



Hi-SIDE Press Release

The Hi-SIDE project aims to develop and validate innovative technologies to remarkably improve space on-board data handling and transfer capabilities, primarily for Earth Observation and partly also for Telecom future missions. To develop the technology, Hi-SIDE has been granted 6.9 M€ from the European Union's H2020-COMPET-2017 Research and Innovation Action Framework Programme under Grant Agreement no 776151.

Hi-SIDE, which stands for High-Speed Integrated Satellite Data Systems For Leading EU Industry, started on 1st January 2018 and will run until 30th June 2021. The project consortium includes Airbus Defence and Space GMBH (Germany) from which Martin Steiner will act as the Project Coordinator, Airbus Defence and Space SAS (France), Tesat-Spacecom GmbH & Co.KG (Germany), Deutsches Zentrum Luft - und Raumfahrt e.V. (Germany), STAR-Dundee Limited (UK), University of Dundee (UK), Integrated Systems Development S.A. (Greece), Kongsberg Spacetec AS (Norway), Erzia Technologies SL (Spain), Universitat Autònoma de Barcelona (Spain), Ethniko kai Kapodistriako Panepistimio Athinon (Greece) and Modus Research and Innovation Limited (UK).

The Hi-SIDE consortium brings together world-leading experienced experts in all the required fields to deliver the objectives and outputs of the project. Industrial leaders, large organisations and SMEs, are joining forces with influential academics to ensure that the research efforts translate into market-ready and industry-aligned technologies. By delivering breakthrough innovation designed to respond to the needs of future space missions', the Hi-SIDE project will ensure that the internationally competitive position of European spacecraft primes and equipment manufacturers is maintained and enhanced in the strategically important area of satellite systems.

To achieve the project goals, Hi-SIDE will make substantial advances in all major elements of the data chain including inter-satellite and on-board network, payload processing, data compression, protection, storage and transmission. Whilst individual advances can only enable incremental improvements, the breakthroughs in satellite data management required to support the next generation of data intensive missions can be achieved only by jointly designing the complete data chain architecture and considering the overall system performance. The Hi-SIDE project will provide a comprehensive demonstration incorporating all the critical elements of the payload data chain from instrument to ground-station; aiming to substantially increase the payload data-rates that can be supported in future space-based data networks and Earth Observation missions. It will allow an aggregate instrument data-rate of at least 50 Gbps to be supported in the near term, together with a road-map to achieve even higher performance in the future.

For further details and to follow the work progress, please visit Hi-SIDE's website on:

<https://www.hi-side.space/>