

Annex C – TAP AND TOR FOR HFM-073

C.1 TAP FOR HFM-073 (TG-12)

<i>ACTIVITY</i>	Technical Team – RTO Task Group	Human Effects of Non-Lethal Technologies										TBA	
<i>PRIORITY</i>	Medium											04 / 2001	
<i>PRINCIPAL MILITARY REQUIREMENTS</i>	3	4	5								NU (occ NS)	03 / 2004	
<i>MILITARY FUNCTIONS</i>	4	6	11	12	14								
<i>PANEL AND COORDINATION</i>	HFM; Human Factors and Medicine							SAS					
<i>LOCATION AND DATES</i>	various; semi-annual, with a symposium at end of year 3										P-I		
<i>PUBLICATION DATA</i>	TR or MP							06 / 2004		40			
<i>KEYWORDS</i>	Non-Lethal		Weapons			OOTW			Peace-keeping				
	Psychology		Physiology			Protection			Technology				

C.1.1 Theme

Non-Lethal Technologies (NLTs) have, in such forms as baton rounds and irritant gases, been widely used in cases of civil unrest. The increasing use of military forces in peace-keeping operations and Operations Other Than War (OOTW) has led to an increasing emphasis on the use of NLT in the control of materiel and personnel in situations where the use of lethal weapons is not acceptable, together with a proliferation of suggestions on the forms such NLT might take.

While the use of NLTs raises many concerns, this Technical Team is concerned specifically with Human Effects issues, both physiological and psychological. Such effects include: (a) effects on operators, allied forces, and target populations; (b) protection against accidental exposure or by exposure by opposing forces; (c) effectiveness and means of action; and health and safety issues. A large number of technologies have been proposed, including kinetic energy, sticky or slippery foams, barriers, acoustics, light (dazzle), odours, and nets, so that the number of human effects issues that are raised by the use of NLTs is correspondingly large. One area of especial concern is the effect on motivation of large groups of people, which may be very different from the effects on individuals.

C.1.2 Justification

NLTs are the subject of a voluminous literature, but much of it is of poor quality and fails to address fundamental issues. Moreover, technical assessments and experimental work could clearly benefit from international discussion and scrutiny. For NLTs already in general use, such as baton rounds and irritant gases,

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there is a considerable body of experience, but in other cases it is difficult to say in what circumstances an untried NLT might best be used, whether it would be effective at all, or what degree of risk is likely for users, target populations or bystanders. These questions need to be addressed, but this needs to be done on an international basis to share experience in situations where NLTs might have been used; and also to make best use of different levels of funding and methods of approach, which differ substantially between NATO member nations.

Experimental work on NLTs is likely to be very expensive. The need for, and nature of, the experimental work required should be discussed within an international forum to make best use of available funds.

Much information, especially on safety issues, is available in contexts other than specifically NLT, but the relevance of this is again best discussed within an international forum.

C.1.3 Topics to be Covered

- Effects of NLTs on individuals and populations.
- Medical, Health, and safety issues in the use of NLTs, including effects on targeted populations and bystanders.
- Terminology for the NL technologies and human effects.
- Effects of NLTs on motivation and actions of large groups of individuals; to include models of crowd behaviour in different scenarios.
- Protection of the soldier.
- Data collection issues and database development for the human effects of NLTs.
- Training issues for the use of NLTs.

C.1.4 Chairman

US.

C.1.5 Members

FR; GE; NE; PL; UK; US.

C.1.6 National Resources Available

TBD

C.2 TERMS OF REFERENCE (TOR) FOR HFM-073 (TG-012)

C.2.1 Origin

C.2.1.1 Background

Non-Lethal Technologies (NLTs) have been widely used in cases of civil unrest and will be used in future NATO operations other than war (OOTW). Although there is a substantial literature on the physical

characteristics of many proposed NLTs, the human effects (psychological/physiological and short/long term) on the users and putative targets of such technologies and are largely unknown.

C.2.1.2 Justification

This activity is needed to facilitate training, readiness, and joint operations utilizing NLTs; to reduce duplication of research effort; to facilitate acceptance of NLTs; and to minimize risk of injury to NATO forces and to members of the public. Identification of requirements for human effects data will provide the armaments community with criteria for minimizing the risk of injury resulting from use of NLTs.

C.2.2 Objectives

This technical group will address the human effects of NLTs (physiological & psychological) to:

- Assess the consequences of NLTs for health and safety;
- Increase information exchange to facilitate understanding & reduce redundancy;
- Identify gaps in our knowledge and identify research needs;
- Supply relevant information to commanders/warfighters and suppliers;
- Facilitate public acceptability; and
- Identify non-lethal weapons suitable for anti-terrorist activity especially when non-combatants or innocent bystanders are involved, with special attention given to safety margins.

Duration of the TG will be three years

C.2.3 Products

The proposed products of the TG are:

- A common database for NLT Human Effects;
- A common glossary for NLT Human Effects;
- Prioritized recommendations for needed human effects data;
- Yearly progress report and final report;
- A Workshop and possibly a Symposium; and
- Publications, e.g., proceedings, AGARDograph.

C.2.4 Resources

C.2.4.1 Membership

The membership will be composed of experts in fields relating to the human effects of non-lethal technologies, including medical doctors, psychologists, physiologists, and engineers, from governmental agencies, industry, and academia.

Participating nations at this time: CZ, ES, FR, GE, NL, PL, SE, UK, US.

Lead Nation: US.

Chairman: Dr. Michael R. Murphy.

C.2.4.2 National and/or NATO Resources Needed

National resources: Man power and travel funding by the nations.

NATO resources: Publication (AGARDograph?), others TBD.

C.2.4.3 RTA Resources Needed

Two key note speakers at the symposium under the Consultant and Exchange program: TBD.

C.2.5 Security Classification Level

NATO unclassified, open for PfP, except for single events.

C.2.6 Participation by Partner Nations

All NATO member nations and Partners for Peace are welcome to participate.

C.2.7 Liaison

The Technical Team will liaise and coordinate its activities with other RTO activities concerned with non-lethal weapons, especially the SAS Panel's study on Non-Lethal Weapons. This goal will be realized by double membership, by exchange of documents, and perhaps by an official liaison relationship.

Liaison with TTCP, as well as with the European Working Group on Non-Lethal Weapons, and the US Joint Non-Lethal Weapons Human Effects Centre of Excellence is sought.