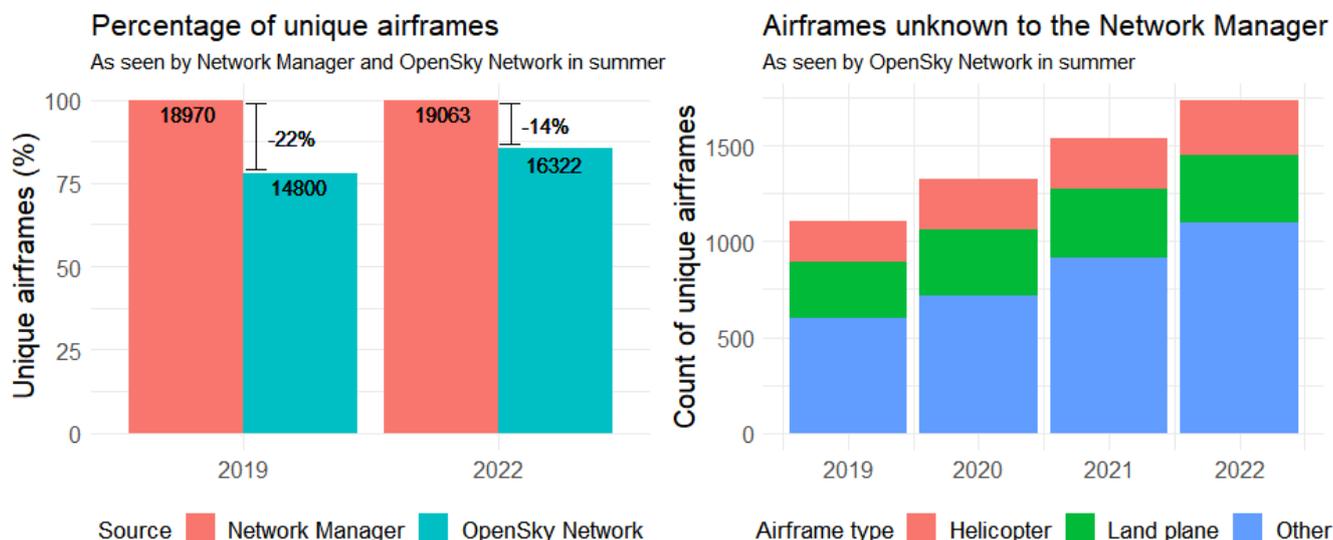


EUROCONTROL Data Snapshot

Moving towards higher levels of transparency for measuring performance with Open Data



08 November 2022



For aviation to improve its performance, an essential element is data on what is happening in the skies. EUROCONTROL provides a wide range of relevant data but there is another source – open data generated from aircraft themselves (from their ADS-B or Mode S transmitters).

This data snapshot analyses the coverage of open air transport data within Europe. The graphic on the left shows the evolution of aircraft processed by EUROCONTROL’s Network Manager (typically aircraft flying IFR and therefore filing a flight plan), compared with those visible through the OpenSky Network (equipped with ADS-B or Mode S). It compares the number of unique airborne airframes in summer 2019 and 2022.

Overall, the number of OSN aircraft is catching up with the number tracked by NM. This is as a result of two trends. First, the proportion of aircraft flying IFR that are equipped with ADS-B/Mode S is increasing (from about 78% to 86%). Second, the number of aircraft visible to OSN but not NM is also increasing, as can be seen in the second graphic. This is because non-commercial aircraft (e.g., agricultural, or recreational flying) are increasingly equipped with modern transmitters.

So, whilst NM monitors primarily IFR flights (and has a more complete coverage of these), OSN does provide a more comprehensive coverage of overall activity in the sky. This includes many flights under visual flight rules, with operations of light aircraft, airships and balloons. This allows us to create broader views on topics such as aviation safety, traffic monitoring and general sky usage, especially now that the proportion of all aircraft visible to OSN has increased so much.

Overall, the analysis of available open data for air transportation suggests that it is a principal enabler to establish a transparent dialogue and level playing field for all stakeholders. The availability of movement data beyond strictly commercial air traffic will help to augment safety and capacity analyses, but also the emerging need to quantify the environmental footprint of aviation and air navigation.

Technical Bits: The data for this snapshot is derived from OpenSky Network. The data comprises flights originating and/or arriving at European airports. For this snapshot the small number of overflights have not been considered. The Performance Review Commission has recently launched an [Open Performance Data Initiative](#) (OPDI) and tasked the Aviation Intelligence Unit to implement it and support stakeholders with a variety of data products to analyse and improve performance. For more information, please also visit the AIU portal @ www.ansperformance.eu.

Interested in the OPDI? Contact pru-support@eurocontrol.int or consider attending the [Opensky Network Symposium](#) (10./11. Nov 2022) in Delft, The Netherlands.

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