

Press Release

## **NEWSKY – EC PROJECT TO DEVELOP A GLOBAL COMMUNICATION NETWORK FOR AERONAUTICAL COMMUNICATIONS**

### ***Leading companies and research organisations begin research on next generation aeronautical communication system***

NEWSKY – NetWorking the Sky – an EU-funded research project, will develop a concept of a global aeronautical communication network capable of integrating Internet solutions and technologies to link aircraft, satellites and ground stations to improve security and safety of flight.

The project, which started in February 2007, is co-ordinated by the German Aerospace Center DLR and involves an international group of engineers and scientists from Thales Alenia Space France, QinetiQ, Frequentis, TriaGnoSys, Deutsche Flugsicherung DFS and the University of Salzburg. It is tasked with developing a vision for a reliable communications system that replicates in the sky the power and scope of existing and future ground-based communications.

The NEWSKY concept offers essential benefits: the integration of heterogeneous communication links into a seamless global network will enable reliable communication between pilots and air traffic controllers, including the transmission of weather or traffic information. Communication will be improved in both remote areas, for example over oceans or polar regions, and over highly populated regions such as central Europe, where the current systems are becoming overloaded. The improved information flow will allow improving safety and security, while flight routes can be further optimized to reduce fuel consumption and environmental impact. In addition, NEWSKY's modular system concept enables simple and cost efficient integration of future new technologies. Finally, cockpit and passenger communications may be combined into a single network, providing new business opportunities.

Several technological challenges have to be solved before implementation of the NEWSKY concept is possible. First, a basic networking concept has to be developed and evaluated with respect to performance, coverage, reliability, and robustness. The major challenge results from the high degree of mobility of aircraft. Furthermore, priority rules and security concepts have to be established to prioritise pilots' safety critical data transmissions over non-safety critical traffic such as passenger communications.

While the conceptual stage of the work has already started, it is anticipated that full implementation of the "Networking the Sky" vision will take around 15-20 years.

***Notes for Editors:***

The project is granted under the title "NEWSKY – Networking the Sky for Aeronautical Communications", project number 37160, by the EU Sixth Framework Programme.

*List of project participants:*

DLR – German Aerospace Center, D

Thales Alenia Space, F

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TriaGnoSys GmbH, D

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