

## Adacorsa Summary (English)

According to market studies, the global commercial drone market size, which includes Beyond Visual Line Of Sight (BVLOS) drones, is expected to exceed USD 129.23 billion by 2025. BVLOS drones are expected to contribute significantly to this growth due to their extended operational capabilities. Major driving factors for the market growth include technological advancements in drone technologies, relaxed regulations in certain countries, and an increasing number of use-cases where BVLOS operations provide superior efficiency and effectiveness. Industries such as agriculture, oil and gas, power and utilities are extensively adopting BVLOS drone technology for functions like precision agriculture, infrastructure inspection, surveillance, and mapping. Despite its potential, the BVLOS drone market also faces challenges, including stringent regulatory standards, need for advanced sense-and-avoid systems, and concerns over data privacy and security.

The vision of the over 3 years project ADACORSA is to leverage European technology, innovating the way drones serve as an efficient and secure part of the mobility mix. The project aims to establish drones as reliable vehicles with specialized capabilities, particularly in extended BVLOS operations.

With the developed concepts and technologies the project aspires to bridge the gap between the automotive and drone industries, thereby reducing deployment costs through the use of automotive sensing technology, commercial off-the-shelf (COTS) communication technologies, and services. By integrating AI and data analytics, ADACORSA aims to revolutionize future air mobility, embracing the efficiency of automotive-style production for components and subsystems.

In the frame of the ADACORSA project (2020-2023), CISC was working on secure wireless identification, including technologies like RFID, NFC (Near Field Communication), BLE (Bluetooth Low Energy) or UWB (Ultra Wide Band). CISC developed its own demonstrator, ensuring the integrity of the whole system and providing reliable, robust and secure wireless communication and identification.

The results have shown trustworthy management of identities via cloud-based management platform as well mobile apps. Based on the activities in the automotive domain, CISC could transfer the know-how to the drone domain by using NFC access and shareable identities.

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