

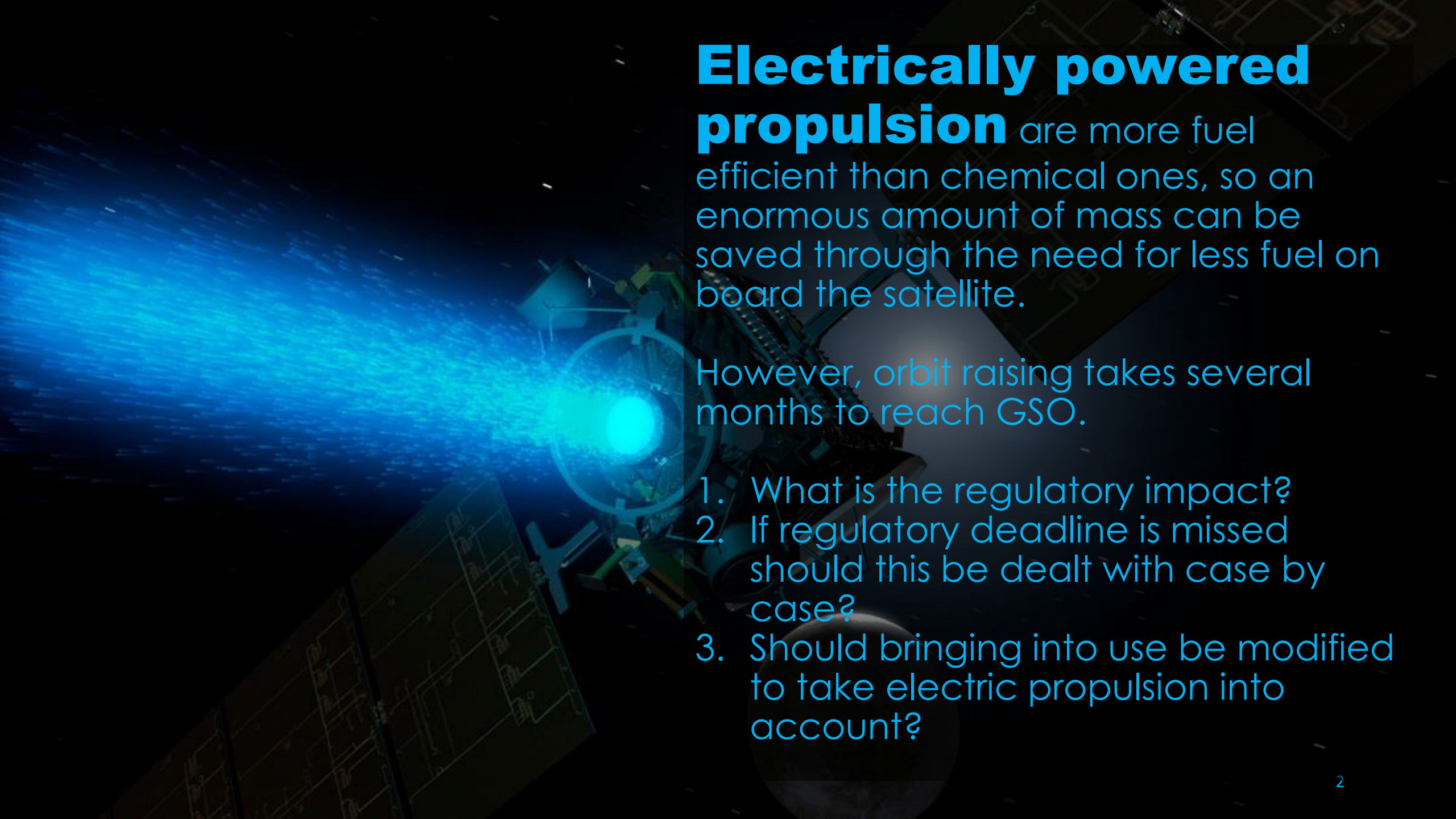
Open Forum Discussion

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A satellite is shown in space, with a large, bright blue plume of ion thrusters extending from it. The satellite's solar panels and various instruments are visible. The background is a dark space with some distant stars and a faint view of Earth's horizon.

Electrically powered propulsion are more fuel efficient than chemical ones, so an enormous amount of mass can be saved through the need for less fuel on board the satellite.

However, orbit raising takes several months to reach GSO.

1. What is the regulatory impact?
2. If regulatory deadline is missed should this be dealt with case by case?
3. Should bringing into use be modified to take electric propulsion into account?



**A REVOLUTION
IN SATELLITE
MANUFACTURING**

No one has ever built a satellite in one day... we will build several every day!

TOTAL COVERAGE

Internet to everyone,
everywhere on Earth

Bringing into use NGSO frequency assignments

What is the definition of BIU for NGSO?

