

## Douglas Young

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**From:** Douglas Young  
**Sent:** Wednesday, September 30, 2020 1:22 PM  
**To:** dsmith@planetiq.com  
**Subject:** Request for Info - File # 0504-EX-CN-2020  
**Attachments:** Additional\_data\_for\_API.pdf

Complete the additional data form as required by the ITU. Also, email the latest SpaceCap file. The file that was uploaded to ELS appears to be corrupt and can't be opened.

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of September 30, 2020 may result in application dismissal pursuant to Section 5.67 and forfeiture of the filing fee pursuant to Section 1.1108.

## Additional Data Items Required for API

Name of satellite network: \_\_\_\_\_

AP4 Reference	Description	Type of Response		Value
A.1.g	indicator showing that the non-GSO satellite system is planned to be operated in accordance with Resolution 32 (COM5/5) (WRC-19) Required for advance publication and notification	Mandatory	Y/N	
A.4.b.1.a	indicator of whether the non-geostationary-satellite system represents a “constellation”, where the term “constellation” describes a satellite system, for which the relative distribution of the orbital planes and satellites is defined  <i>Note</i> – Non-geostationary-satellite systems in frequency bands subject to the provisions of Nos. 9.12, 9.12A, 22.5C, 22.5D, 22.5F or 22.5L are always considered as “constellations”	Mandatory	Y/N	
A.4.b.1.b	indicator of whether all the orbital planes identified under A.4.b.1 describe a) a single configuration where all frequency assignments to the satellite system will be in use or b) multiple configurations that are mutually exclusive where a sub-set of the frequency assignments to the satellite system will be in use on one of the sub-sets of orbital parameters to be determined at the notification and recording stage of the satellite system Required only for the: 1) advance publication information for a non-geostationary-satellite system representing a constellation (A.4.b.1.a), and 2) coordination request for non-geostationary-satellite systems	Mandatory * under specified conditions	S-Single / M-Multiple	
A.4.b.1.c	if the orbital planes identified under A.4.b.1 describe multiple mutually exclusive configurations, identification of the number of sub-sets of orbital characteristics that are mutually exclusive Required only for the: 1) advance publication information for a non-geostationary-satellite system representing a constellation (A.4.b.1.a), and 2) coordination request for non-geostationary-satellite systems	Mandatory * under specified conditions	Integer	
A.4.b.1.d	if the orbital planes identified under A.4.b.1 describe multiple mutually exclusive configurations, identification of the orbital planes’ id numbers that are associated with each of the mutually exclusive configurations Required only for the: 1) advance publication information for a non-geostationary-satellite system representing a constellation (A.4.b.1.a), and 2) coordination request for non-geostationary-satellite systems	Mandatory * under specified conditions	Provide in separate table, enter here the attachment number	
A.4.b.4.h	the initial phase angle ( $\omega_i$ ) of the $i$ -th satellite in its orbital plane at reference time $t = 0$ , measured from the point of the ascending node ( $0^\circ \leq \omega_i < 360^\circ$ ) Required only in the case of a non-geostationary-satellite system representing a “constellation” (A.4.b.1.a), and to be specified in: 1) the advance publication information, for any frequency assignment not subject to the provisions of Section II of Article 9 2) the coordination request, for any frequency assignment subject to the provisions of Nos. 9.12, 9.12A, 22.5C, 22.5D, 22.5F or 22.5L 3) the notification, in all cases <i>Note</i> – The initial phase angle is the argument of perigee plus the true anomaly	Mandatory * under specified conditions	Provide in separate table, enter here the attachment number: (attachment should contain a value for each satellite in each orbital plane)	
A.4.b.4.i	the argument of perigee ( $\omega_p$ ), measured in the orbital plane, in the direction of motion, from the ascending node to the perigee ( $0^\circ \leq \omega_p < 360^\circ$ ): Required only for orbits of a “constellation” (A.4.b.1.a) where the altitudes of apogee and perigee (A.4.b.4.d and A.4.b.4.e) are different, and to be specified in: 1) the advanced publication information, for any frequency assignment not subject to the provisions of Section II of Article 9 2) the coordination request, for any frequency assignment subject to the provisions of Nos. 9.12, 9.12A, 22.5C, 22.5D, 22.5F or 22.5L 3) the notification, in all cases	Mandatory * under specified conditions	Provide in separate table, enter here the attachment number: (attachment should contain a value for each orbital plane)	

AP4 Reference	Description	Type of Response		Value
<b>A.4.b.4.j</b>	<p>the longitude of the ascending node (<math>\theta_j</math>) for the <math>j</math>-th orbital plane, measured counter-clockwise in the equatorial plane from the Greenwich meridian to the point where the satellite orbit makes its South-to-North crossing of the equatorial plane (<math>0^\circ \leq \theta_j &lt; 360^\circ</math>)</p> <p>Required only for orbits of a “constellation” (<b>A.4.b.1.a</b>), and to be specified in:</p> <ol style="list-style-type: none"> <li>1) the advance publication information, for any frequency assignment not subject to the provisions of Section II of Article 9</li> <li>2) the coordination request, for any frequency assignment subject to the provisions of Nos. <b>9.12</b>, <b>9.12A</b>, <b>22.5C</b>, <b>22.5D</b>, <b>22.5F</b> or <b>22.5L</b></li> <li>3) the notification, in all cases</li> </ol> <p><i>Note</i> – All satellites in all orbital planes must use the same reference time. If no reference time is provided in <b>A.4.b.4.k</b> and <b>A.4.b.4.l</b>, it is assumed to be <math>t = 0</math></p>	Mandatory *	under specified conditions	Provide in separate table, enter here the attachment number: (attachment should contain a value for each orbital plane)
<b>A.4.b.4.k</b>	the date (day:month:year) at which the satellite is at the location defined by the longitude of the ascending node ( $\theta_j$ ) (see Note under <b>A.4.b.4.j</b> )	Optional *		Provide in separate table, enter here the attachment number: (attachment should contain a value for each satellite in each orbital plane)
<b>A.4.b.4.l</b>	the time (hours:minutes) at which the satellite is at the location defined by the longitude of the ascending node ( $\theta_j$ ) (see Note under <b>A.4.b.4.j</b> )	Optional *		Provide in separate table, enter here the attachment number: (attachment should contain a value for each satellite in each orbital plane)
<b>A.4.b.4.m</b>	<p>indicator of whether the space station uses sun-synchronous orbit or not</p> <p>Required only in frequency bands not subject to the provisions of Nos <b>9.12</b> or <b>9.12A</b></p>	Mandatory *	under specified conditions	Y/N
<b>A.4.b.4.n</b>	if the space station uses sun-synchronous orbit ( <b>A.4.b.4.m</b> ), indicator of whether the space station references the local time of the ascending node (solar local time when the space station is crossing the equatorial plane in the South-North direction in hours:minutes format) or the descending node (solar local time when the space station is crossing the equatorial plane in the North-South direction in hours:minutes format)	Optional *		Y/N
<b>A.4.b.4.o</b>	if the space station uses sun-synchronous orbit ( <b>A.4.b.4.m</b> ), the local time of the ascending (or descending, per <b>A.4.b.4.n</b> ) node (solar local time when the space station is crossing the equatorial plane in the South-North (or North-South) direction in hours : minutes format)	Optional *		Time (hh:mm)

\* These fields may be entered as N/A for those satellite networks that are not applicable

**THIS FORM SHOULD BE SUBMITTED FOR EACH SATELLITE NETWORK**