What's next for the drone industry in Europe?

Blog post by Associate Alexander van der Wusten, 8 April 2022

This year's Amsterdam Drone Week and EASA High Level Conference wrapped up last week, bringing together the annual gathering of policymakers and industry to discuss unmanned aircraft regulation and the technology's roll-out in Europe. It has been a number of years since the last one was held, due to covid, so the conference was a flurry of activity. The conference hall was packed with aircraft manufacturers, operators, unmanned traffic management (UTM) providers, telecom companies, and infrastructure providers (e.g. vertiport builders) all jostling for face-time to discuss the future trajectory of the sector in Europe. The conference discussions made clear that there remain several key issues that need to be resolved before the public sees widescale roll-out of complex drone or eVTOL aircraft operations.

The first challenge is getting the regulatory framework in place. Industry professionals expressed concern that it remains difficult for manufacturers to obtain the necessary certification for their products. As the details around the EU's 'certified' category – catering for drone operations with the highest level of risk - have not yet been completely worked out, the regulatory challenge now is how to make sure that manufacturers and operators can first fulfil all necessary requirements to operate in the lower-risk 'specific' category and then smoothly transfer to the 'certified' category, without having to start the certification process all over again. This would significantly speed up product roll-out.

Another challenge is efficiently carrying out risk assessments. Specifically, the question is how to implement the Specific Operations Risk Assessment (SORA) in practice. SORA facilitates the risk analysis and mitigation of certain UAS operations, to ensure safety of operations. At the conference, it was suggested that telecoms companies could help with ground risk assessment by giving clarity regarding the number of people (with mobile phones) on the ground under a flight path. At the same time, determining mid-air collision risks remains a very challenging and resource-heavy process that requires carefully selecting appropriate use cases that could then be fed into the overall risk analysis process.

Finally, no blog on drone and urban air mobility (UAM) policy would be complete without a reference to public acceptance and wider fears over safety of drones. Attendees at the conference all agreed that while this continues to be an issue, it is one that will only be fully addressed by rolling out the technologies very gradually and carefully, so that communities understand the benefits upfront and are consulted about their concerns well in advance. It is also important to incorporate public acceptance into companies' business models: for example, a company might deliberately diversify its flight path so that even if it is going to the same destination twice a day, the same houses are not overflown.

Although the technology is advancing, and quickly, it looks like the combination of these challenges are likely to slow down the full deployment of drone technology in Europe. The European Commission has admitted the full integration of manned and unmanned aircraft by 2030 is now looking unrealistic. Moreover, national aviation regulators and governments are also highly sceptical about their ability to roll out U-space across the continent by the anticipated deadline of early 2023. Therefore, the promise of drones delivering consumers morning coffees, or electric vertical take-off and landing (eVTOL) aircraft transporting people around cities by air, still remains several years away.