

PRESS RELEASE

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Berlin, Germany

Additional optical components from the Berliner Glas Group in space – EDRS-C launched successfully

On August 06, 2019 at 9:30 p.m. (CET), the EDRS-C satellite was launched with an Ariane 5 rocket from the spaceport in Kourou, French Guiana. The satellite is already in position in geostationary orbit and was placed in orbital position 31 degrees East.

The EDRS-C telecommunications satellite is the second node of the SpaceDataHighway (also referred to as the European Data Relay System, or EDRS). EDRS-C complements EDRS-A, which has been in space since 2016 and transmits images of the Earth taken by the four Sentinel observation satellites of the Copernicus program. Since the initial launch at the end of 2016, more than 20,000 laser connections have been established, over which more than 1 petabytes of data have been downloaded.

This data is transmitted via laser communication terminals. These laser communication terminals (LCT) are provided by the Tesat-Spacecom GmbH & Co. KG space company from Backnag, Germany. A large portion of the key optical components for this were developed and manufactured by the Berliner Glas Group.

Optical communication enables customers to access, for further use on Earth, hugely increasing amounts of data in a faster, more reliable way. Very sophisticated technologies were developed and qualified for use in space in order to exploit the advantages of transmitting data via laser light.

EDRS-C will serve as a redundant backup to the SpaceDataHighway system, double the transmission capacity, and act as a relay for simultaneously routing data from two observation satellites.

Based on the latest laser technologies, this system is the first and only "fiber-optics network in the sky". It is a network of geostationary satellites that are positioned permanently over a network of ground stations and can transmit data at a speed of 1.8 Gbit/s. This improves, for example, Earth observation services and thus considerably reduces reaction times during natural catastrophes, as the data recorded can be transmitted in almost real time.

And the planning already continues. Starting in 2024, a third communication node is to be positioned over the Asia-Pacific region. This will again considerably increase the communication capacity of the coverage area because the EDRS-D satellite will be equipped with three laser communication terminals.

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More information about the SpaceDataHighway can be found on the ESA website:
<http://www.edrs-spacedatahighway.com/>.

About the Berliner Glas Group:

The Berliner Glas Group (www.berlinerglasgroup.com) is one of the world's leading providers of optical key components, assemblies and systems, high-quality refined technical glass as well as glass touch assemblies. With more than 1,500 employees, the BERLINER GLAS GROUP develops, produces and integrates optics, mechanics and electronics into innovative system solutions for its customers. As OEM partners from concept to volume production, the Berliner Glas Group companies serve innovative customers in various market segments – semiconductor industry, laser and space technology, medical technology, metrology and the display industry.

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