1. One NGSO satellite?
2. Entire constellation?
3. X % of the constellation for minimum service?
4. Draft RoP CCRR/57 = One satellite with frequency assignment in use for 90 days + deployment plan + minimum no. for service



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Flexibility for NGSO

Submission of coordination requests with multiple orbital characteristics. Draft RoP CCRR/57 allows simultaneous & mutually exclusive operation of NGSOs.

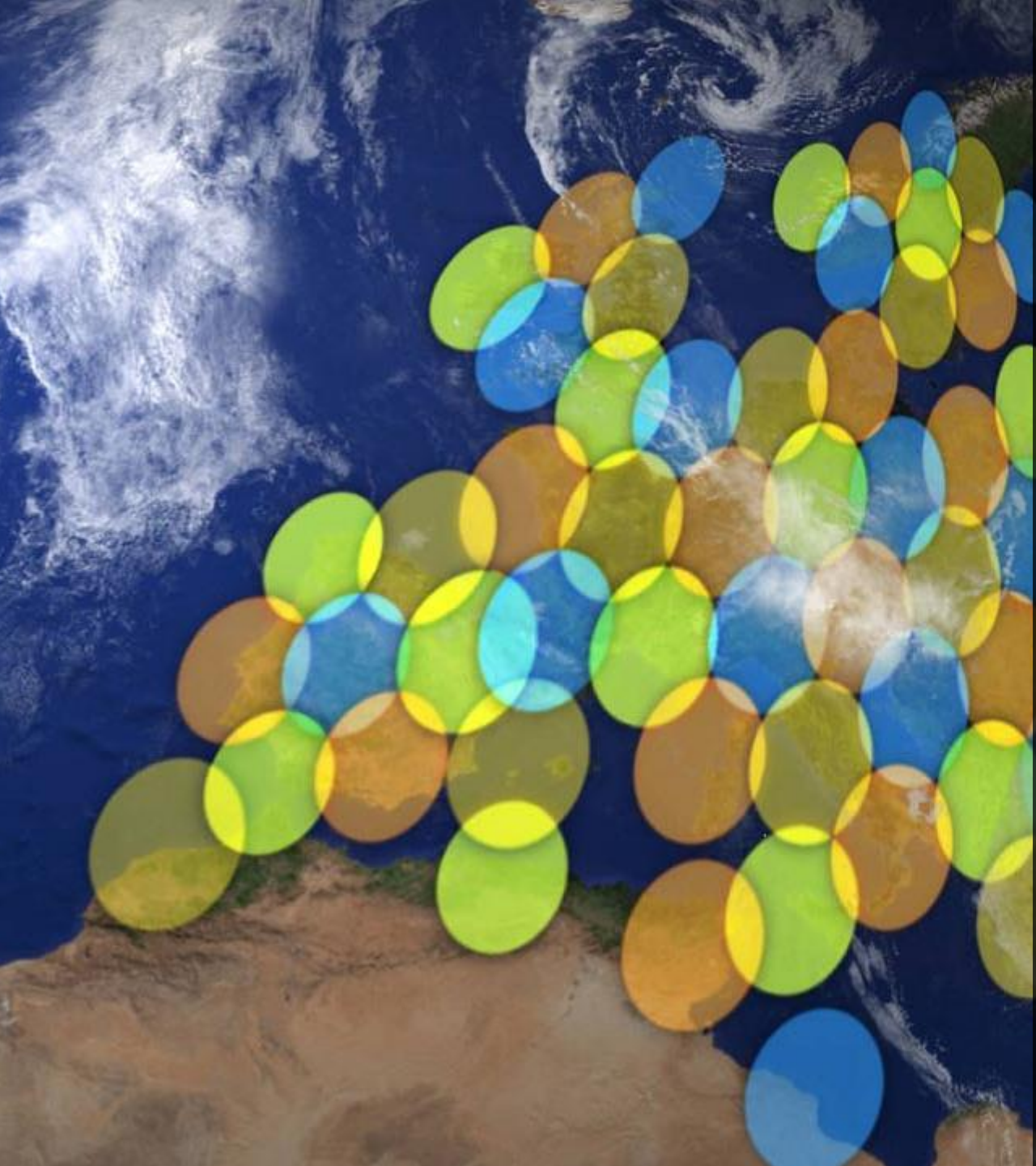
1. Should one NGSO satellite system submit a CR filing with multiple sets of orbital characteristics and inclination values which are mutually exclusive?
2. How to prevent abuse and warehousing of spectrum?



Reservation of service areas.

Global/regional/steerable beams are brought into use or in continuous use on a restricted part of the service area:

1. Current RR does not prevent such usage. Should it prevent service area warehousing?
2. Should be provisions under Nos. 11.44 and 11.44B be modified?
3. Should the BR start verifying and applying No. 13.6 for service area not BIU?



