

# SESSION UNMANNED SYSTEMS

INFODAY AND BROKERAGE EVENT  
11 APRIL 2019

European Union's Preparatory Action on Defence Research - PADR programme has received Union's funding

This communication or publication related to the implementation of the entrusted tasks made by EDA reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains.



# CALL TEXT PRESENTATION RA TOPIC TOPIC PADR-US-03-2019

Interoperability standards for military unmanned systems

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# PADR-US-03-2019 – CHALLENGE

## Interoperability Standards for military unmanned systems

- Interoperability of defence systems is key for the ability of different forces to operate safely and effectively together in joint or combined operations.
- Increased use of unmanned systems of modern forces in multi-national operations require:
  - Multi-national interoperability;
  - Cross-domain interoperability;
  - Effectiveness and adaptability of systems to mission and mission intensity.
- Need to:
  - Upgrade and adoption of novel payloads;
  - Maintaining and upgrading equipment at state-of the art;
  - Standardising the human-machine interaction.

# PADR-US-03-2019 – SCOPE (1/5)

## Interoperability Standards for military unmanned systems

- Focus on interoperability and standardisation at different levels: **systems**, **subsystems**, **components** and **procedures** of complex UXS platforms in a network centric environment.
- The proposed activities should include a **demonstration** of the effectiveness of the proposed approach.
- Key performance indicators (KPIs)
  - High-level description in the proposal (envisaged functionalities and the methodologies on how to measure)
  - Detailed description of these KPIs and methodologies to be delivered at KO + 6 months

# PADR-US-03-2019 – SCOPE (2/5)

## Interoperability Standards for military unmanned systems

- Examples of topics to be addressed by the proposals:

- The coordinated use of multiple platforms, datalink aspects, standardisation of control stations to simultaneously control several platforms and to control the handover between stations

# PADR-US-03-2019 – SCOPE (3/5)

## Interoperability Standards for military unmanned systems

- Examples of topics to be addressed by the proposals:

- Intra-system interoperability: interoperability between the subsystems and payloads within a system:
  - standard interfaces
  - plug-and-play connection capability
  - easy installation/change of mission payloads
- Standardisation of the modules, interfaces and information formats to simplify the design of new, the upgrade of existing UXS;
- Robotic hardware standardization: to allow for the exchange of robotic elements in military applications

# PADR-US-03-2019 – SCOPE (4/5)

## Interoperability Standards for military unmanned systems

- Examples of topics to be addressed by the proposals:

- Interoperability between
  - UXS;
  - manned systems and UXS;
  - soldiers, manned systems and UXS;
- Concepts for interoperability between military units utilizing autonomous systems.

# PADR-US-03-2019 – SCOPE (5/5)

## Interoperability Standards for military unmanned systems

- EU contribution: EUR 1 500 000.
- The lifetime of the proposed project should not exceed 24 months.
- **No more than one action will be funded.**
  
- **Deadline for applications: 28/08/2019**



# PADR-US-03-2019 – EXPECTED IMPACT

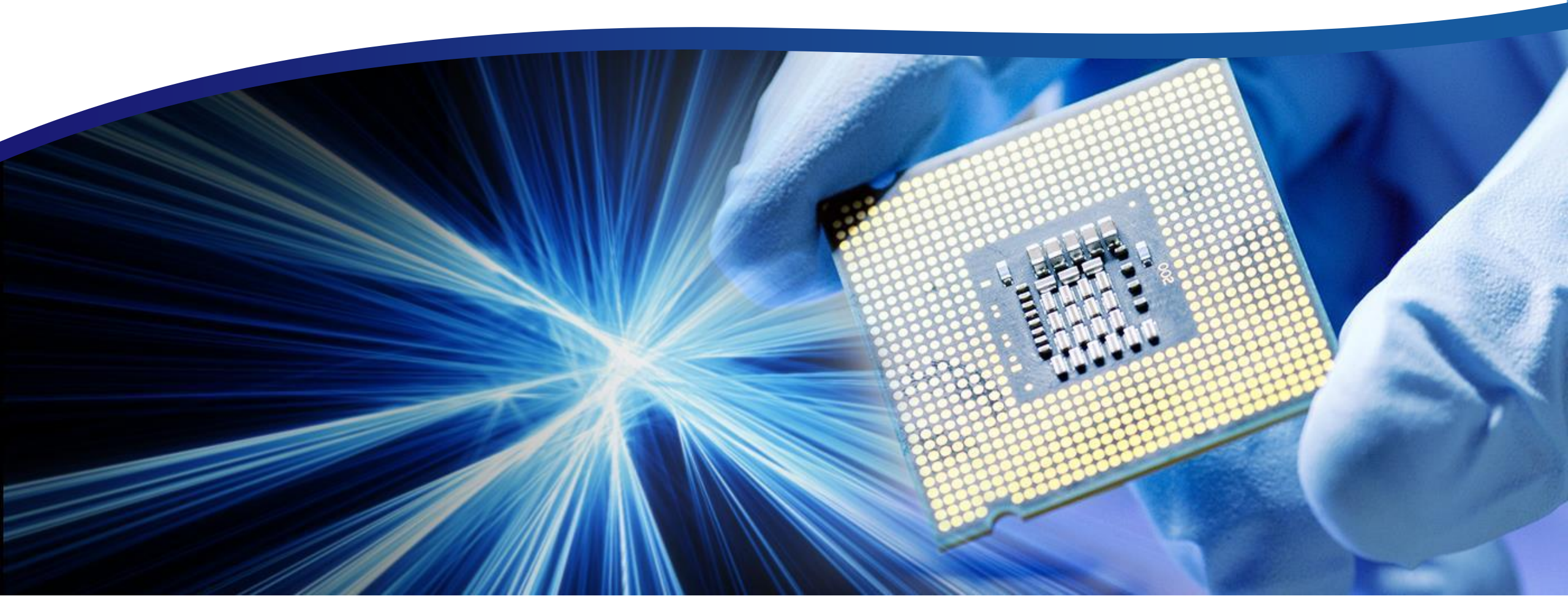
## Interoperability Standards for military unmanned systems

- Convincing demonstration of **EU-wide research cooperation** in defence research;
- Promotion of **intra-/inter-system interoperability** for unmanned systems;
- **Increase of modularity and reduction in life cycle costs** for unmanned systems;
- Enhancement of the **effectiveness of military personnel and systems.**

**Type of Action:** Research Action (RA)



EUROPEAN  
DEFENCE  
AGENCY



# THANK YOU – Q&A

PLEASE BE INFORMED THAT THE Q&A SESSIONS WILL BE AUDIO RECORDED, AND THE QUESTIONS AND ANSWERS WILL BE INCLUDED IN THE RELEVANT Q&A FILE, PUBLISHED IN THE CALL WEB. YOUR NAMES WILL NOT BE INCLUDED. HOWEVER, IF YOU HAVE ANY OBJECTION TO THIS, PLEASE AVOID TO STATE YOUR NAME BEFORE ASKING THE QUESTIONS.