



8<sup>th</sup> Annual Conference on "The Ethical Implications of Emerging Technologies in Warfare"

WELCOME ADDRESS by the PRESIDENT  
General (rtd.) Benoît ROYAL

Ladies and gentlemen,

It is with great pleasure that I open EURO-ISME's 8<sup>th</sup> annual conference at this magnificent venue, the Spanish army's Infantry Academy in Toledo.

First and foremost, I would of course like to thank our hosts very much for opening their doors to us. We are most appreciative of their enthusiasm and their generous welcome, without which we could not have gathered here today. Thank you to all of the teams which have helped to organise the conference: we are very grateful to them.

A big thank you too to all of the EURO ISME team, which has put so much effort into organising the conference: John Thomas, Ted von Baarda, Ivana Gosic and all of their assistants. As every year, we acknowledge their work as we look back at the past and the effort put into achieving such quality of organisation, which is always of a very high standard.

Finally, I would like to thank all of you for attending today. Your presence shows the interest which you take in military ethics-themed research. We appreciate your loyalty towards the conference which we are holding today. The presence of so many researchers, both government and military, is a formidable promise of quality exchanges and I am again convinced that we will go home better informed in every field: technical, philosophical, legal, human and of course, ethical.

The theme which we are focussing on this year is "The Ethical Implications of Emerging Technologies in Warfare".

I would like to spend a few minutes sharing a few thoughts on the subject with you.

The expression "Emerging technology" includes:

- The increasing automation of weapons, which we see in everything which we classify as autonomous [and semi autonomous?] lethal weapon systems (drones, of course, but not exclusively),
- The technologies and biology which lead to increasing military capabilities, which we classify under the umbrella term "the enhanced soldier", including physical, cognitive and psychological capabilities.

- The emergence of artificial intelligence and algorithms on the battlefield, especially in the computer systems which help in decision-making. Things which help us increase the autonomy and automation of responses in the multitude of electronic decision-making systems.
- The development of cybertechnology (to deal with infiltration, hacking, etc.) in cyberspace.

Let us try to identify the main characteristics of the emergence of these new technologies, at “macro” level. Here are three headings expanded with a few thoughts:

### **1. These technologies are potentially less murderous**

- They make for increased effectiveness when it comes to targeting, and as far as those focussing on automation of arms are concerned, they no longer require 100 bombs to achieve their aim (as was the case in the 2<sup>nd</sup> World War), whilst others seek to protect soldiers.
- Reinforced military techniques seek to protect soldiers. [Comment – repeats end of first point]

### **2. Increasingly covert targeting capabilities, combined with this effectiveness, mean that we can go further, more discreetly, and increase the surprise effect.**

But conversely, these capabilities have the drawback that the ideal tool may look deceiving. US strategists fell into this trap when they were engaged in the drone war in Pakistan and the Yemen, which was ultimately extremely murderous in terms of collateral damage, and led John Tierney, President of the House of Representatives’ National Security and Foreign Affairs Sub-committee, to declare in 2015 that *“the drones’ strikes were at best contrary to ethics and at worst counterproductive”*.

### **3. These technologies tend to gradually wipe out defined war frontiers:**

#### **A. Beyond the frontiers of the geographical area**

This means:

- areas where drones are used, getting in the way of the day-to-day life of populations and countries which did not start the war,
- actions in cyberspace, which of course, has no frontier,
- drone pilots who are acting outside combat zones, staying within their national territory (such as US drone pilots).

So war tends to extend into uncharted territory and other people tend to become involved. We see inversion of the process to reduce combat zones.

#### **B. Beyond the frontiers of the militarised zone**

In fact, the dissemination of technologies and their accessibility to government operations encourages this dissemination.

For example:

- the CIA deeply involved in the drone war
- the cyber war pursued by computer hackers
- dissemination of armed drones in developing countries (Chinese)

### **C. Beyond view and control**

Here, I would evoke:

- The increasing stealth of aerial vehicles (rather than increasingly invisible bomber aircraft),
- The almost complete invisibility of cyber action,
- The increasing use of special forces and secret operations assisted by increasingly discreet technologies.

### **What are the consequences of this?**

1. The principles of discrimination and proportionality which were the basis for the creation of international law tend to become diluted: after all, what control does the international community have over them?
2. In these increasingly secretive areas, belligerents find room for manoeuvre, where new excesses are allowed, disregarding all rules.
3. Faced with algorithms and automation techniques, Man is gradually abrogating some of his intelligence to machines. Nowadays, is he capable of setting their limits?
4. Man's place and his awareness (and so his capacity to regulate the degree of violence) tend to increasingly reduce both in areas where decisions have to be made (top management, decision-making centres) and on the ground. Perhaps Man has not yet come out of the loop, but it is certain that he no longer has both feet inside it.

So I believe that the expansion of these new technologies on the battlefield is starting a new contest **between war with rules and war without rules.**

And I believe that there is **a real risk of dehumanisation of war and that our ethical values in future wars will drop** if players on all sides disregard lessons learnt from history and are tempted to return to short-term victories.

And the values which we are defending are the ones which were identified by humanity's most ancient philosophers as consubstantial with Man's survival. These values, which are felt from within by every one of us and are not imposed from outside by a minority, focus on our love for ourselves rather than our hatred of others. They carry with them the seeds of victory when confronted by other people's ideologies fabricated on all kinds of things, profoundly exclusive, or when confronted by hegemonic attempts from another age.

Events like this gathering enable us to reflect on these issues and will no doubt be the focus of your forthcoming debates.

Thank you for your attention. I hope that you all enjoy the conference.