

Day 2 – IoT4EO

ESTEC, 17 Feb. 2023 - IoT4EO 2023 Workshop

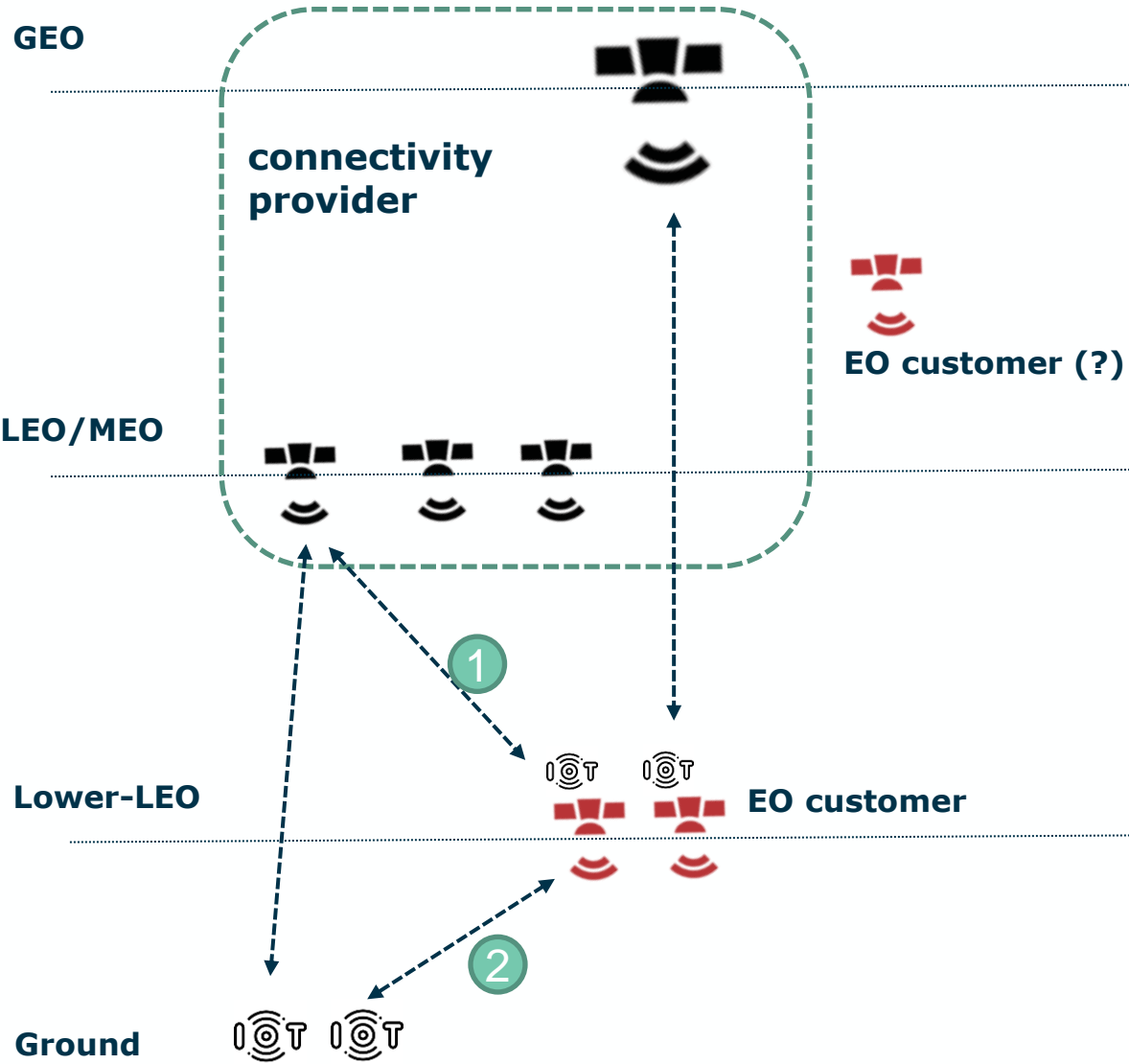


Various EO use cases showed interest in improved tasking and telemetry/early data access

Some parties implementing their own solutions, and offering these solutions/services to others.

Solutions vary from Globalstar/Iridium to IDRS/GEO L-band or GEO Ku-band or S-band

Limited mentioning of use cases that need IoT on ground, e.g. to trigger an EO observation/tasking



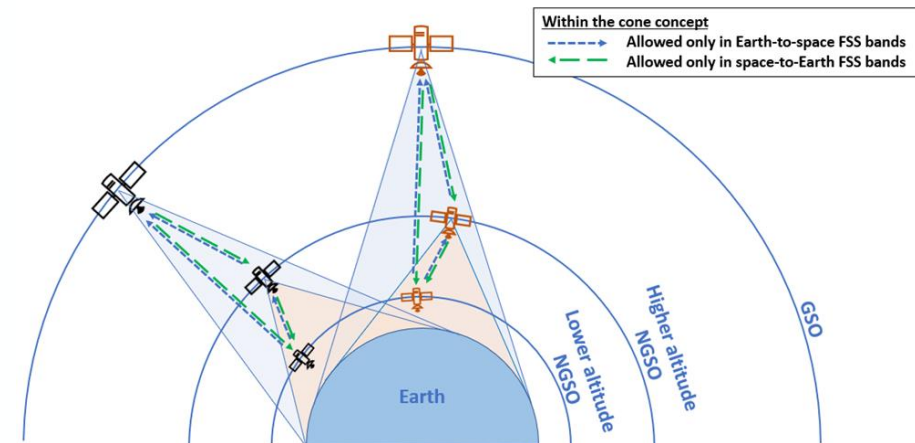
- 1** Features of IoT solutions for data relay
- Spectrum
 - Bandwidth
 - Standards
 - Coverage and Orbit
 - Latency
 - "Lock-in"
 - SWaP
 - Multiple access
 - Cost/affordability
 - ...
- 2** Additional features for IoT integrated with EO satellites
- IoT gateways/payloads on board

Regulatory development – will your EO satellite be allowed to be served with the proposed solution?

New opportunities in **Ka-/Ku-band** for data-relay systems – after WRC-23

In 2027 possibly other frequency ranges – such as **C-band** – allowed

Parts of L-band MSS inter-satellite link might be removed



“IoT-alike” standards-based connectivity

We co-fund a number of data relay projects

We would be interested in additional projects that demonstrate the use of standards (e.g. Lora/NB-IoT NTN/NR NTN/IAB) in such data relay topologies

