

# Operational Considerations for LAWS



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# Summary

- The nature of defence
- Emerging security trends
- Why military forces might or might not seek greater autonomy
- Meaningful Human Control
- Conclusions

# The Nature of Defence



“The first duty of government  
is defence of the realm”

Michael Fallon MP,  
Former Secretary of State for Defence  
HMG

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# The Nature of Defence

The security environment is inherently unpredictable

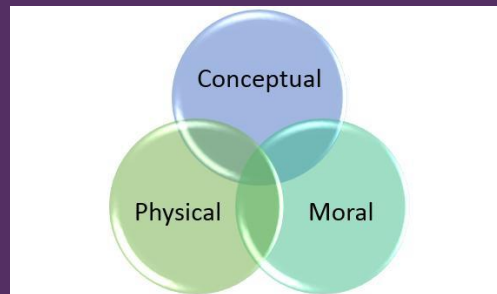
The adversary always has a vote



# Defence

The hallmarks of an effective military force:

- Competitive (relative to adversaries)
- Deterrence (communication of intent and demonstration)
- Secrecy
- Governed by LOAC, IHL



# Global Security Trends

- Diverse Threats
- Civilian sector is the driver for Research & Development
- Defence Industry has globalised
- Mass & cost
- ISR - Reach and persistence
- Cyber/EME/IOT
- International media/social media has increased scrutiny

# Why greater autonomy is attractive

- Exploit civil technologies and understand how others may also wish to exploit existing technologies
  - Big data
  - Open Source Intelligence
  - Logistics
- Increase situational awareness and therefore make better, more timely decisions - persistence
- Increase speed, range of defensive measures
- Increasing costs of personnel

## Why LAWS might be attractive

- Allow greater numbers of 'low cost' platforms
- Increases the military's ability to intervene across multiple theatres of operation if requested
- Intervene in theatres where access might be denied
- Bandwidth may not be available for man 'on the loop'



## Why LAWS may not be appropriate

- Increase the likelihood of intervention on the part of the political class
- Potential for unlimited liability on the part of the commander
- Autonomous systems may be controlled by others
- Remote warfare/overwhelming violence may aggravate security situation
- LAWS Arms race

# Meaningful Human Control

Strategic



Operational



Tactical



# Meaningful Human Control

MHC relative to.....?



## Summary

- The security situation is increasingly unstable
- Civil sector is driving R&D moving to increasing autonomy
- Potential for arms race and/or proliferation of technology
- Political oversight of military always requires MHC and many layers of scrutiny already exist within military system
- Greater scrutiny always drives more regulation and greater accuracy
- Enforcement of LOAC and IHL paramount

# Questions?

Thank you