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- Introduction to LAWS
- Allocating moral responsibility
- The responsibility gap



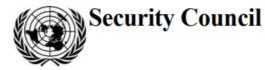




"Crimes against international law are committed by men, not by abstract entities, and only by punishing individuals who commit such crimes can the provisions of international law be enforced"



United Nations



Distr.: General 8 March 2021

Original: English

## Letter dated 8 March 2021 from the Panel of Experts on Libya established pursuant to resolution 1973 (2011) addressed to the President of the Security Council

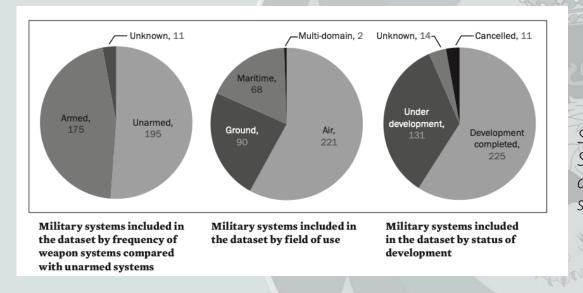
The Panel of Experts on Libya established pursuant to Security Council resolution 1973 (2011) has the honour to transmit herewith, in accordance with paragraph 12 of resolution 2509 (2020), the final report on its work.

The report was provided to the Security Council Committee established pursuant to resolution 1970 (2011) concerning Libya on 18 February 2021 and was considered by the Committee on 5 March 2021.

"Logistics convoys and retreating HAF were subsequently hunted down and remotely engaged by the unmanned combat aerial vehicles or the **lethal autonomous weapons systems** such as the STM Kargu-2 and other loiterings. The **lethal autonomous weapons systems** were programmed to attack targets without requiring data connectivity between the operator and the munition."



- Categories of unmanned weaponry systems
- Remotely operated ('in the loop')
- Automated ('on the loop')
- Autonomous ('out of the loop')
- -> directed by human
- -> supervised/pre-programmed
- -> no human input



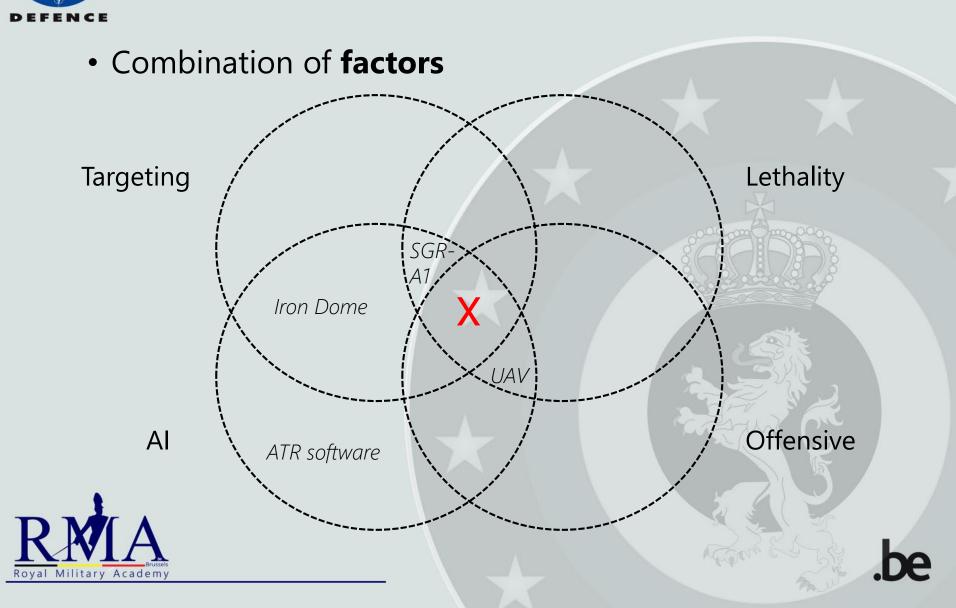
Source: SIPRI dataset on autonomy in weapon systems



• Disagreement on **definition** 

" Systems that ones activated can select and engage targets without further intervention by a human operator " (ICRC, DoD US)







- General problems with AI
  - Bias in algorithms (data quality, quantity, origin)
  - Lack of transparency/predictability
  - Problems with verification and validation
  - Automation bias

+ Military environment (harsh, dynamic, complex, adversarial nature)

- Specific to military context: principles of IHL ('jus in bello')
  - Discrimination
  - Proportionality
  - Military necessity





• Importance of notion responsibility in international debate

"Human responsibility for decisions on the use of weapons systems must be retained since accountability cannot be transferred to machines. This should be considered across the entire life cycle of the weapons system "

(Principle 2, Guiding principles by the GGE)





