



EASA
European Aviation Safety Agency

NPA 2017-05

UAS Open and Specific category Workshop

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Environment, Privacy, Data Protection & Security



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Draft Basic Regulation Annex IX

1 (a) A person operating the unmanned aircraft must be aware of the applicable Union and national rules relating to the intended operations, **in particular with regard to safety, privacy, data protection, liability, insurance, security or environmental protection....**

1 (b) If necessary to mitigate risks pertaining to safety, **privacy, protection of personal data, security** or the environment, arising from the operation, the unmanned aircraft must have the corresponding and specific features and functionalities which take into account the **principles of privacy and protection of personal data by design and by default**. According to the needs those features and functionalities must ensure **easy identification** of the aircraft and of the nature and purpose of the operation; and must ensure that applicable **limitations, prohibitions or conditions** to be complied with, notably with respect to the operation in particular **geographical zones**, beyond certain distances from the operator or at certain altitudes.

(council proposal, December 2016)



Approach environmental protection

► **Operational:** UAS.SPEC.30/UAS.OPEN.30 (6)

respect other people's fundamental rights and operate the UAS in a considerate way to minimise nuisance to other people due to noise emissions.

► **Technical:** Product requirements for UAS Class (h)

... have a sound power level not exceeding 80 dB (measured at 3 m distance from the UA);

► **Areas:** Article 12 (d)

... the Member State may designate airspace areas or special zones: where UAS operations shall comply with specified environmental standards;



Main contributors to Security and Privacy

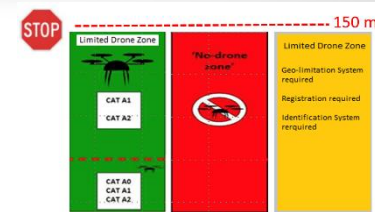
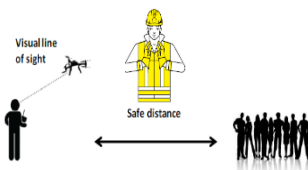
- **Registration:** UAS operators must register the UA except those operating UAS with an MTOM of less than 250 g. For security considerations, the UAS operator must also register the UA when the UA is heavier than 900 g.
- **Electronic identification:** functionality required for class C1 when equipped with >5 megapixel camera and real-time transmission system, or class C2 or when required by the zone of operation.
- **Geofencing:** functionality is required for UAS in class C2, or required by the zone of operation.
- MSs may define **zones** also for security or privacy reasons.



Mix of mitigations for the open category

Operational limitations and rules:

- maximum height and distance, VLOS,
- Areas of limited / no use of drones



Pilot competence:

- age, familiarization,
- Training



Compliance with product requirements

- limiting performance, injury risk (height, mass)
- functionalities (geofencing, identification)



Safety Promotion

- Awareness raising



Efficient enforcement

- Mandatory operator registration



Identification





Approach to security

The NPA provides tools

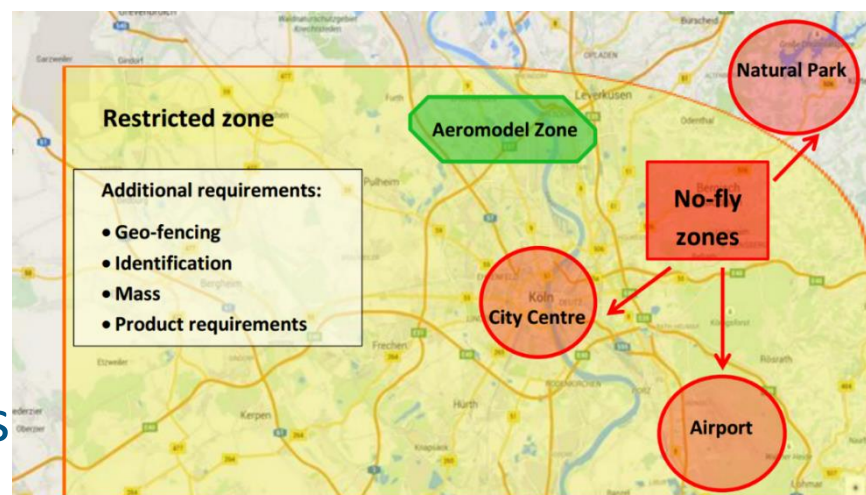
1) **definition of zones**, especially airspace areas where

- certain UAS operations are not permitted without prior authorization or are not permitted at all
- access is allowed only to UAS equipped with an electronic identification and/or geofencing system.

2) **technical functions**; geo-fencing and electronic identification

This supports

- protection of sensitive areas
- situational awareness
- detection of suspicious operations





Approach privacy & data collection

➤ **Pilot competence:**

... the remote pilot must demonstrate knowledge also of relevant EU security and privacy/data protection regulations.

... awareness leaflet with all the information required to use the UAS in accordance with the applicable regulations on aviation safety, security, privacy and data protection, liability and insurance; and

➤ **Operational:** UAS.SPEC.30/UAS.OPEN.30 (6)

Respect other people's fundamental rights + GM1 UAS.OPEN.30(c)(9)

➤ **Technical:** Product requirements for UAS Class (k)

E-Identification for all drones equipped with an audio sensor or optical camera of more than 5 MP or any other type of sensor

E-Identification contributes to the law enforcement of privacy rights.



Privacy & Data Protection

- The collection, storage and any other type of processing of personal data is framed by the [EU Data Protection Directive](#) and the [National Data Protection Laws](#)
- This fully applies to drone operators using audio-/visual electronic sensors that may record personal data
- The principles of necessity and proportionality apply, especially to any commercial operator
- Additional regulations apply in case of publication of material (e.g. copyright, protection of one's image)
- Also registry, identification and tracking capabilities need to be proportional and to only collect and provide necessary data



Conclusion

- Security and privacy are key to public acceptance
- EASA is in contact with security and privacy specialists (e.g. Counter UAV Group, Data Protection Officer)
- NPA addresses security and privacy (operation, pilot competence, technical functions, zones)
- Encourage MSs to have discussions between safety, security and privacy authorities so that coordinated positions are transmitted



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Questions

<http://www.easa.europa.eu/easa-and-you/civil-drones-rpas>

