

Media information
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WORK Microwave Achieves Major Milestone in IRIS² System Validation Testbed Project

Holzkirchen, August 2026 – WORK Microwave, a leading provider of advanced RF and satellite communication technologies, has successfully completed another key milestone in the IRIS² System Validation Testbed (SVTB) project. During the review meeting with the European Space Agency (ESA) in Graz, Austria, a LEO-to-MEO handover was demonstrated live. The project is carried out in close collaboration with Fraunhofer Institute for Integrated Circuits IIS and JOANNEUM RESEARCH.



Successful Demonstration of LEO-to-MEO Handover. The demonstration showcased a Conditional Handover (CHO) from LEO to MEO satellite and back to LEO satellite. Channel impairments were applied between the UE and the satellites reproducing dynamic SATCOM conditions including key channel effects such as Doppler shift, delay variation and AWGN channel condition. The demonstration was successfully done to representatives from ESA and the spaceRISE consortium,

highlighting the maturity stage of the project.

Project Objective

The IRIS² System Validation Testbed is designed to emulate the behavior of the future IRIS² communication system under various deployment conditions and to evaluate the performance of radio-communication links between users and the satellite system.

As prime contractor for the project, WORK Microwave is responsible for system integration and verification, including the development of the IF analog interface with third-party 5G devices.

Fraunhofer Institute for Integrated Circuits IIS is responsible for the 5G-NTN subsystem, with components based on OpenAirInterface.

JOANNEUM RESEARCH is responsible for the integrative emulation framework hosting all network emulation modules of a mega constellation, including satellite orbits, modem and channel components such as Doppler shift, phase noise, delay variation, AWGN channel conditions, non-linearities, and handover scenarios, enabling highly realistic end-to-end testing of NTN communication links in real time.

“This successful demonstration is further proof of our team’s capabilities and the strong, trust-based collaboration with ESA and our consortium partners. We are proud to contribute significantly to the realization of Europe’s IRIS² infrastructure with the SVTB,” WORK Microwave.

About WORK Microwave (www.work-microwave.com)

Headquartered in Holzkirchen (near Munich), Germany, and comprised of four product lines. RF, Optical Satellite Communication and Virtualised DIFI Solutions, Defence Electronics and Sensors & Measurement - WORK Microwave leverages 40 years of experience to anticipate market needs and apply an innovative and creative approach to the development of its technologies while maintaining the highest standards for quality, reliability, and performance.

WORK Microwave's Satellite Communication Product Line develops and manufactures high-performance, advanced satellite communications equipment in RF technology, optical/laser communication and virtualized (DIFI) solutions for IP networks, DTH broadcast, NGE0 constellations, governmental services, earth observation and science mission, teleport management, Optical Ground Stations and many more applications.



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