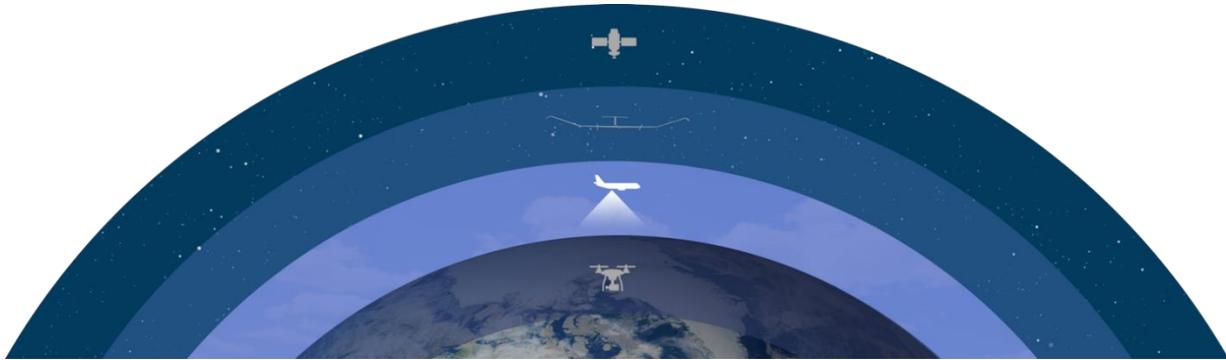


## SkyfloX Achieves Key Milestone in ESA Project for Novel Aircraft-Based Earth Observation System



**Esch/Belval, Luxembourg, 23 July 2020 – Luxembourg-based start-up SkyfloX has received the go-ahead from the European Space Agency (ESA) to start the final phase of the ESA co-funded pilot deployment project to develop services using its revolutionary aircraft-based Earth observation system ORCA.**

The ORCA (Optical and **Rf** Constellations on **A**irplanes) project plans to use commercial airliners as a platform carrying small remote-sensing equipment, which would image the ground as the planes travel on their regular routes. A constellation of such payloads, hitching a ride on the thousands of aircraft flights crossing the continents every day, would provide coverage and revisit frequencies impossible with satellite-based systems and at the fraction of the cost.

The pilot project is the first step towards ORCA's commercial deployment, which will enable a whole new range of applications such as early forest fire detection, disaster relief, affordable infrastructure monitoring, resource management or detailed monitoring of the environment and the atmosphere.

SkyfloX, an alumnus of the European Space Agency's Business Incubation Programme (ESA BIC), successfully finalised the first phase of the ESA pilot project, supported under the Business Applications Programme, which finalised the design of the equipment to be mounted under the tail section of commercial airliner aircraft. In this effort, SkyfloX coordinated the work between major European airline partners Transavia and Luxair, as well as strategic aerospace players such as Germany-based **Safran Engineering Services** and **Kampf Telescope Optics**, Luxembourg's **Euro-Composites** and **EmTroniX**, and Swedish **Spacemetric**.

SkyfloX correspondingly initiated the certification procedure at the European Aviation Safety Agency (EASA) to allow the installation of the equipment on commercial aircraft.

Key commercial partners in Earth Observation and Geospatial Analytics were furthermore involved in this effort, including **HEXAGON**, **Esri Deutschland**, **EarthLab Luxembourg**, **UTILIS**, **The Sniffers** and the **Institute of Geodynamics - National Observatory of Athens**.



Significant restrictions on global travel and collapse of commercial activity due to the covid-19 virus has forced airlines to ground the bulk of their fleets, SkyfloX partners Luxair and Transavia included. This unprecedented setback for the industry has significant near-term implications; the industry will see extensive resource restrictions and lay-offs to weather the crisis. The coming months and years will be those of recovery. SkyfloX and partners strongly believe the ORCA system is a solution that offers airlines immediate ancillary revenues to aid in their recovery, off-setting the high cost of operating aircraft.

The payload, about the size of a small suitcase, is designed not to interfere with any regular aircraft operations, and will be controlled remotely by an ORCA operator (thus, no intervention is required by the pilot or the airline). Unlike a payload on a satellite, equipment on an aircraft can easily be repaired, changed or updated, providing additional advantages compared to space-based systems.

Transavia's Innovation Lead Brit Haarmans stated: *"At Transavia, we consider this a revolutionary project, which will allow us to improve present-day earth observation. In this way, our flights can contribute to monitoring air quality, deforestation and pollution."*

SkyfloX aims to operate the first Earth-observing equipment on operational civil transport airplanes at the beginning of 2021.

### **About SkyfloX**

SkyfloX is a disruptive European Space Agency 'spin-off'. The company's unique constellation will offer unprecedented cost/performance ratio to the high spatial and temporal resolution Earth observation and telecommunication markets, enabling a wide range of new applications. The ORCA concept is patented by ESA and licensed to SkyfloX for development and commercialisation.

### **About ESA Business Applications and Space Solutions**

Since the programme's inception in 2008, ESA Business Applications has invested more than €200M in over 500 business ideas, addressing innovative services for new markets and industries worldwide. Funding supports everything from early stage feasibility studies to large-scale demonstration projects. See [business.esa.int](https://business.esa.int)

For more information visit [www.skyfloX.eu](http://www.skyfloX.eu) or contact us via [info@skyfloX.eu](mailto:info@skyfloX.eu)