

February 10, 2016

Federal Communication Commission Satellite Division – International Bureau Washington DC 20554

Attention: Mr. Paul E. Blais, Chief Systems Analysis Branch

Subject: Proba-V License Request SES-LFS-20151020-00734 call sign E150131

Dear Mr. Blais,

Universal Space Network (USN) resubmitted the Proba-V permanent application on October 20, 2015 FCC File No SES-LFS-20151020-00734 call sign E150131. The original request was on File No. SES-LFS-20141015-00799.

In reply to the letter of dismissal without prejudice from the FCC dated August 26, 2015, the Commission require a narrative response to the following:

- A statement confirming that the space station operator has assessed and limited the amount of debris released in a planned manner during normal operations. 47 C.F.R. § 25.114(d)(14)(i).
 - USN response The space station has no consumables on board and contains no ejectable items that under normal mission planning could become debris. The space stations orbit was assessed and selected to minimize any possible collision with known orbital objects.
- A statement that the space station operator has assessed and limited the probability of the space station becoming a source of debris by collisions with large debris or other operational space stations. 47 C.F.R. § 25.114(d)(14)(iii). In addition, please address the anticipated risk of a debris generating collision between PROBA-V and other objects over the orbital lifetime of the satellite. Finally, to the extent there is any additional information supporting departure from the 25 year post-mission disposal guideline, please provide that information.
 - USN response We note that 47 C.F.R. § 25.114(d)(14)(v) states, "For non-U.S.-licensed space stations, the requirement to describe the design and operational strategies to minimize orbital debris risk can be satisfied by demonstrating that debris mitigation plans for the space station(s) for which U.S. market access is requested are subject to direct and effective regulatory oversight by the national licensing authority." PROBA-V is a non-U.S. licensed space station authorized/licensed under the authority of European Space Agency (ESA) which has conducted the appropriate space debris assessments as



demonstrated in the, "Proba-V Space Debris Mitigation Document," submitted as part of this application. Specifically ESA has determined that

- "PROBA-V does not include on-board propulsion therefore any requirements relating to propulsion are not relevant to this mission. For example the following maneuvers shall not be performed on PROBA-V.
 - 1) De-orbiting at EOL and
 - 2) Collision avoidance."1

If you require additional information please feel free to contact me at 215-394-0127 or <u>jgreet@uspacenet.com</u>.

Regards,

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¹ See IFBS File No. SES-LFS-20151020-00734, attachment "Debris Mitigation", page 5, para 1.