



Press Release

17 April 2018

Space Symposium, Colorado Springs

SSTL and Goonhilly Earth Station sign collaboration agreement with ESA for commercial Lunar missions

Surrey Satellite Technology Ltd (SSTL), Goonhilly Earth Station (GES) and the European Space Agency (ESA) have signed a collaboration agreement for Commercial Lunar Mission Support Services at the Space Symposium in Colorado Springs today. This innovative commercial partnership for exploration between ESA, GES and SSTL aims to develop a European lunar telecommunications and navigation infrastructure, including the delivery of payloads and nanosats to lunar orbit.

The partnership allows for a low-risk, phased approach to implementing a sustainable, long-term commercial service and will support lunar scientific and economic development, both for Europe and for the rest of the world. The agreement focusses on the upgrade of the Goonhilly Earth Station for commercial deep space services, and the maturation of the space segment with a lunar pathfinder mission. The cooperation also encompasses the commercial and regulatory support to catalyse the lunar economy and provide affordable access to the lunar environment, and ultimately deep space.

The agreement was signed by Sir Martin Sweeting, founder and Executive Chairman of SSTL, Ian Jones, founder and Chief Executive of GES and Dave Parker, Director of Human and Robotic Exploration at ESA.

Dave Parker commented "The agreement between ESA and SSTL/GES establishes ESA's first partnership for providing commercial services in support of lunar missions. Commercial lunar communication, navigation and transportation services will enable ESA to deliver innovative lunar missions at lower costs. The Lunar Pathfinder mission would provide exciting new opportunities for science and technology demonstration and open deep space access to new actors. This commercial partnership is part of a broader ESA innovation plan aimed at creating new opportunities for and engaging new actors in delivering the European Space Exploration Envelope Programme. Further, this activity is



consistent with the ESA Director General's wider Moon Village concept, in which actors around the world can contribute in different ways to sustained lunar exploration."

Sir Martin Sweeting, who is attending Space Symposium this year, commented "I am delighted that this collaboration agreement will enable new, and regular, mission opportunities to the Moon, which I believe is the next frontier for commerce and sustainable solar system exploration and exploitation."

Ian Jones remarked that "This partnership opens a new chapter on the development of international exploration of the Moon and beyond. We are excited about the potential of our new partnership with SSTL and ESA to make the commercial lunar economy a reality."

Alice Bunn, International Director at the UK Space Agency, said: "The UK is at the vanguard of a new, commercial era of space exploration, where costs are lower and innovative companies are changing the way things are done. While this agreement covers missions to the Moon, there is no reason why we couldn't see a similar service for Mars in the future. The UK Government's Industrial Strategy sets out how we are working with industry to ensure businesses can pursue new commercial opportunities, and establishing the UK as a world leading destination for space launch."

Following the recent announcement of the GES ground segment upgrade to form the world's first deep space commercial node, the partners are now jointly committed to the maturation of the Lunar Pathfinder space segment for a low cost "Ride and Phone Home" capability. The Lunar Pathfinder mission will offer a ticket to lunar orbit for payloads and nanosats onboard an SSTL lunar mothership spacecraft, which will provide communications data relay and navigation services between customer payloads and the GES Deep Space ground station. The £1m per kilogram ticket for a flight opportunity in the 2022 timeframe includes an end-to-end mission service which supports the integration, transportation and deployment of payloads, the provision of data relay and navigation services via the dedicated ESA ESTRACK deep space network, and a simple web-based interface for payload operations and return of mission data.

Private and agency Lunar landers, rovers and surface impactors will also be able to sign up to use the lunar communications and navigation services provided by the mothership either for primary mission operations, to provide additional capacity, or as a back-up

service. For prospecting, exploring, and ultimately utilising the far side of the Moon, this communications relay service will be a mission enabler, providing the vital bridge between Earth and the lunar surface. Exploring the far side of the Moon, particularly the South Pole Aitkin Basin, is a key area for future robotic and human exploration due to its chemical and mineral composition. The stable elliptical orbit of the mothership will allow for long duration visibility of the Southern Lunar Hemisphere each day, with maximum opportunities for the transmission and reception of data between Earth and the lunar surface.

