



**CARE WINGS-5G**

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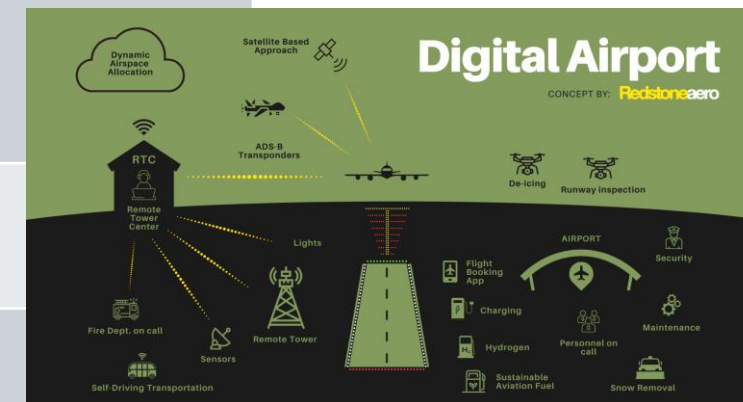
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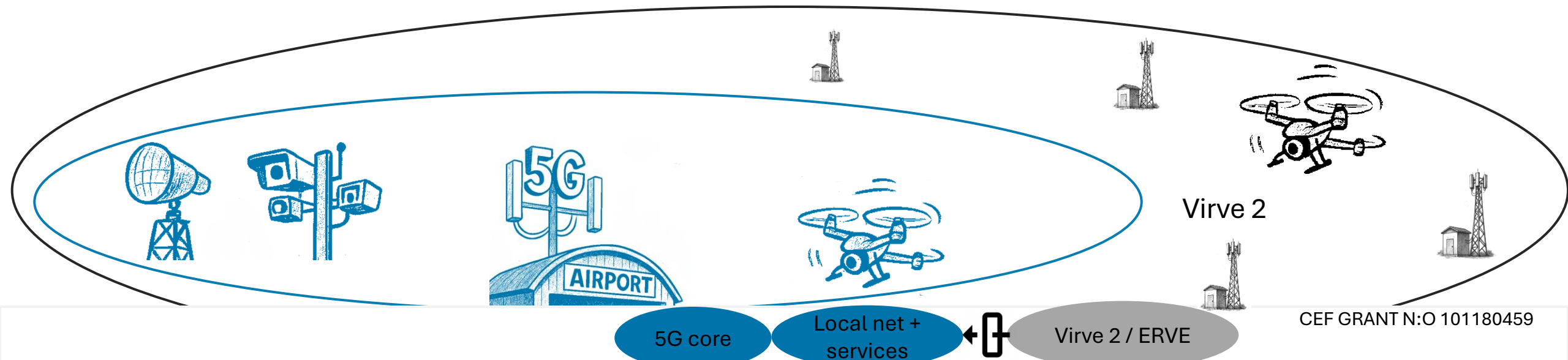
# Digitalizing Helsinki-East Aerodrome

Use cases & goals	Notes
<b>Demonstration of use cases</b> <ul style="list-style-type: none"> <li>• <i>Search and Rescue</i></li> <li>• <i>Emergency Response</i></li> <li>• <i>Sample Medical Delivery</i></li> </ul>	Use cases owned by authorities in Finland => authority aviation. This enables <ul style="list-style-type: none"> <li>• Use of Virve 2 service on the missions</li> <li>• Collaboration with the air rescue association</li> </ul>
<b>Airport Management System</b>	Automation & enabler for remote operations
<b>4G/5G connected drone</b>	Private 5G mobile network for Airport. Virve 2 for drones when flying. [Virve 2 is the 4G service for authorities in Finland. (5G SA available for testing.)]
<b>5G connected devices and sensors for the airport</b>	Similar NPN use cases as on large airports – but need more flexibility!
<b>Blueprint of the ecosystem for small-medium sized airports</b>	Automation and central remote control are enablers for airport services at small airports.



# Instant drone support for authorities

- Currently
  - Police needs to get to the target area first for using their own small drones
  - Air rescue association team also gets to the target area (2 -3 hours delay)
- Bigger drones are becoming available
- Carewings-5G tests/develops process for getting a drone that is stationed at the airport into air asap.
  - Collaboration with air rescue association and authorities



# Learnings & recommendations

Req spec: Less than 10% of all requirements relate to mobile networks

- Regulation and airport management are the more complex topics

No point in requiring very advanced 5G features (UE support...)

Private 5G & Virve 2 to be used in parallel. Network selection by UE.

- Major constraints by regulation and security policies.

Dear EU

- Fix a liberal U-space regulation asap.
- Encourage civilian authorities to make use of BVLOS capabilities.

Technology is not holding us back, regulation is.

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<b>Main Authors</b>	Kimmo Terävä, Heikki Almay, Martti Ylikoski
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