

Number	LANCS-D4.3-RN-Warfare-Dual-Use	A-PI--
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Title	Research Note (RN) for D4.3
Subtitle	Issues in Focus : Dual-use and warfare

PROBLEM	SOLUTION	Research Note	X	Selected Annotation
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Categories: | | |

Summary:

This note takes the example of ICTs in military research and operation, and questions how they might compare with civilian counterparts?

CONTEXT

Developments of advanced ICTs are heavily funded by military and extensively put to use in warfare (surveillance, reconnaissance and battle zones activities), and in military patrol. In fact, there is nowhere more investment in advanced ICTs than in military technology research.

FACTS

Military technologies include the development of applications such as:

- the positioning and tracking objects and bodies
- sensing and recording behavioural metrics
- operating unmanned aerial vehicles
- operating bomb sniffers and environmental sensors
- applying non-invasive brain-machine interfaces for enhanced performance

All of these applications are developed in one or another form for civilian use, where unmanned aerial vehicles are developed for surveillance and monitoring in law enforcement, and mobile robotic devices are used to detect hazards and living beings in burning buildings and other health and safety-critical scenarios (key readings include Sparrow, 2009; Sharkey, 2008; Arkin, 2008).

COMMENT

The main problems with dual use, turns on adequately answering questions such as:

1. where the values lie in using the new and advanced technologies.
 - What would we learn from comparing machine 'workers' in dangerous situations with machine weapons aimed at winning a war?
2. what the gap is between promises and outcomes.
 - The promises of future military applications are particularly powerful and persuasive and so are the promises of future surveillance and security applications. But will advanced ICTs disproportionately alienate and isolate operators from populations who are their subjects, creating unnecessary risks in both military operations and law enforcement?

- How useful and usable are the applications when machine intelligence is designed to dominate in decision-making scenarios? How amenable are such applications to abuse?
3. when the applications of advanced ICTs are seen to be next to risk-free compared to the deployment of persons.
 - What are the comparisons in this respect between warfare and policing?
 4. what the threshold is for conflict and to what extent humans should always be in the operational loop.
 - What are the comparisons between warfare and law enforcement?