S3 WIRELESS ICT PARTNERSHIP

Project idea-5G EDGE Drone

- To implement, test and demonstrate new solutions for state-of-the-art drones that make use of the 5G EDGE capabilities.

- The idea is to move, thus reducing weight, the main flight control hardware and software to the 5G EDGE cloud with none or minimal/acceptable disturbance on the drone capability.

Project goals

"Verify a system solution for drone 5G EDGE flight control. This includes system design and verification of drone capabilities. The reduced weight of the drone also opens for other new innovative features to be included"

To be addressed:

- Innovation: Identify drone features enabled by 5G EDGE

- Energy: CPU power consumption vs increased radio usage. Implications on battery capacity (weight).

- Performance: Latency, overall flight performance

- Autonomy: Handling at poor radio conditions

What we need is…

- Small, light weigth 5G Radio units

- Test environment with 5G SA (Stand Alone) including EDGE

- Test environment that also include other radio solutions (like WiFi 6) to be able to study and compare.

- Use cases, engagement from large and small companies for example mining industry.