

**POLIS**

CITIES AND REGIONS FOR TRANSPORT INNOVATION

ANNUAL  
CONFERENCE

**2022**

30 November  
1 December, 2022  
Brussels, Belgium



**#POLIS2022**

# Preparing Local Authorities to deal with drones

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# Preparing professionals for future cities

ISCTE´ s mission



create and convey **scientific knowledge** according to the best international standards

prepare and train **highly skilled professionals** for the advancement of the society

**Business School**

**Sociology and Public Policy**

**Institute for Public and Social Policy**

**Social Sciences**

**Technology and Architecture**

**Iscte-Sintra**



# UAMschool4cities project

**Scope:** Preparing future professionals to include Urban Air Mobility services in their cities

**Objective:** create a MOOC program for building the capacity of future employees of any background to:



- familiarize with UAM concepts and key technologies
- keep up with relevant UAM regulatory frameworks while determining the challenges and for Local Authorities
- include UAM in their urban development agendas and
- start developing responsible and socially acceptable UAM services for the benefit of their citizens



# Drones for what?



## Drone pilot-evidence

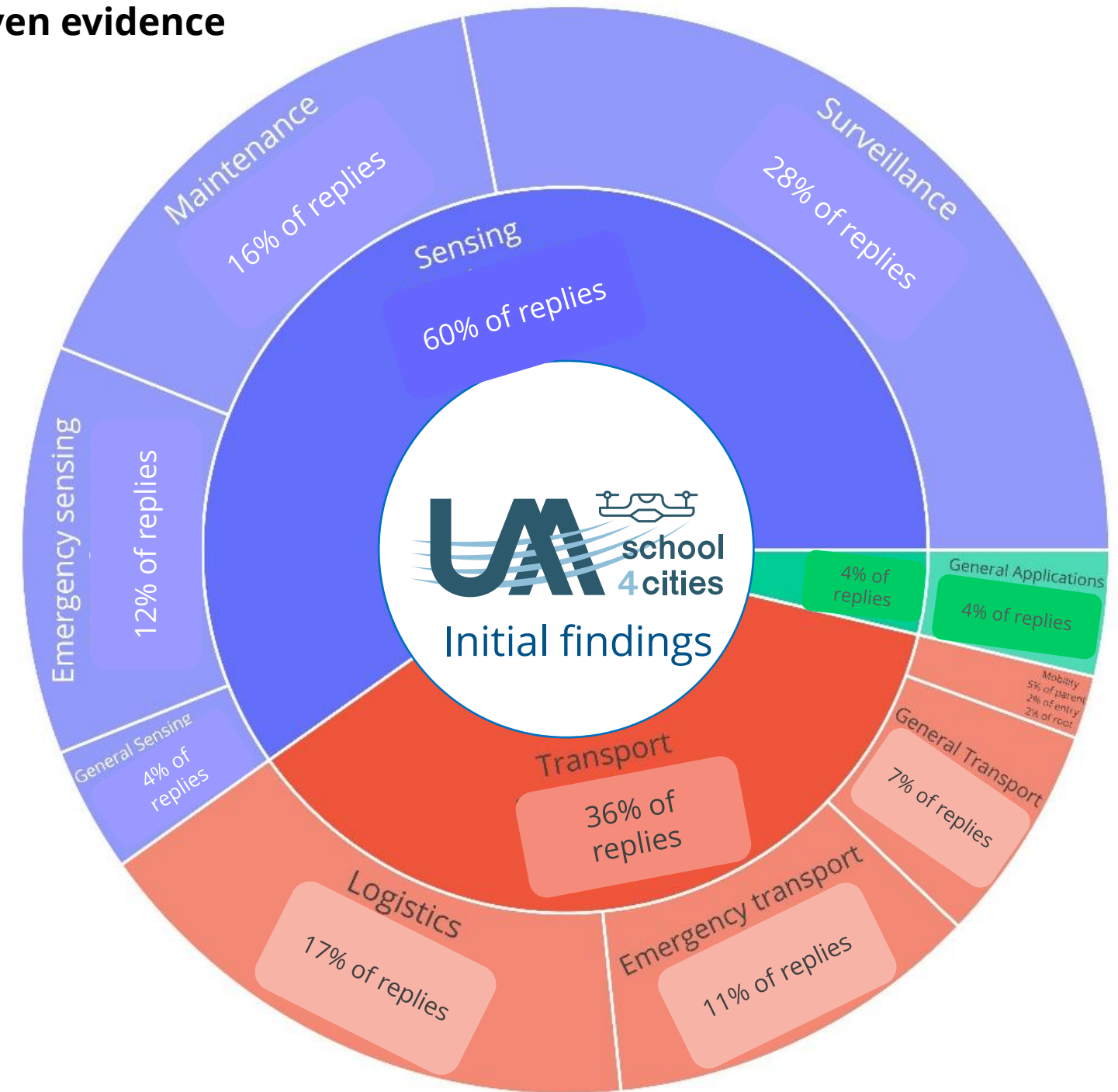
Medical



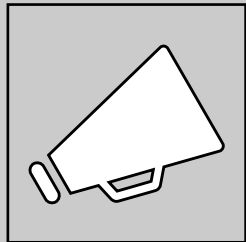
Emergencies

Surveillance

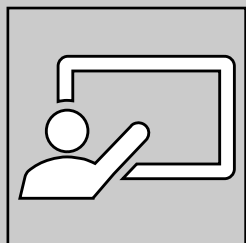
## City-driven evidence



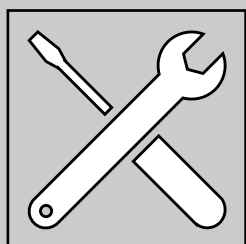
# How to prepare cities?



