

# Presentation to Policy and Ethics of Intelligent Autonomous Systems Technical Exchange Meeting

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## *Dimensions of Autonomous Decision Making*

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# Study Questions

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1. What are the dimensions that must be considered in delineating what decision-making authority should/must remain with humans vs. what can be delegated to Intelligent Autonomous Systems?
2. How can DOD incorporate these dimensions into a framework that will guide the development, fielding, integration, and employment of militarily effective, legally compliant, and ethically conforming Intelligent Autonomous Systems?

# Study approach—question #1

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- *What are the dimensions that must be considered in delineating what decision-making authority should/must remain with humans vs. what can be delegated to Intelligent Autonomous Systems?*
  - Identify the concerns/risks that must be addressed before granting decision making authority
    - In the form of questions/checklists
  - Review a large and diverse collection of documents:
    - AI & robotics roadmaps, plans, strategies, SOPs, etc.
      - DOD, USG, allied *and adversary* foreign governments, NATO, UN, commercial unmanned vehicles, etc.
    - Doctrine and targeting manuals
    - Groups opposed to lethal autonomous weapons
    - Commissions, think tanks, FFRDCs, UARCs
  - Affinitize these “elements” into dimensions

# Study approach—question #2

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- *How can DOD incorporate these dimensions into a framework that will guide the development, fielding, integration, and employment of militarily effective, legally compliant, and ethically conforming Intelligent Autonomous Systems?*
  - Still to be determined, but:
  - We want to “test drive” our proposed checklists/dimensions with groups of SMEs
    - With participants of a/the 3000.9 mock review?
    - With developmental testing SMEs?
    - With operational testing SMEs?
    - With an operational commander’s staff?

# Request for Information

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- We have and will disseminate:
  - The list of documents already collected
  - The list of documents we intend to collect
- ***We encourage your suggestions for additional documents that contain potential additional individual “elements” that comprise the Dimensions of Autonomous Decision Making***
- We are also happy to provide copies of any documents we already have that may be of interest to you (subject to distribution restrictions)