

Chapter 7 – CONCLUSIONS AND RECOMMENDATIONS

7.1 CONCLUSIONS

NATO operations will benefit by having an NLW capability.

Information on the human effects of the technologies used or proposed for NLW is critical to all aspects of an NLW capability, from concept, to development, to evaluation, to testing, policy approval, acquisition, deployment, and rules of engagement.

While there are very few adequate human effects data on any proposed NLT, there is a particular need for acquiring data on promising, novel technologies, such as those using electromagnetic or electrical stimulation.

Human effects specialists should be involved at all stages of the development of a NATO NLW capability. The RTO HFM Panel is the premiere NATO resource for providing this assistance.

7.2 RECOMMENDATIONS

Public and Military Acceptance: In order to garner acceptance of NLW use, both by the military members who will use them and the general public, it is essential to provide information and to give opportunities for debate. The general concept of the value of NLW should be addressed as well as the nature of specific weapon systems and technologies that are planned or already in use. Information on human effects will be of major importance. The HFM Panel should enable a RTO Lecture Series on the Human Effects of Non-Lethal Technologies (see Annex O).

Directed Energy and other Novel NLT Concepts: Conventional NLT that have been used for many years by police, e.g., baton rounds, flash-bangs, pepper spray, will be easier for NATO to adopt and the public to accept because they have a long track record of successful and relatively safe use. Novel NLT, such as radio frequency, laser, and electro-muscular devices, have a tremendous potential for effectiveness, but are difficult to test because of medical ethics and the requirement for limiting human exposure to that allowed by highly conservative occupational health and safety standards. The health and safety of long-term exposure to electromagnetic emissions is still debated. The HFM Panel should enable a new Exploratory Team on the Human Effects of Emerging Non-Lethal Technologies (see Annex O).

Legal and Political Issues: Inside NATO-Nations different law is applied on different situations in certain scenarios in police or military operations. For multinational and joint operations the Law of Armed Conflict should be identical for each participating nation. Because of the multi-national nature of NATO operations, there will be a need to develop a common NATO standard for the use of NLW and training of personnel. This might also imply changes in the domestic law of some NATO member states.

Medical Preparation: The tragic outcome of the Moscow Theatre Hostage Rescue (see Annex M) illustrates the important role of medical preparation in planning for NLW deployment. Tactical medical planning for immediate rescue activities and therapeutic strategy is essential in an overall operative environment. It is obvious that medical protection and treatment of NATO allied forces is as important as ever, but, for NLW, the treatment and recovery of the opposition forces becomes a new high priority. The aim could be a NATO certificate for NLT. The initiative for developing a STANAG on NLT / NLW should be launched.

CONCLUSIONS AND RECOMMENDATIONS

Training: The issue of training how and when to use NLW deserves further consideration by specialists in military and police training. An “after-action” or “lessons-learned” format should be developed and deployed to report and evaluate the outcomes of NLW use. These examples would be useful when training troops to be able to deal with all the full spectrum of options, from doing nothing to applying lethal force.

Continued Research: Military-funded Human Effects Research in NLT is urgently needed to evaluate both their effectiveness and risks. Research in this area should be encouraged and supported, including collaborative experiments enabled by the HFM Panel.

Discussion and Information Exchange: The HFM Panel should continue to work to break down the barriers that limit multi-national sharing of critical human effects data on NLT. The HFM Panel should evaluate organizing a symposium on NLT/NLW, possibly in collaboration with the SAS Panel and the NATO Science Committee.