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EUROPEAN CONSORTIUM TO EXHIBIT FIRST INTEGRATED SATELLITE AND AIR-GROUND AIR TRAFFIC CONTROL TECHNOLOGY

The NEWSKY consortium, co-funded by the European Commission, announced today that it will run a live demonstration of the first air traffic control network based on IPv6 to integrate satellite and air-ground links, at ATC Global 2009 in Amsterdam, Netherlands, 17-19 March. The technology on display enables hand-over between different satellite and air-ground communication links, which is central to NEWSKY's next generation network.

The NEWSKY network is designed to meet future air traffic control needs such as those identified in the SESAR ATM target concept. In particular by increasing both available bandwidth and geographic coverage, it will enable both the increased level of data communications, and more strategic planning of flight routes. In addition, new business opportunities are addressed by allowing greater integration of non-safety critical airline information and passenger services within the common network.

The integrated network being demonstrated at ATC Global, on stand H129, will show advanced services such as graphical weather maps and VoIP, as well as passenger Internet connectivity. Further air traffic services applications are under development, as well as applications for airline operation communications, airline administrative correspondence, and inflight passenger communications.

In addition to the network, a simulation will show the NEWSKY approach on a large scale. The data traffic communication link characteristics and the overall network topology will be modelled to a high level of detail, to validate functions such as optimized IP mobility schemes and Quality of Service provision.

"The NEWSKY trials and simulations are a key step ahead towards the realisation of an integrated aeronautical communication system as envisaged in SESAR", said project director Dr Frank Schreckenbach. "These communication technologies enable the cost-efficient provision of services to meet the high safety and security requirements for the expected air traffic increase."

The modular architecture of the NEWSKY approach enables the cost-efficient integration of legacy and future data links for short range airport communications, long range en-route data transfer and satellite communications.

In addition, NEWSKY supports the move away from proprietary solutions in aviation to the use of commercial off-the-shelf Internet technologies. In this context, the International Civil Aviation Organization (ICAO) Council has recently approved an amendment to the Aeronautical Telecommunications Network (ATN) for the use of the IP Suite (IPS). The NEWSKY consortium has contributed to the definition of ATN/IPS, and the NEWSKY demonstration will be based on this specification.

About NEWSKY

The NEWSKY - Networking the Sky – project is co-funded by the European Commission through the Sixth Framework Programme. The project is co-ordinated by the German Aerospace Center DLR and involves an international group of engineers and scientists from Thales Alenia Space, QinetiQ, Frequentis, TriaGnoSys, Deutsche Flugsicherung DFS and the University of Salzburg. It is tasked with developing a vision for a heterogeneous and reliable communications system that replicates in the sky the power and scope of existing and future ground-based communications.

List of project participants:
German Aerospace Center (DLR), Germany
Thales Alenia Space, France
Frequentis GmbH. Austria
TriaGnoSys GmbH, Germany
QinetiQ Ltd, UK
Universität Salzburg, Austria
Deutsche Flugsicherung GmbH (DFS), Germany

Further information on NEWSKY is available on the project website:
www.newsky-fp6.eu

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