Earth-Moon Communication and ROVER Teleoperation Via 5G-NR

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LLO Mission scenario

Teleoperator
Concurrent Design Facility
Core Network

Earth-Moon Delay

Propagation Delay

Earth delay

LLO Regenerative 5G-NR satellite

Propagation delay

ROVER
Functional architecture of scenario testbed
5G-NTN LLO Mission

Access Time: 48 sec
NTN Related Projects at SnT

ESA’s 5G/6G Hub used to simulate lunar connection

https://www.esa.int/Applications/Telecommunications_Integrated_Applications/ESA_s_5G_6G_Hub_used_to_simulate_lunar_connection
NTN Related Projects at SnT

- https://5gspacelab.uni.lu
- https://gitlab.eurecom.fr/oai/openairinterface5g/-/tree/SnT-enb-ntn-rel-1.0
- https://artes.esa.int/projects/5ggoa
- https://artes.esa.int/projects/5gleo
- https://wwwfr.uni.lu/snt/research/sigcom/projects/prospect
Interdisciplinary Centre for Security, Reliability and Trust

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