

Omnispace LCC Responses to OET Follow-up Questions to Form 442
File No.: 0426-EX-CN-2022
May 9, 2022

- 1. Please provide the antenna gain of Omnispace EXP-LEO-1 antenna.**

The gain of the antenna is 6.0 dBi.

- 2. Please confirm that applicant is the “owner” of Omnispace EXP-LEO-1 antenna.**

We confirm that Omnispace LLC is the owner and operator of the EXP-LEO-1 antenna.

- 3. Please provide a copy of space station license of the NGSO OMNI-L1 and OMNI-L2 satellites operated by Omnispace LLC.; which will show the uplink frequency band, downlink frequency band, TT&C frequency bands, and gateway frequency bands.**

The Space Station Licenses are provided in Annex 1.

- 4. Please provide the ITU name, the ITU link(s) for the ITU filing(s) filed by the National Information and Communication Technology Authority of Papua New Guinea (“PNG”) for the uplink 1996-1998 MHz and downlink 2186-2188 MHz frequency bands, TT&C frequency bands, and gateway frequency bands operated by the OMNI-L1 and OMNI-L2 NGSO satellites.**

- a. Uplink beams (1996-1998 MHz): ITU Filing M5L2SAT
 - i. Link: ISLGU (see Annex 1)**
- b. Downlink beams (2186-2188 MHz): ITU Filing M5L2SAT
 - i. Link: ISLGD (see Annex 1)**
- c. TT&C Frequency bands: ITU Filing UHF-TTC-L2
 - i. 401.03-401.07 MHz (see Annex 1)**
- d. Gateway Frequency bands: ITU Filing S-TTC-M5L2
 - i. Earth-to-space: 2025-2110 MHz (see Annex 1)*
 - ii. Space-to-Earth: 2200-2290 MHz (see Annex 1)**

- 5. Please provide ODAR (orbital debris information) for the OMNI-L1 and OMNI-L2 satellites.**

The OMNI-L1/OMNI-L2 satellites were designed and manufactured for Omnispace under contract to Thales Alenia Space of France. Both satellites are designed for 3 years life with a goal of 5 years and have an on-board electric propulsion system which includes sufficient propellant to perform nominal mission operations and a de-orbit operation at the end of life. The satellites were designed to the ESA Space Debris Mitigation Compliance Verification Guidelines and meet the space debris requirements to limit the orbital debris

from the time of launch to the time of de-orbit and include an assessment of casualty and collision risks and measures to avoid such risks.

- 6. Please provide a copy of the space station license and a statement, with any supporting documentation, indicating the country that will provide registration information for the satellite to the UN Office of Outer Space Affairs.**

Omnispace provides copies of our Space Station Licenses in Annex 1.

Statement: Omnispace had discussions with Department of State and the US Vienna office responsible for registration of space objects with UNOOSA. Omnispace is a US company, and the launches have been contracted with USA company (SpaceX), Omnispace was advised by the U.S. Department of State that registration of OMNI-L1 (LEO6-1) and OMNI-L2 (LEO6-2) will be made by them directly using the monthly information provided by the DoD/FAA. Both LEO satellites will therefore be in the USA Registry at UNOOSA.

If OET/FCC has further questions, please feel free to contact Mindel De La Torre at mdelatorre@omnispace.com.

Annex 1

Omnispace LEO6-1 Space Station License



LEO6-1 SS License
RCAP-SS-0000-005.p

Omnispace LEO6-2 Space Station License



LEO6-2 SS Licence
RCAP-SS-0000-006.p