Urban Drones 5G

Objetive:

The main objective of the project, for which C-V2X (connected car) and RTK technologies are applied for precise location, is to evaluate how the 5G network can facilitate the development and implementation of drone services in urban environments. In this project, it is shown how 5G solves these needs for drones in urban flights.

Description:

Telefónica, together with Correos, has developed a secure and reliable system for delivering packages to mobile delivery points using connected and intelligent drones to address the challenges of last-mile delivery in urban areas.

The demonstrator consists of the flight of several drones that communicate with each other and with different urban elements connected with the aim of making a correct delivery of a package at a mobile collection point finding in its trajectory another drone or a warning of a restricted area area.

In the future, drone flights in urban environments will grow exponentially. This large volume of operations can only be carried out safely if there is real-time coordination, both between drones and with the Smart City, which we achieve with direct communications from C-V2X drone to drone and drone to infrastructure.

In addition, when flying in a smaller space in the city, it is essential to have a centimetric positioning that allows us to guide the drone safely.

The involvement of Correos has been fundamental. Their experience and knowing their needs in the distribution of packages by drones has allowed the joint definition of new scenarios that add value to their business.

Video
Press release