



Ejército del Aire
y del Espacio

Counter Unmanned Air Systems

The SpAF Vision

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UNMANNED AIR SYSTEMS POTENTIAL THREATS SPECIFICS

***Universal* threat**

- From massive-commercial to specific military
- From tiny devices to *real* aircrafts
- Easy to procure, modify or even develop.



Huge effects spectrum

- Unintentional / misuse - intentional /malicious
- Services denial – Cyber-vector - Kinetic attack



Agile and highly evolving threats

- Remote *agresor* – *stand off* – *non atributable*
- Evolving technologies, pay loads or strategies



Diffuse protection boundaries

- Private protection - Law Enforcement - Military



COUNTER UAS MILITARY RESPONSE - TECHNICAL CYCLE

Detection:

- As soon as practicable
- Any available sensor - Integration / fusion
- C4I Military – Law enforcement - ATM



Identification:

- Physical identification
- Control system
- Pay load

Evaluation:

- Risk – Hazard analysis
- Highly agile - Tempo



Mitigation:

- Non kinetic vs kinetic
- Collateral effects – Rules of Engagement

COUNTER UAS MILITARY RESPONSE – COOPERATION AND INTEGRATION

Integration of means:  **Standardization**

- Getting advantage or others means : *disimilar* sensor fusion
- Avoiding undesired damages on protected assets & others services / assets
- Technological integration required - **Interoperability**



Intelligence sharing:  **Cooperation**

- New threats detection dissemination among stakeholders
- New technologies developed from detection through mitigation
- The fastest the knowledge shearing the higher the probability of success





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READINESS

FLEXIBILITY

RESPONSIVENESS