



Emerging Security Challenges Division
Science for Peace and Security Programme
Call for Proposals:
Non-Checkpoint Detection of Concealed
Explosives and Firearms – Confirmatory Detectors

Suicide bombing and mass-shooting terrorism remain among the principal concerns of public security professionals. In many scenarios, for example mass-transit, sporting events, or buildings, traditional “airport-style” screening is not feasible due to the high flow of subjects or for other reasons. The NATO Science for Peace and Security Programme (SPS)-sponsored STANdoff Detection of EXplosives (STANDEX) Programme combined real time sensors, video tracking and data fusion to allow early detection of person-borne improvised explosive devices in moving crowds with the goal of stopping an attack before it can affect the targeted infrastructure.

The SPS Programme is currently seeking to extend STANDEX with new technologies and new scenarios and hereby solicits proposals to develop technologies or systems which can confirm, with high confidence, the detection of person borne explosive devices and/or firearms concealed on the body or in bags of single individuals identified by an upstream screening detector.

Technical Requirements

All proposed technologies must be capable of:

- screening selected individuals with high confidence; please include in your proposal estimates of the screening rate and performance (ROC curves if available) of the technology both in its current state and at the end of the proposed development
- screening selected individuals either without restricting their motion or while they are stopped briefly (<1 min) as at an entrance gate for example
- providing a real-time response
- public deployment; all EU regulations must be respected and in particular those regarding acceptable levels of electromagnetic and/or laser radiation and those regarding privacy.
- integration into a multi-sensor integration platform to allow automated alarm resolution

Additionally, it would be advantageous if technologies are capable of:

- screening carried items such as bag packs
- screening a wide range of threat materials, including HME's
- discriminating among threat materials
- covert operation such that selected individuals are not aware that they have been selected

Programme Requirements

As one of the principal goals of the Science for Peace and Security Programme is to promote cooperation between NATO countries and NATO partner countries, only applications from researchers in those countries (please see list overleaf) can be accepted. Applications for joint research between NATO-country and partner-country researchers are strongly preferred. Further information on SPS Multi-Year Projects can be found on our website: www.nato.int/science.

The proposal should include a one-to-two page technical proposal along with a summary budget and estimated schedule. It should describe the threat(s) addressed, and current state of development: TRL and performance, along with the expected TRL and performance at the end of the project. Authors of selected proposals will be invited to submit a full technical and financial proposal in the fall.

Application Deadline 1 October 2015

Please send proposals to sps.applications@hq.nato.int

NATO Countries

Albania, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Turkey, United Kingdom, United States

Eligible NATO Partner Countries

Afghanistan, Algeria, Armenia, Australia, Austria, Azerbaijan, Bahrain, Belarus, Bosnia and Herzegovina, Egypt, Finland, Georgia, Iraq, Ireland, Israel, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyz Republic, Malta, Mauritania, Moldova, Mongolia, Montenegro, Morocco, New Zealand, Pakistan, Qatar, Republic of Korea, Serbia, Sweden, Switzerland, Tajikistan, the former Yugoslav Republic of Macedonia[†], Tunisia, Turkmenistan, Ukraine, United Arab Emirates, Uzbekistan.

[†]Turkey recognises the Republic of Macedonia with its constitutional name.