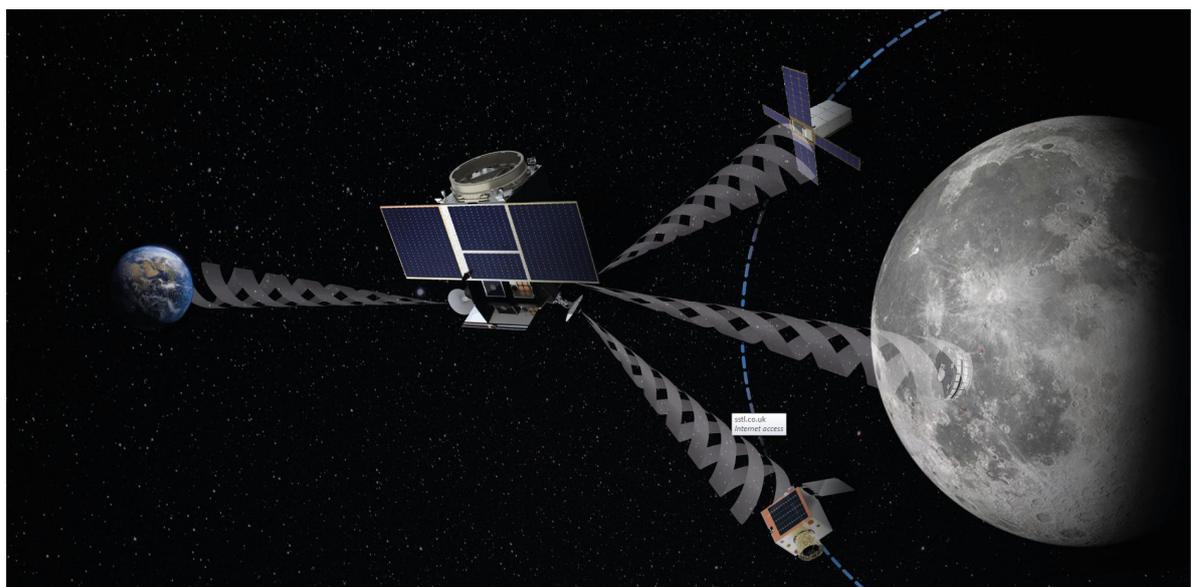
Prospective customers for Lunar Ride and Phone Home opportunities are invited to contact lunar@sstl.co.uk

ENDS

Notes to editor:

- The development of commercial partnerships constitutes one of the activity areas under ESA's European Exploration Envelope programme (E3P).
- [Press Release: £8.4 million growth deal to bring major European Space Agency Project to Goonhilly, 22 February 2018](#)

The full size images for this press release, can be downloaded at www.sstl.co.uk/Press/SSTL-and-Goonhilly-sign-collaboration-agreement-wi



Lunar Ride and Phone Home service. Credit SSTL.



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About SSTL

Surrey Satellite Technology Limited (SSTL) is the world's leading small satellite company, delivering operational space missions for a range of applications including Earth observation, science, communications, navigation, in-orbit servicing and beyond Earth infrastructure. The Company designs, manufactures and operates high performance satellites and ground systems for a fraction of the price normally associated with space missions, with 500 staff working on turnkey satellite platforms, space-proven satellite subsystems and optical instruments.

Since 1981, SSTL has built and launched more than 50 satellites for 20 international customers – as well as providing training and development programmes, consultancy services, and mission studies for ESA, NASA, international governments and commercial customers, with an innovative approach that is changing the economics of space.

Headquartered in Guildford, UK, SSTL is part of Airbus.

www.sstl.co.uk

About Goonhilly

Goonhilly Earth Station Ltd (GES) acquired the world-famous Goonhilly Satellite Station in 2014. It is an independent, privately-owned business providing a complete range of satellite communications services and ever growing range of space and data related services.



GES clients include some of the largest global satellite operators such as SES, Inmarsat, Eutelsat, Intelsat, Hughes, Hispasat and Planet Labs. Working alongside ESA, BAE Systems and SSTL, GES is developing both the world's first private Deep Space Communication system. GES also has close relationships with a wide range of leading universities including Oxford, Manchester, Leeds, Southampton, Durham, and Hertfordshire in order to enhance UK capabilities in Radio Astronomy.

In December 2015 Goonhilly was granted Enterprise Zone status as part of the expanded Cornwall Airport Newquay Aerohub Enterprise Zone. Goonhilly also hosts the Satellite Applications Catapult South West Regional Centre of Excellence.

The Goonhilly infrastructure, including 24/7 operations, diverse power, 200 GBit/s diverse tier-1 Internet connectivity and a wide range of antennas makes it an ideal partner for satellite TV broadcasters.

www.goonhilly.org