

Chapter 8 – ACTIVITIES OF THE NATO RESEARCH AND TECHNOLOGY AGENCY

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I was asked to talk about the NATO research organization. I'd like to use this as an opportunity to go through the work we've been doing for 7 – 8 years involving social science contributions to combating terrorism. The NATO Research and Technology Organisation (RTO) promotes cooperative research and information exchange between NATO Nations and with Partner Nations. The goal is to bring Nations together not to do new things, but to explore commonalities in a multi-national program. There are no separate NATO facilities for research; we base the research program on what the Nations are already doing in terms of Research and Development (R&D). We leverage the current R&D investment and add the multi-national component to meet the military needs of NATO and advise NATO decision makers. The most important element is the network of 3000 experts who regularly come together in working groups, workshops or symposia on specific topics. They produce reports, which if unclassified, are published on the web. Sometimes we produce standards, e.g., the Modelling and Simulation (M&S) standards being developed under a current effort. We also are involved in technology demonstrations when the technology is mature enough for an experimental prototypes or concepts that can be shown to potential customers (militaries in the Nations). We organize educational opportunities. Through lecture series and technical courses, we try to bring the work to audiences that might be interested based on the results of various working/task groups (i.e., Research Task Groups).

On our organizational chart, RTO is under both the Military Committee and to the Conference of National Armament Directors. This is due to the charter mandate to support the militaries and to produce technology that can be/is used in the armaments arena. Thus there are two main focus areas – military and armaments/technology. One organization, the Science for Peace and Security Committee (SPSC) produces civil science and technology between NATO and Partner Nations, mainly working with universities and Non-Government Organizations (NGOs) through initiatives that come from the scientists themselves. There is no connection to RTO; the main vehicle for NATO Nations to collaborate on R&D. Anyone can download an application for SPSC work if you have a NATO or Partner Nation colleague that you want to work with – mostly through Advanced Research Workshops (ARW).

The RTO organization chart has a typical structure for NATO, with a Board that defines policy, a number of Panels that deal with specific technology areas. Each Panel has a programme of work and organizes symposia, etc. This (NATO-Russia) Workshop is under the Human Factors and Medicine (HFM) Panel. NATO is not a hierarchal organization. The Secretary doesn't determine the work to be done; the bosses are the Nations themselves. The committees consist of representatives from the Member Nations and others, including Russia and they determine the programme of work. Professor Krasnov represents Russia in the HFM Panel. Dr. Varus represents Ukraine. We have an evolving policy for dealing with Partner Nations, such as the Partners for Peace or Mediterranean Dialogue groups. Currently the policy is consistent with NATO guidance and the objectives of Research and Technology Board; that is, to support NATO objectives; to promote stability and security across the Euro-Atlantic area and beyond; and to enable a collaborative environment in which all NATO and Partner Nations can mutually benefit from each other's R&D efforts. Partner Nations include Sweden, Russia, Georgia, Finland, Austria, Ukraine, Switzerland, etc.

There is increasing interest in research in social sciences in support of COIN/Stability operations (behaviour sciences, psychology, human factors, cultural anthropology, sociology, economics) with participation from the traditional defence research communities as well as the broader research community. The key issue is how to operate in a multi-national environment. This is really a new direction in that the defence research community has not traditionally emphasized the social sciences. The United States

Department of Defense (US DoD) has recognized this and the Minerva program is an attempt to build up the social science expertise relative to defence and terrorism.

