Statement of the UN Institute for Disarmament Research

at the Meeting of the High Contracting Parties to the CCW

13 November 2014

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Mr Chairman, distinguished colleagues

Thank you for giving me the opportunity to tell you about research underway at the UN Institute for Disarmament Research (UNIDIR) that pertains to your discussion on Lethal Autonomous Weapon Systems and that we hope will add value to your work.

The Project

In 2013 the Secretary-General's Advisory Board on Disarmament Matters recommended that the Secretary-General consider commissioning a comprehensive analysis on increasingly autonomous weapons technology. He suggested UNIDIR be tasked to carry out such a study, which would cover the development, proliferation and use of this technology.

Member States have yet to decide whether to commission such a study. However, in the interim UNIDIR has begun to carry out an 18-month project on the weaponization of increasingly autonomous technologies with the support of the governments of the Netherlands and Switzerland. This project is part of UNIDIR's Research Programme on "Security and Society".

UNIDIR's project is focused on advancing multilateral discussion in this domain. For example, it seeks to explore some of the areas of concern, and learn from approaches from other domains that may be of relevance. It does *not* offer specific policy recommendations. Instead, the project's primary aim is to help policy-makers to better consider and make informed decisions about autonomy in weapon systems.

Turning to the outcomes of the project

This year, UNIDIR has focused on four aspects related to autonomy—ways to frame discussions, the concept of "meaningful human control", maritime autonomy, and ethical challenges.

On the first aspect, UNIDIR released a short paper at the end of April entitled "Framing discussions on the weaponization of increasingly autonomous technologies." The paper makes **four observations** for policy makers to think about as they approach talks in multilateral fora such as the CCW and the Human Rights Council, as well in their national policy dialogues.

Second, the phrase "**meaningful human control**" has been taken up by civil society and some states as a useful framing concept for discussions on autonomy in weapon systems. We saw this most clearly at the May 2014 CCW Meeting of Experts, with some noting then that the concept needed further development and study. Other potential frames for thinking about the issues were also raised at that meeting, like those focused on predictability or human intent.

In response, UNIDIR has sought to further explore the concept of meaningful human control. For example, on 16 October, on the margins of First Committee, UNIDIR held a well-attended side event entitled "Weapons, Technology and Human Control". One new element this side event introduced was that there are safety issues related to ensuring meaningful human control in autonomous systems. These issues go beyond strict questions of intentional targeting and attack, especially in highly complex, tightly coupled technological systems that are prone to catastrophic failure. For those of you who were not with us on 16 October, you can hear the thought-provoking talks on our website (`www.unidir.org`).

Today we are releasing a second paper, "The Weaponization of Increasingly Autonomous Technologies: Considering how Meaningful Human Control might move the discussion forward". I won't attempt to summarise this fascinating and up-to-the-minute paper here. Instead, I recommend to you all that you read it as an aid to your work. Copies are available at the back of this conference chamber, or can be downloaded from the UNIDIR's website, (www.unidir.org).

Third, this year we have considered **maritime autonomy.** Experts have suggested that fully autonomous weapon systems are likely to first appear in the relatively "uncluttered" maritime environment. Yet, policy-makers do not yet appear to have focused much on the specific issues and challenges that will arise. The rules covering armed conflict at sea are less elaborate than those for land warfare. While basic rules of international humanitarian law apply—namely those of distinction, proportionality and precaution in attack—there is little treaty law addressing the challenges of doing so at sea. Two existing categories of marine objects in maritime law that might be relevant to discussions of increasing marine autonomy are **vessels** and **weapons**. Just as Special Rapporteur Christof Heyns has warned that the weaponization of increasingly autonomous systems might one day blur the distinction between weapon and soldier, increasingly autonomous marine systems blur the line between these two distinct categories.

Later this month UNIDIR will release a third observation paper that aims to shed light on these and other issues related to the weaponization of increasingly autonomous technologies in the maritime environment.

Finally, considering ethical dimensions in the autonomy discourse is crucial. Yet we've observed that the matter of ethics is often presented as a prelude to supposedly more substantive legal discussion. So our work this year will conclude with a paper examining **ethical issues** that the weaponization of increasingly autonomous technologies raises.

Mr Chairman, distinguished colleagues,

UNIDIR stands ready to continue to assist Member States as you move forward in your discussions on the weaponization of increasingly autonomous technologies in this forum as in others. Funding permitting, UNIDIR intends to continue its work in this regard through 2015. If your government is interested in supporting UNIDIR's programme of work on this topic, I'd be happy to discuss areas for collaboration with you.

Thank you, Mr Chairman.

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