure that there is a facilitator in the room who can move the process along. Avoid the tendency to "admire the problem" too long.
- Never assume that everyone is on the same page—or that everyone fully understands the intricacies of the BAA process.
- Make certain that co-creation participants know the ground rules of working with USAID.
- Support an atmosphere that leads to collaboration—not one that results in confrontation and competition among participants.



USAID officials visit a heat and power plant. Ukraine's energy infrastructure is a frequent target of cyberattacks.

Photo credit: USAID/Ukraine