

## Press release

### **DLR, THALES ALENIA SPACE AND SES DEVELOP INNOVATIVE SPACE-BASED AIR TRAFFIC CONTROL MONITORING SYSTEM**

Luxembourg, October 17, 2013 - In the presence of the Luxembourg Minister of Higher Education and Research, Mrs. Martine Hansen, and Prof. Hansjörg Dittus, Executive Board Member of the German Aerospace Center (DLR), SES TechCom S.A., a subsidiary of SES S.A. (NYSE Euronext Paris and Luxembourg Stock Exchange: SESG), today signed a long term agreement with its strategic partners DLR and Thales Alenia Space Germany for the joint development of the first European space-based Automatic Dependent Surveillance Broadcast (ADS-B) constellation to monitor and optimize air traffic control around the globe. The agreement follows the successful launch of the ADS-B payload developed by DLR, which is currently operated on board the Proba V satellite and continuously provides global ADS-B data to the mission processing & analysis centre developed and operated by SES TechCom S.A.

This pioneering payload developed by DLR will be followed by the *in orbit validation* mission, which will demonstrate the full technical scope of space-based ADS-B. The European Space Agency has contracted Thales Germany for the development of this next generation ADS-B system, which is progressing on schedule with strong participation of the Luxembourg space industry, such as LuxSpace, with the TRITON micro-satellite platform to support the future demonstration mission.

States Prof. Hansjörg Dittus, DLR: “The promising results of the proof of concept mission demonstrate the potential of space-based ADS-B for global air traffic monitoring and control, especially in areas not covered by ground-based radar such as oceans or deserts. Aircraft will remain continuously visible during their journeys around the globe by providing their position, altitude, velocity vector and relevant telemetry data to ground controllers and other suitably equipped planes on an automatic basis. The agreement is in the interest of DLR and underlines the good relationship and strong cooperation between the German and Luxembourgish space industry.”

Sven Carstensen, CEO Thales Alenia Space Germany, elaborated: “Putting ADS-B, a field-proven terrestrial surveillance concept, onto satellites will further enhance safety and efficiency of modern air traffic around the entire globe in the foreseeable future. Combining European leaders’ competences and capabilities in this promising technology will open and secure new business opportunities for Europe worldwide. This will help us to master growing demand for air transportation and to further reduce carbon dioxide emissions”.

Gerhard Bethscheider, Managing Director of SES TechCom S.A., added: “The development of the space-based air traffic control is part of SES’ strategic initiative to drive innovation in space and broadcasting technologies. Today’s agreement bundles the ADS-B related know-how and core competencies of three committed partners that have a reputation for excellence in space. It will support the efficient knowledge transfer between the teams and therefore will significantly shorten the development phase for a space-based ADS-B constellation.”

Minister Martine Hansen concluded: “This agreement and the in-orbit demonstration currently running on the PROBA-V mission would never have been possible without Luxembourg’s membership in the European Space Agency. The efforts pursued by the Luxembourg Government over the last 10 years in this domain are starting to bear fruit and to lead to very innovative and promising projects such as satellite-based ADS-B.”

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#### **About SES:**

SES is a world-leading satellite operator with a fleet of 54 geostationary satellites. The company provides satellite communication services to broadcasters, content and internet service providers, mobile and fixed network operators and business and governmental organizations worldwide. SES stands for long-lasting business relationships, high quality services and excellence in the broadcasting industry. The culturally diverse regional teams of SES are located around the globe and work closely with customers to meet their specific satellite bandwidth and service requirements. SES (NYSE Euronext Paris and Luxembourg Stock Exchange: SESG) holds participations in Ciel in Canada and QuetzSat in Mexico, as well as a strategic participation in the satellite infrastructure start-up O3b Networks. Further information under: [www.ses.com](http://www.ses.com)

#### **About DLR:**

DLR is the national aeronautics and space research centre of the Federal Republic of Germany. Its extensive research and development work in aeronautics, space, energy, transport and security is integrated into national and international cooperative ventures. In addition to its own research, as Germany’s space agency, DLR has been given responsibility by the federal government for the planning and implementation of the German space programme. DLR is also the umbrella organisation for the nation’s largest project execution organisation.

DLR has approximately 7,400 employees at 16 locations in Germany: Cologne (headquarters), Augsburg, Berlin, Bonn, Braunschweig, Bremen, Goettingen, Hamburg, Juelich, Lampoldshausen, Neustrelitz, Oberpfaffenhofen, Stade, Stuttgart, Trauen, and Weilheim. DLR also has offices in Brussels, Paris, Tokyo and Washington D.C.

### **About Thales Alenia Space Deutschland:**

Subsidiary of Thales Alenia Space, Thales Alenia Space Deutschland GmbH is a carve-out of Thales Air Systems GmbH the worldwide leader in ground based navigation aids (NAVAIDS) for Air Traffic Management (ATM) based in Stuttgart. Over the past 15 years this team, being located in Germany, has built up outstanding experience in the fields of GNSS (Global Navigation Satellite Systems) and ADS-B (Automatic Dependent Surveillance - Broadcast). Numerous contributions have been provided to ESA, EC as well as to National funded studies, since the early days of GNSS and ADS-B. Thales Alenia Space Deutschland as contributed to the success of EGNOS, and is responsible for the Ground Mission Segment Assembly, Integration, Validation and Qualification activities as part of the Galileo program.

Thales Alenia Space Deutschland has extensive project management capabilities of large, complex multi-national programs as well as software and algorithm developments expertise. An important part of its core business consists of the development of safety critical and certifiable systems.