

NATO Next Generation Incident Command System Pilot Project



Homeland Security

Science and Technology

HUMANITARIAN CRISES: THREAT TO HUMAN SECURITY

Humanitarian crises, whatever the cause or wherever they occur, have increasingly become threats to human security: a concept that has rapidly emerged in international cooperation and development efforts with the establishment of the U.N. Commission on Human Security in 2001. International relief missions that deal with humanitarian crises can present significant financial and technical challenges.

One of the technical challenges in times of large scale disasters is the lack of interoperability among technology tools used by governments at national, regional, and local levels. Not being able to share even the most basic information on the location and scale of disasters can complicate relief efforts. This can make international collaboration (in humanitarian crises response, for example) difficult and slow. Seemingly simple problems such as requesting assistance, establishing optimal locations to set up relief operations, and understanding best transportation routes to and from impacted areas can rapidly become quite complicated.

NATO CONTRIBUTES TO DHS S&T PILOT PROJECT

The Next Generation Incident Command System (NICS) is a communications platform that has recently been adopted by four North Atlantic Treaty Organization (NATO) member and partner countries. NICS was funded by the U.S. Department of Homeland Security (DHS) Science and Technology Directorate (S&T), in collaboration with the Massachusetts Institute of Technology Lincoln Laboratory (MIT-LL) and with major contribution from the NATO Science for Peace and Security (SPS) division. With this partnership, NATO is helping to advance worldwide first responder capabilities through technological exchanges, information sharing, and lessons learned.

NICS offers a solution to interoperability problems by providing situational awareness, information and data



sharing, and collaboration across multiple organizations throughout all levels of government. Based on an open standards common approach, NICS can enhance existing information-sharing capabilities and be interoperable with existing technology platforms and databases. NATO is implementing the NICS system and technology in Bosnia and Herzegovina, Croatia, Macedonia, and Montenegro. This support, in collaboration with DHS S&T, will help meet the international emergency management needs of these countries by providing developmental assistance and technical collaboration. For example, in September 2017, NATO will test the NICS technology during flood and earthquake exercise scenarios in Bosnia Herzegovina as part of the Advanced Regional Civil Emergency Coordination Project (ARCECP).

FLOOD APEX PROGRAM

Also, in 2016, the Federal Emergency Management Agency asked S&T to create a Flood Apex Program to develop new technologies to reduce fatalities and property losses from future flood events while increasing community resilience. Participation with NATO in the ARCECP program is an opportunity for DHS S&T to advance this research agenda through experimentation and international collaboration.

The NATO exercise will illustrate how responders can improve situational awareness and emergency management. DHS S&T will gain a deeper understanding of emergency management information-sharing requirements at an international level, which will help inform future research activities.

