

Engaging cities in Urban Air Mobility: Learnings from a recent study on public acceptance



POLS CONFERENCE 2022

Slido questions

What is your knowledge level on the topic of Urban Air Mobility?

Do you think the expansion of drone services is a good idea?

What is your biggest concern in relation to drones?

What benefits do you think drones could bring?





How knowledgeable are you on the subject of Urban Air Mobility?



Do you think the expansion of drone services is a good idea?

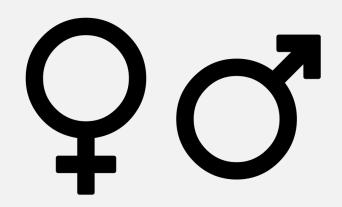


What benefit do you think drones have for society (if at all)?



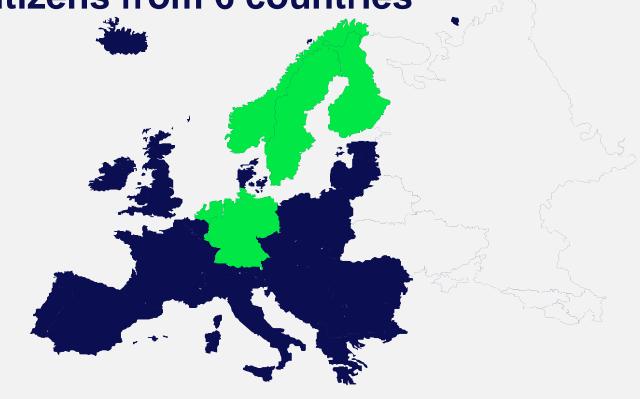
What is your greatest concern in relation to drones?

Questionnaire of 1,104 Citizens from 6 countries



Female Male 50%

Age group	Percentage
18-30	16.5%
31-40	16.5%
41-50	17%
51-60	17%
61-70	16.5%
70+	16.5%



Germany – Nordhessen region

Luxembourg – whole country

Netherlands – whole country

Sweden - Stockholm, Goteborg, Norrköping and Linköping

Finland – Uusimaa region

Norway – Stavanger, Oslo, Bergen





The questions we asked them...

- Demographics (gender, age, location)
- Knowledge on topic / exposure to drones
- Acceptability on uses of drones and the benefits (incl. benefit to society)
- Comfort, level of trust & level of risk
- Location of landing site & flight zones
- · Concerns incl. privacy, safety, noise, visual
- Preference on EMS use cases & flight path near to work or home
- Personal details (location of residence, working in EMS, email)

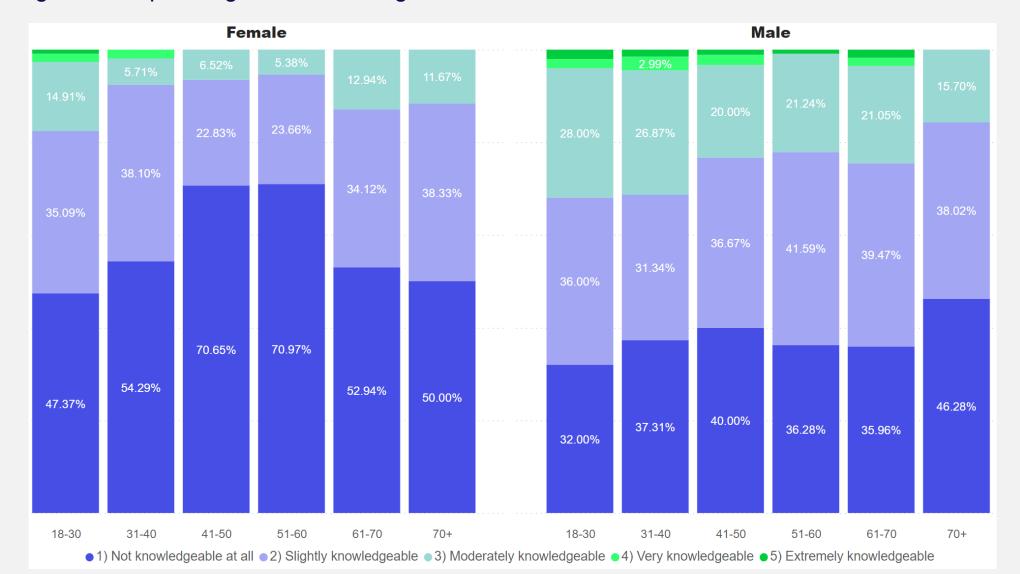






Knowledge of UAM:

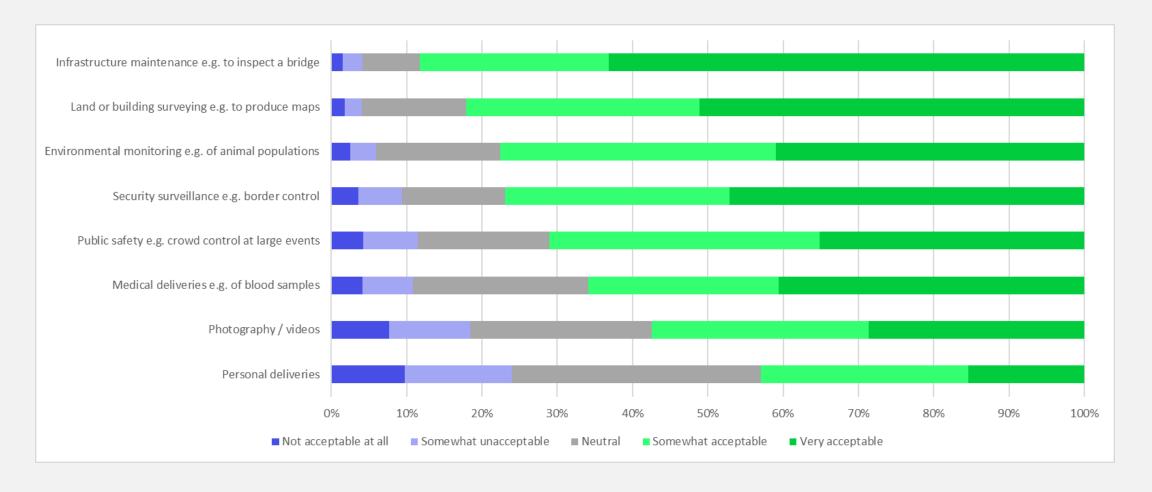
Male respondents reported greater knowledge of UAM than female respondents. Younger respondents of both genders reported greater knowledge.





Acceptable use cases:

Infrastructure maintenance, Surveying and Environmental monitoring were widely accepted uses of drones. Drone use for personal deliveries was not widely accepted.





Reported concerns and benefits around UAM:

Most concering

Safety, such as flying vehicles possibly crashing

Privacy concerns, such as a drone flying close to my window or over my property

Noise pollution, such as loud and/or annoying sounds of flying aircraft

Social inequality e.g. the service being affordable only for rich or privileged people

Environmental, such as impact on wildlife

Visual pollution, such as annoying air traffic

Least concering

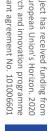
Inner-city space occupation due to infrastructure requirements (take-off and landing stations)

Reduction of traffic jams due to fewer road vehicles

Reduction of local emissions and pollution

Reduced journey time

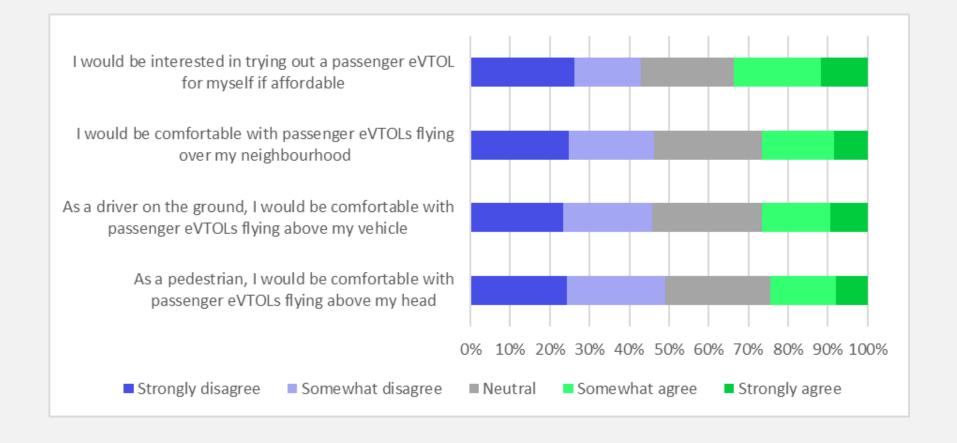
Improved development of and access to remote areas