Address awareness



Identify training areas



Develop training material



- UAM best practices
- City staff focus groups
- City staff interviews



# Do cities know about drones?

## Indicative answers from cities:

*"We were **not informed at all**, we are not familiar either. It is new."*

*"We know some things but from completely **personal interest**"*

*"Personally, I had experiences with flying drones for quite a few years with **my drone**, but I had some training as part of **a project** as well"*

*"I am part of a **Facebook** group and I am getting updated from there for all the latest news about the legislation"*

*"I know that there is **a body in the government level** which is designated to supervise the air traffic and also the air control"*

*"UAM is new, I guess it will be with a little bit of planning ahead and inevitably with a few **trial and error depending on cases**"*



# What are cities looking for?

Initial findings:

1. Regulations
2. Safety topics
3. Privacy and Security topics
4. Ecosystem development

**EASA**  
European Union Aviation Safety Agency

**Understanding how the new U-space will enable the safe integration of drones in the European airspace**

- + U-space is a set of services, provided in a digital and automated manner, inside a volume of airspace.
- + It will enable a safe integration of drones and manned aircraft in Europe from 2023

**U-SPACE**

Network of UAS routes in U-space airspace

**Colour codes for geographical zones**  
Member States are recommended to use these colour codes to symbolise their Geozones on maps:

- Red:** UAS operations are prohibited in general
- Orange:** UAS operations are limited and are subject to fulfilment of set of conditions imposed for relevant zones
- Green:** UAS geographical zones, which facilitate operations in all categories
- Blue:** U-space airspace

**U-space Service Providers (USSP) services**

- UAS flight authorisation
- Geo-awareness
- Network e-identification
- Traffic info
- Weather info
- Conflict avoidance monitoring

**EASA**  
European Union Aviation Safety Agency

**Vertiports**

**Prototype Technical Specifications for the Design of VFR Vertiports for Operation with Manned VTOL-Capable Aircraft Certified in the Enhanced Category (PTS-VPT-DSN)**

March 2022

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[https://www.iconfinder.com/icons/6205715/block\\_city\\_drone\\_moon\\_night\\_street\\_uav\\_icon](https://www.iconfinder.com/icons/6205715/block_city_drone_moon_night_street_uav_icon)



<https://coptrz.com/blog/birds-attacking-drones-how-to-fly>





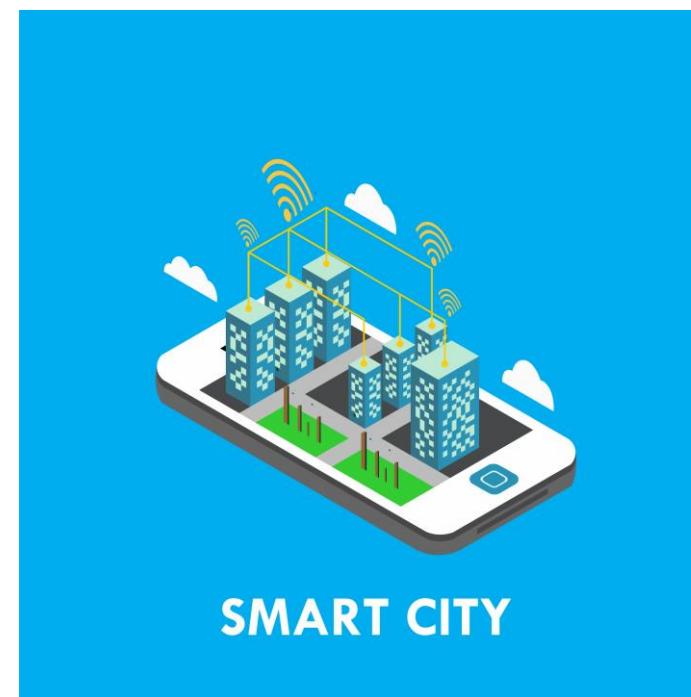
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<https://www.teledataict.com/nar-drones-cybersecurity-are-real-estates-top-emerging-technologies/>



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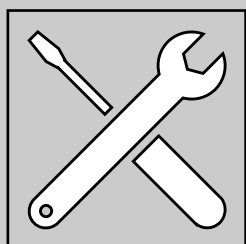
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# Thank you for your attention!

For questions:

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