

A multidimensional response to UAS-related threats against vulnerable targets

The EU Commission and Countering UAS

DG HOME – Dir. Internal Security – Counter-Terrorism Policy Unit

United Nations International Expert Group Meeting on the Protection of Vulnerable Targets and Unmanned Aircraft Systems

UNOCT – 07 Oct 2021

European (C-UAS) policy context

- The 2020 **EU Security Union Strategy** and **Counter-Terrorism Agenda** state that the threat of non-cooperative UAS is a serious concern in Europe.
- Action Plan on synergies between civil, defence and space industries (2021)
 - includes a drone technologies flagship project.
 - ➤ involves, e.g. the *EU drone strategy 2.0* (2022) aimed at enabling and accelerating the further development of UAS tech in Europe, including C-UAS.
- European regulatory framework for safe drone operations will enter into force:
 - <u>U-Space</u> the European UTM arrangement (January 2023).
- Many EU partners engaged in counter-UAS, including Institutions, EU Agencies, LEA's & networks and funded consortia.





C-UAS and Drone related Directorates-General (DG)

- Migration and Home Affairs (DG HOME)
- Mobility and Transport (DG MOVE)
- Defence Industry and Space (DG DEFIS)
- Internal Market, Industry, Entrepreneurship and SMEs (DG GROW)
- + the Commission's Joint Research Centre (JRC)







- □EU Regulations 2019/945 and 2019/947 set out the framework for the safe operation of civil drones in the European skies.
- □ In 2021 the *European Union Aviation Safety Agency* published 2 relevant documents:
 - ➤ Manual "Drone Incident Management at Aerodromes" (partially restricted).
 - Study on the societal acceptance of Urban Air Mobility.



DG HOME & Counter-UAS

- Use of commercial drones by terrorist groups in Syria-Iraq, Gatwick incidents as well as several terrorist threats and plots.
- First EU C-UAS workshop in 2016
- The need for protection against drones is mentioned in the EU Action Plan to support the protection of public spaces (2017).
- Provide support to EU member states, funding of projects and studies.
- Now at 2 meetings per year...



DG HOME's Counter-UAS activities

Communitybuilding

Meetings with MS

Counter-UAS Interest Group

Bilateral engagement with stakeholders

Informationcollection and sharing

Global monitoring

and email updates to stakeholders

Counter-UAS Interest Group

European Programme for C-**UAS** systems testing

COURAGEOUS

Regular newsletter

Practical guidance/support

> **EU Handbook for** securing metro areas

Overview of counter-**UAS** solutions (February 2020)

> **Support to EU Agencies**

Support to ERNCIP

Research and innovation

Monitoring and bringing visibility to relevant projects, e.g. ISF-Police, Horizon 2020, EDIDP. **SESARJU**

Identifying future innovation/knowledge needs

Legislative engagement

Existing EU drone regulatory framework

U-Space (UTM)



European Programme for counter-UAS systems testing

- Outcome of 2019 High-Level EU International Conference
- Intended to facilitate a more common European approach among civilian authorities regarding counter-UAS systems testing
- Supported by COURAGEOUS, a three-year project led by the Belgium Royal Military Academy, started in April 2021, tasked with:
 - Identifying relevant standard scenarios
 - Developing functional and performance requirements/metrics
 - Developing a testing methodology
 - Conducting performance testing of sensors and integrated systems
 - Dissemination of results to EU MS



EU Handbook for securing urban areas from non-cooperative UAS



Source: Securitymagazine.com

- A top-level, accessible handbook addressing relevant audiences and stakeholders in an urban context
- Non-technical
- Public release scheduled for late 2021



Joint Research Centre

- □ JRC DRONE. Counter UAS for critical infrastructure
 - ➤ Proof of Concept, installation and tests.
 - ➤ Counter UAS handbook for critical infrastructure (Q4 2021).
 - Living lab installation for stakeholder involvement (Belgium).
- □ EU guideline for the physical protection against drones (Q4 2021)
 - Safety and Security of Buildings Unit (Italy)
 - Passive measures (target hardening)



C-UAS - A cyclical, whole-of-society approach required...



- Lawmakers
- Regulators
- Drone manufacturers
- Drone operators
- Government authorities, including police, defence, civil protection, CAAs, etc.
- Local-level authorities
- Operators of critical infrastructure and public spaces
- Private security providers
- Citizens



...that accounts for and/or recognises

- The rapid pace of technological evolution
- Quick uptake in the use of UAS by a wide range of users, including law enforcement, which alters the risk landscape and will impact airspace access
- The still comparatively high costs of tech solutions (no silver bullet)
- The interplay between counter-UAS measures (including tech) and UTM (U-Space)
- Lessons from other stakeholders and settings
- In every instance, civilian-military and international cooperation is essential!



Thank you for your attention.

European Commission

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