



235 Queen Street  
Ottawa, Ontario  
K1A 0H5

### SPECTRUM LICENCE

**NOV 27 2017**

Our File: 3150-1 (838512 CP)

Mr. Nickolas Spina  
Manager, Launch and Regulatory Affairs  
Kepler Communications Inc.  
Suite 500 - 355 Adelaide Street West  
Toronto ON M5V 1S2

Dear Mr. Spina *Nick*

This is in response to Kepler Communications Inc.'s (Kepler) application of October 20, 2017, for a licence to operate a satellite in the fixed-satellite service (FSS) in a non-geostationary satellite orbit (NGSO).

Kepler's application has met all of the requirements outlined in Client Procedures Circular (CPC-2-6-02), *Licensing of Space Stations*. This letter constitutes a spectrum licence issued to Kepler for the use of radio spectrum by the Angarium constellation of up to 175 satellites in 7 orbital planes at an altitude of approximately 575 km. This licence authorizes the provision of FSS services and is associated with the MULTUS and KELYPSIS International Telecommunication Union filings. The authorized frequencies are outlined in the table below:

Orbital Position	Frequency Bands	
	space-to-Earth	Earth-to-space
NGSO	10.7-10.95 GHz 10.95-11.2 GHz 11.2-11.45 GHz 11.45-11.7 GHz 11.7-12.2 GHz 12.2-12.7 GHz	12.7-12.75 GHz 12.75-13.25 GHz 14.0-14.5 GHz

.../2

This licence is subject to the conditions outlined in the attachment, including the requirement to obtain, prior to the launch of the second satellite, an authorization for S-band frequencies for the launch and early operations of all subsequent satellites. Kepler must comply, on an ongoing basis, with all conditions of licence, including implementation milestones. Failure to do so may result in the revocation of this licence. The public benefit condition of licence (Condition 13) may be amended to better define how and when it must be met, following a consultation with satellite operators.

This licence includes coverage of visible Earth, subject to Kepler obtaining appropriate regulatory approvals in jurisdictions in which it intends to provide service.

This licence is valid until March 31, 2038 and is subject to the fees as set out in Canada Gazette Notice SMSE-008-16 – *Fee Order for Fixed-Satellite Service (FSS) and Broadcasting-Satellite Service (BSS) Spectrum in Canada*.

In keeping with our commitment to open, fair and transparent licensing processes, this licence may be posted on the Department's spectrum and telecommunications website. If you have any questions regarding this letter, please contact me at (613) 986-0017 or Christine Power at (343) 291-1971.

Yours sincerely,



Shari Scott  
A/Director  
Space Services Operations

Attachment