



Platform Unmanned Cargo Aircraft (PUCA) input for:

Hearing#1: : Urban Air Mobility and U-space

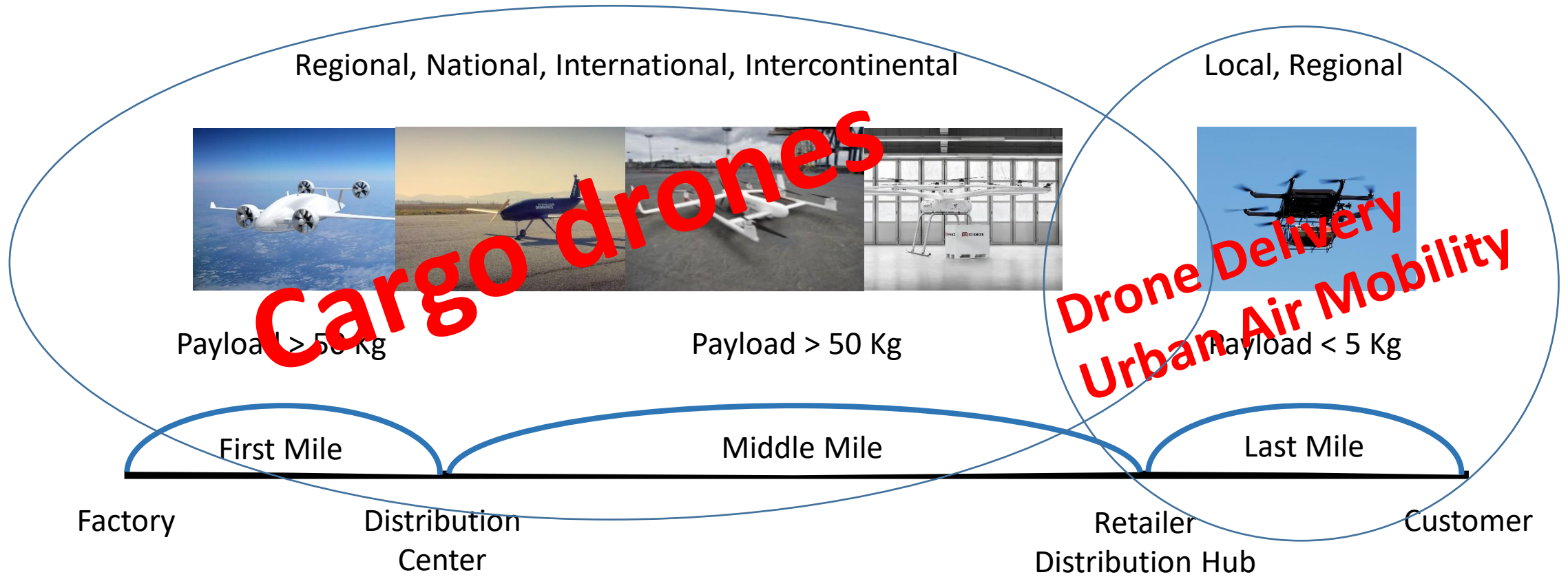
PUCA

Platform Unmanned Cargo Aircraft (PUCA)



- Open, non-profit association of members aiming to support development and deployment of Unmanned Cargo Aircraft (UCA)
- Drive consistent, focused and concise approach to market education to highlight benefits, use cases and UCA applications,
- Business market analysis and development of a favourable environment for deployments at short/medium term from first mile to middle/last mile of small to large cargo in Europe and beyond
- Composed of an eco-system covering all aspects of UCA market: logistics, aviation and drone industry, systems integration, system suppliers, IT services, infrastructure to venture capital, academia and research centres, and regulatory organisations.

PUCA The market



Question 1

Societal acceptance of UAM is affected by perceived concerns, notably related to safety, security and environment (including noise) as well as collaboration and coordination among aviation and non-aviation authorities, and other stakeholders (e.g. ground mobility and urban planners, local authorities, etc). How can these concerns best be addressed to develop UAM in a safe, secure, environmentally friendly and socially embraced manner? How can EC support the better understanding of what it is societally acceptable for UAM operations?



- There are many UAM projects funded by EU across Europe with topics mentioned above. They mostly work individually. Start with merging the results and have them learn from each another.
- Build on the results several pilot projects in several cities with different sizes
- Support at short term projects new initiatives such as those developed by UCA to study the entire value chain and related concepts and solutions bringing realistic and safe solutions addressing through new transport modes the necessary mobility and sustainability of the logistic chain, in particular through activities out of other aviation networks (i.e. between industrial sites, low level, hybrid engines, use of dedicated infrastructure, etc.)
- Consider a confidential market study that evaluates liquidity of market sector players beyond manufacturers as listed above to identify weaknesses in the supply chain
- Do not consider mobility provided by Unmanned Cargo Aircraft (UCA) only reduced to the last mile delivery and Urban environment since a large market area is covered by medium or potentially long range activities (middle mile / first mile)

Question 2

ATM and U-space are connected, yet currently different systems are organising access to airspace. How do you see convergence and integration happening in the future?



- Integration of Unmanned Cargo Aircraft (UCA) shall very much be dependent on U-Space and ATM system to ensure their safe and secured integration;
- UCA in particular will require the use of pre-established networks to ensure routine operation based on dedicated and not-dedicated infrastructure, using both UTM and ATM
- UTM/ATM interfacing and complementarity must be technically and operationally addressed as soon as possible, making best use of future data service provision and technology convergence
- Results from latest development and large demonstrations must be used to pave the way, while additional live testing campaign should be funded to validate concepts and regulatory approaches regarding UCA integration
- In particular, use of UTM distributed information not yet available through ATM, revealed essential at lower airspace levels for some other airspace users than drones (police/medical helicopters, general aviation, etc.).
- Maximum convergence, while respecting specificities, should be ensured from an early stage between UTM and ATM development and deployment to maximise the opening of UCA business

Question 3

Given the expected speed of development of Urban Air Mobility and U-space services, how can the Commission best facilitate the process and best utilise the innovative capacity of the sector? For instance, how could you envisage the requirements/enablers for integrating U-space with ground mobility traffic systems (e.g. ITS - Intelligent Transport Systems) in the context of Mobility-as-a-Service (MaaS)?



- Recognize the importance of IT in all aspects and create bridges with new technology developers/providers
- Involve Branche organisations active in Logistics (f.i. Alice) with regard to Unmanned Cargo Aircraft (UCA)
- Create a European challenge for unmanned cargo systems (integrating air and land infrastructure and services) starting with several hackathons spread over Europe.
- The winners of the challenge get support to work out several solutions, which can be input for an European approach

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