### • Different kinds of responsibility

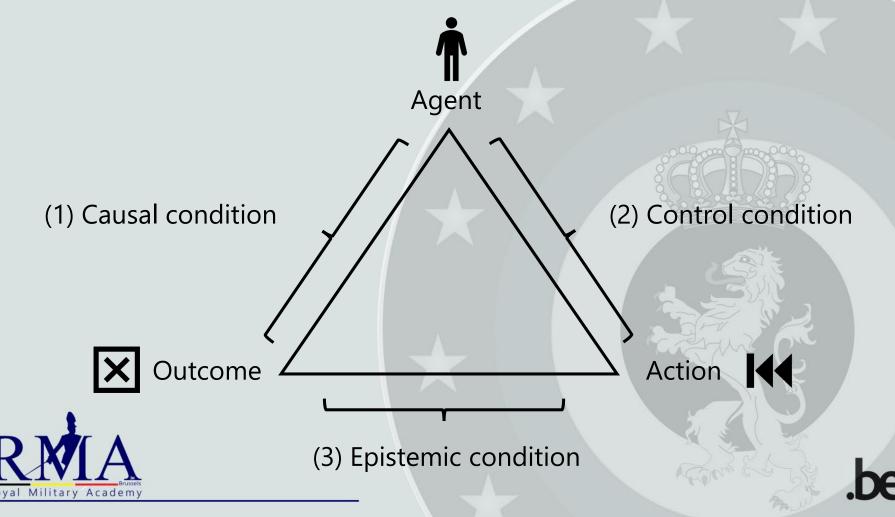
" Smith had always been an exceedingly <u>responsible</u> person, and as captain of the ship he was <u>responsible</u> for the safety of his passengers and crew. But on his last voyage he drank himself into a stupor, and he was <u>responsible</u> for the loss of his ship and many lives. Smith's defense attorney argued that the alcohol and his transient depression were <u>responsible</u> for his misconduct, but the prosecution's medical experts confirmed that he was fully <u>responsible</u> when he started drinking since he was not suffering from depression at that time. Smith should take <u>responsibility</u> for his victims' families' losses, but his employer will probably be held <u>responsible</u> for them as Smith is insolvent and uninsured. "



(Vincent 2011, adapted version of Kutz 2004 and Heart 1968)



• Individual moral outcome responsibility =





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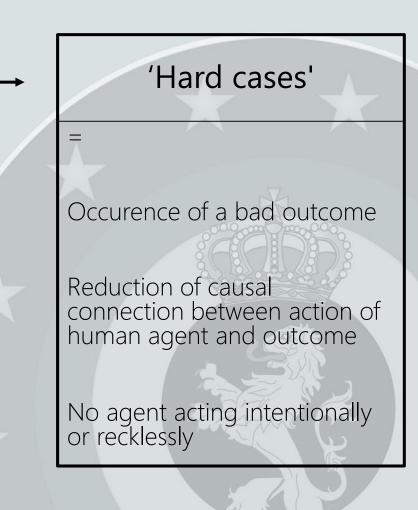
Occurence of a bad outcome

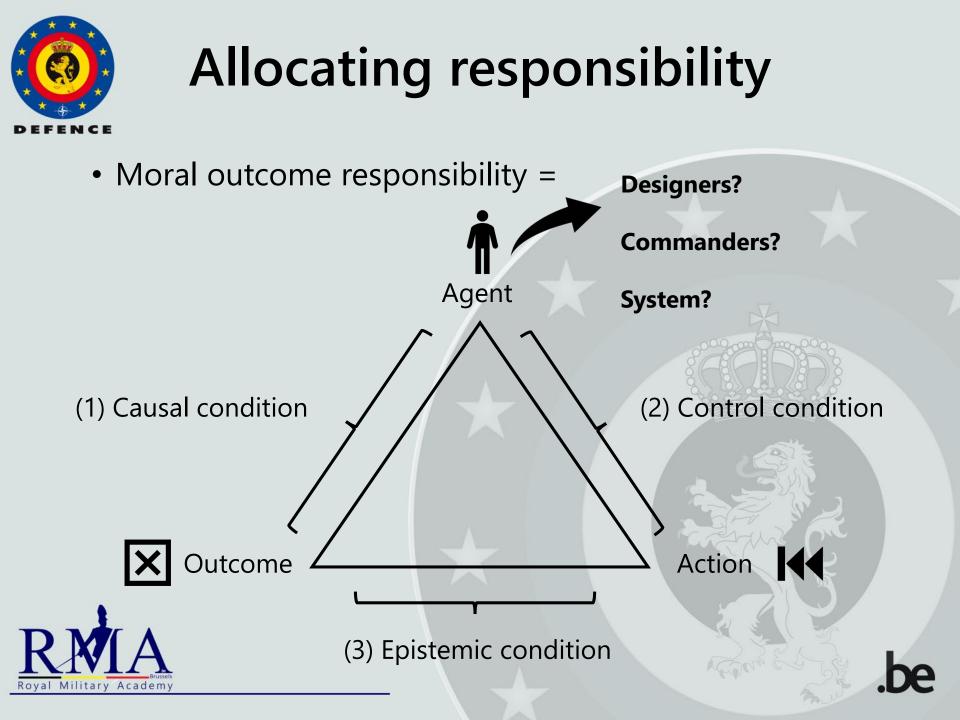
'Easy cases'

Direct causal connection between the action of human agent and outcome

Agent with bad intent that uses AWS as an instrument









# **Responsibility gap**

- (Pr) Just war if someone can be held responsible
- (Pr) No-one can be held responsible
- (C) Use of LAWS is unjust





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# **Responsibility gap**

		ー Solvable	Solvable
Gap	New moral problem	- Pessimists	<ul> <li>Practical arrangements</li> <li>Tracking solutions</li> <li>System itself responsible</li> <li>Collective responsibility</li> </ul>
	¬ New moral problem	<ul><li>Not unique to LAWS</li><li>Tolerable</li></ul>	<ul><li>Not unique to LAWS</li><li>Tolerable</li></ul>
⊐ Gap	New moral problem	X	X
	– New moral problem	X	- LAWS is a tool so human remains responisble
al Military Academy			Actual Control of Cont



### Thank you.

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# Royal Military Academy

