Developing Practical Cooperation through Science

The NATO Science for Peace and Security (SPS) Programme is open to collaboration with scientists and experts from Iraq.

The NATO SPS Programme enables close collaboration on issues of common interest to enhance the security of NATO and Partner nations by facilitating international efforts to meet emerging security challenges, supporting NATO-led operations and missions, and advancing early warning and forecasting for the prevention of disasters and crises.

The current SPS Key Priorities include:

- Counter-Terrorism;
- Energy Security;
- Cyber Defence;
- Defence against CBRN Agents;
- Environmental Security;
- Security-related Advanced Technology;
- Border and Port Security;
- Human and Social Aspects of Security.

Additionally, the SPS Programme helps to promote regional security through scientific cooperation among Partners. The Programme also helps to prepare interested eligible nations for NATO membership. SPS activities often have a high public diplomacy value.

Iraq

NATO’s commitment to developing a long-term relationship with Iraq was confirmed in April 2011 when Iraq was made an official partner nation. Iraq has expressed a desire for cooperation with NATO Allies through regular dialogue and training in the areas of Counter-Terrorism, defence against cross-border organised crime, and critical energy infrastructure protection. The SPS Programme welcomes future participation from scientists and experts from Iraq. Below are some examples of ongoing and completed activities with Iraq.

Cooperative Activities

IED DISPOSAL AND SEARCH CAPACITY BUILDING IN IRAQ

Initiated in February 2016, this SPS flagship project enhanced the Iraqi post-conflict capacity for IED clearance, thereby responding to a critical capability gap in the partner nation. The project was part of NATO’s Defence Capacity Building (DCB) package for Iraq, which identifies Counter-Improvised Explosive Devices (C-IED) as the most urgent priority area. By assisting Iraq in building more effective security forces, the project was also part of NATO’s efforts to project stability beyond its borders.

Through the provision of expert training and specialist equipment, almost 100 Iraqi Explosives Ordnance Detection (EOD) personnel from the Ministry of Interior, Ministry of Defence and Counter-Terrorism Service were trained in three training cycles in Jordan and Iraq, as well as in a Senior Leaders Engagement activity in Spain. The project’s value is sustained through a train-the-trainer approach. Iraqi experts who attended the first cycle of training as trainees then served as instructors during the second training cycle.

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The training cycles were completed in cooperation with a number of internal and external stakeholders. The NATO Support and Procurement Agency (NSPA) facilitated the overall project implementation, while the NATO C-IED Centre of Excellence in Madrid, Spain, supervised the training activities. During the second training cycle, the instructor team was reinforced through Voluntary National Contributions from Spain, Iceland and the United States. *This project was led by experts from Luxembourg and Iraq* [ref. G5185].

**IMPROVED OPTICAL IMAGING FOR SUBSEA SECURITY MISSIONS**

This ongoing Multi-Year Project (MYP) intends to integrate innovative optical imaging techniques for improving inspection and detection capabilities during subsea security missions aboard underwater vehicles. The technologies being developed include underwater 3D laser imaging and augmented conventional imaging with underwater cameras. The solutions will allow for enhanced resolution and extended imaging range even in turbid water conditions. The present proposal brings together experts from research institutes in Italy, Portugal, and the University of Baghdad to carry on the required research and development activities to improve the two aforementioned techniques, and to realize a single device capable of operating aboard underwater vehicles while encompassing both the techniques. The expected results will be validated during trials conducted first in the controlled environment of a test pool and then aboard a vessel in harbour. *This project, launched in 2018, is led by experts from Italy, Portugal and Iraq* [ref. G5541].

**THE RISK OF SKILLED SCIENTST RADICALISATION AND EMERGING BIOLOGICAL WARFARE THREATS**

Although experts and scholars are actively assessing the ability of terrorist organisations to recruit in the West, focussed discussion on the scientific and engineering community has been lacking. The need for this discussion stems from a rising concern over the misuse of chemical and biological weapons and the expertise to purposely harm soft targets, including in NATO and partner nations. In 2016, this Advanced Research Workshop (ARW) brought together experts from academic, law enforcement, intelligence, and nongovernmental sectors from both NATO and partner nations in order to assess risks, share experiences and strategies to mitigate recruitment threats and examine the latest research in this area. The workshop concluded with a table-top exercise to identify and test gaps in both the domestic and international response to recruitment efforts against the science and engineering communities. The workshop also compared the ability of domestic and international intelligence and law enforcement agencies to collaborate with the science and engineering communities in identifying risks and responding to incomplete information and intelligence leads. *This workshop was led by scientists from Iraq and the United States* [ref. G5193].

Participants of the advanced research workshop in 2016