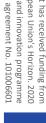




Attitudes towards eVTOLs for passenger transit

Citizens are yet to trust eVTOLs for passenger transportation

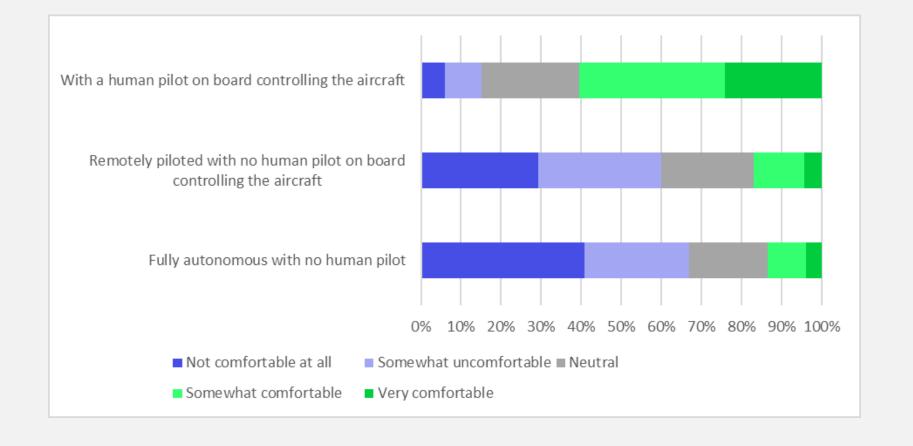


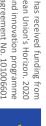




Comfort level travelling in a passenger eVTOL

Citizens are very wary of unmanned passenger eVTOLs but 60% would be somewhat or very comfortable travelling in a passenger eVTOL if there was a human pilot on board

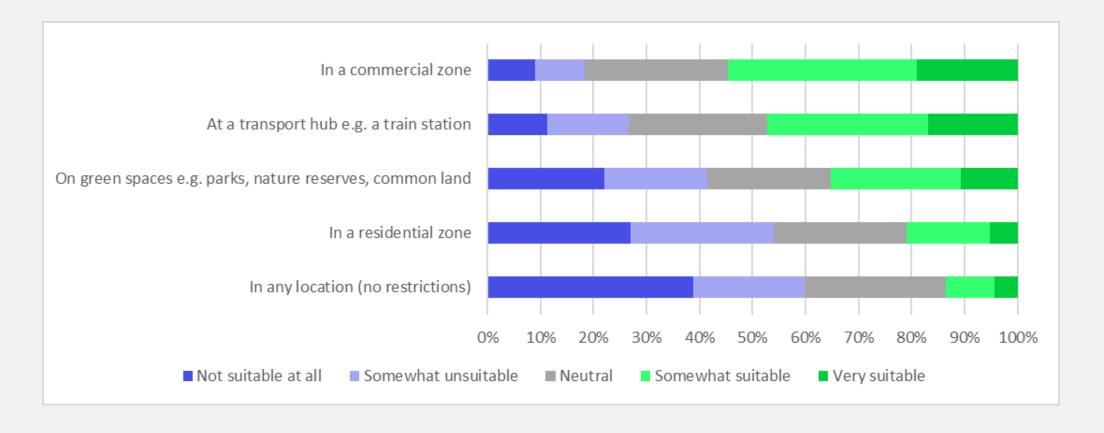






Suitability of location for eVTOL landing site

The preference of citizens is for landing sites in commercial zones or at transport hubs

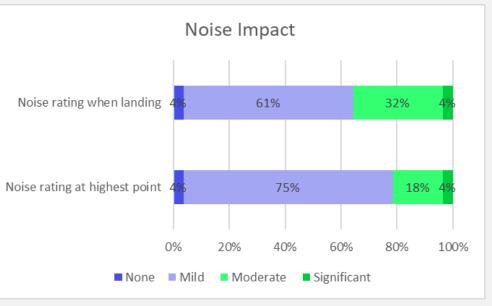


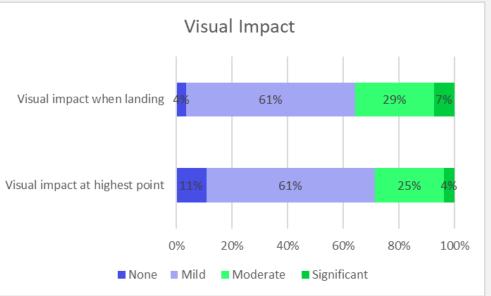


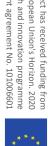


Findings from recent demonstration













Summary of findings

- Correlation between a person's age and gender and their knowledge level of UAM.
- Knowledge = acceptance.
- A high proportion of citizens answered 'neutral' reflective of their lack of knowledge.
- Surveying and monitoring of structures or environment are most acceptable. Non-urgent medical use cases are less acceptable than urgent ones.
- High level of mistrust in passenger eVTOLs / air taxis. Significant difference if they are manned or unmanned.
- Top safety concerns = safety, privacy and noise. Top benefits = reduction in traffic congestion, emissions and journey times.
- 1st demonstration: noise or visual aspects of the drone were not considered impactful.

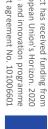




My initial learnings

- Engage with your citizens as early as possible!
- Be inclusive in your engagement.
- Encourage women in the industry.
- Speak to the media.
- Invite stakeholders and the public to your demonstrations.
- Support uses that benefit the whole of society.
- Regulate, certify and monitor.











Thank You!

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