After 9/11, Russian President Vladimir Putin came to NATO Headquarters and it was agreed that NATO and Russia needed to set up collaborative work to combat terrorism. They held an ARW on Social and Psychological Consequences of Chemical Biological and Radiological (CBR) Terrorism co-chaired by Simon Wessely and Valery Krasnov in 2002. It addressed the psychological and societal impact of terrorist attacks, the assessment of factors that serve as mediators to exacerbate the impact (inadequate or exaggerated emergency responses, inaccurate information and false assurances, lack of public confidence and trust, uncertainty and controversy, worry, fear, rumours and hoaxes). They published “Guidelines on Risk Communication: How to Inform the Public, Inform Resilience and Not Generate Panic”. The NATO Russia advisory committee was disbanded in 2005 and it exists in virtual form currently (nrforum@listserv.cc.kuleuven.ac.be). Another ARW in Lisbon in 2004 focused on Suicide Terrorism (chaired by Scott Atran and Ariel Merari). It included NATO and Mediterranean Dialogue Nations. It was a seminal meeting. The recommendations made by the ARW were for the RTO (HFM Panel) to follow up with a longer lasting activity. Subsequently, the HFM Panel set up HFM-140 focused on Psychosocial, Organizational and Cultural Aspects of Terrorism chaired by Anne Speckhard. The group has been working since 2006 and is working on a final report currently. It will likely lead to a follow-on effort.

There was another Task Group in 2003 – 2006 focused on Stress and Psychological Support in Modern Military Operations that was chaired by Yves Cuvelier (BEL) with participation from many Member Nations. The topics covered by this group included: preparation for deployment, psychological support during deployment, support after deployment and risk assessment. They developed standards for best practices, described in a final report available on the RTO website. HFM-145 held a Symposium in 2007 on Non-Lethal Weapons in Counter Terrorism: Human Effects, co-chaired by Michael Murphy (USA) and N. Obeziyaev (RUS). They looked at the effects of non-lethal weapons (e.g., during hostage taking) and began the discussion of how to set safety margins, and on the appropriate decision support tools for making the right decisions on using non-lethal weapons. One thing that came to light was that there is a tendency to start thinking from the non-lethal side and move to the lethal side in the West versus the reverse in Russia. The thought processes were quite different. We are working on a decision support tool for crowd control in another effort. The last research-related activity I'd like to mention is HFM-146 Medical Aspects of Military Operations in High Altitude Environments, chaired by Stephen Muza (USA). This group, begun in 2006 and continuing until 2010, is addressing altitude acclimatization, altitude sickness pathophysiology, guidelines for state-of-the-art practices for selection and training, acclimatization treatments and interventions. To conclude, the work from Partner Nations to the work of the NATO RTO is extremely important, especially in the area of counter terrorism. The contributions from partners (especially Russia) are important and complement the expertise of the NATO Nations. Also, terrorism is a worldwide problem and needs to be addressed by multi-national approaches.

8.1 DISCUSSION

I'm happy to hear that non-traditional sciences are important in the way ahead. Do you have plans for a group to explore how we can focus social sciences on CT problems? We're waiting for proposals. If you have an idea, please speak with your Panel member. We need good proposals in this area. We need your expertise.

I got the impression that your tone was supported to present an analytical report. What are your views of the prospects of further collaboration, with Russia specifically? I don't decide what the content of the programmes will be. The science needs to come from you. The decisions are made by the Nations. If you have ideas, please write them up and provide them to Valery Krasnov, your representative. If there is nothing coming from the scientists, what can I do?

In NATO, you have the medical committee. Whether scientific points belong to your competence or to the medical committee? In the programme aimed at the improvement of personnel capability at altitudes higher than 5000 m, there is no Russian expert. Why? Russia was invited to contribute to high altitude work. I've spoken to the Ambassador and have tried to find an expert, but haven't found one. We don't specifically invite people; it's an inclusive process. Russia would be very welcome. NATO has a large number of medical committees. The Joint Medical Committee coordinates the work of NATO and Partner Nations in civil medicine. That's the most logical connection for you (to Sergei). There is another committee, COMEDS, the Committee of the Chiefs of Military Medical Sciences in NATO, where all the Surgeon Generals of the NATO and Partner Nations meet to coordinate policies. There is a formal Memorandum Of Understanding (MOU) signed between HFM and COMEDS and they're working on something similar between HFM and the General Medical Council (GMC). If COMEDS wants to initiate a research activity, it goes through HFM and the arrangement with GMC will probably be similar.