High Throughput Satellite (HTS)

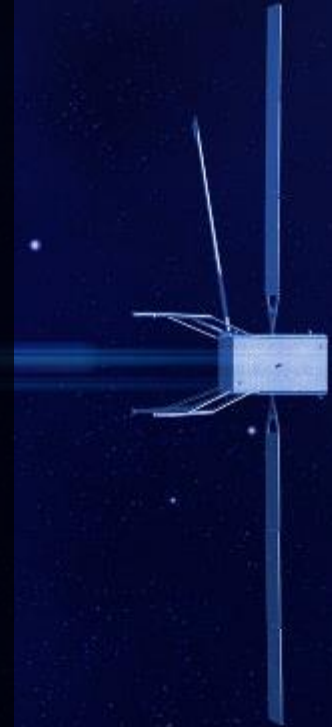
Improved capacity, higher throughput rates, lower space segment cost per MB through frequency reuse and multiple spot beams

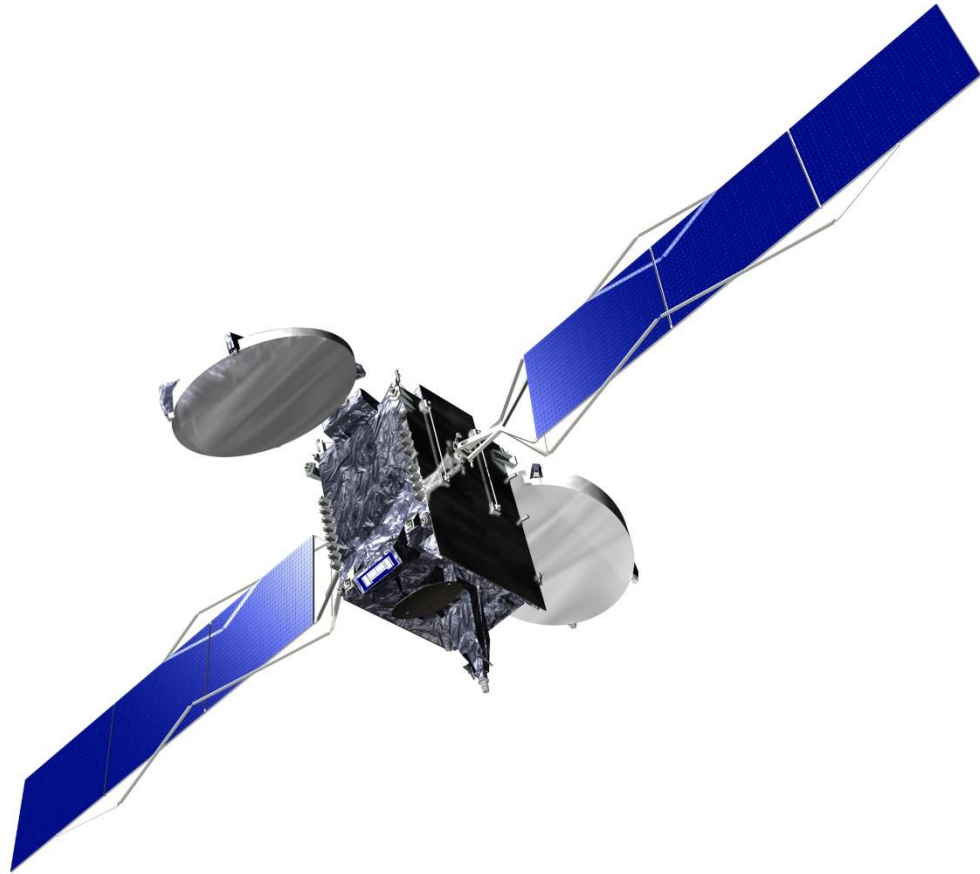
1. Is the future towards a fully HTS?
2. Will traditional FSS satellites cease to exist?
3. Does the current Radio Regulations fit to the concept of HTS with its operational flexibility?

On Orbit Servicing

Providing satellite operators with life-extension (beyond-end-of-fuel continuous service) and other in-orbit services (relocation, orbit correction, inclination correction, bring-into-use (BIU) and deorbiting) using small satellites.

1. What could be the frequency / service used by small satellites for in-orbit service and TT&C?
2. Can the current Radio Regulations procedures –API / Coordination / Notification support such services?
3. Is there a demand for such services in view of 15-20 years lifetime of a satellite?





One spacecraft to BIU assignments of different satellite networks

Should BIU of different satellite networks separated by 1 deg by using one spacecraft in between be allowed ?

Additional use within service area



Application of §6.6 of Appendix 30B: BR identifies Adm included in SA of assignment & notifying Adm shall “seek agreement” with those identified.

1. What is the definition of “seeking agreement”?
2. Is “seeking” the same as “obtaining”?
3. What should be the finding under §6.19 a) if agreements were sought but no response from identified administrations ?