



ELECTRIC PROPULSION SATELLITES AND SERVICE TRENDS IN THE REGION

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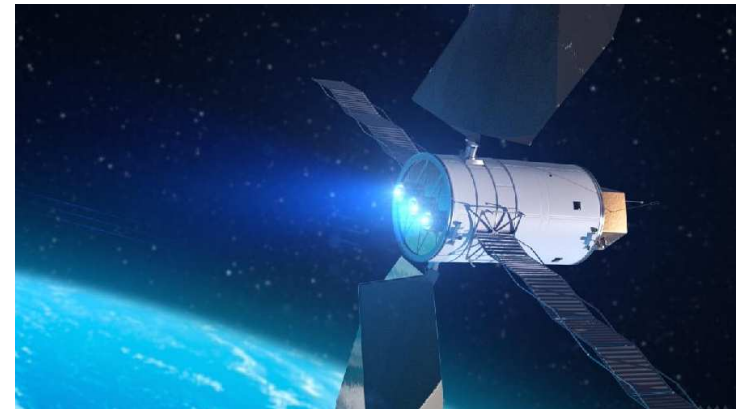
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ELECTRIC PROPULSION

What is it?

A way to accelerate satellites in the space by using electric means, and can be used for:

- Orbit raising
- Stationkeeping
- Change of orbital slot
- Satellite de-orbit



http://www.nasa.gov/multimedia/imagegallery/image_feature_2487.html

Electric orbit raising allows placing more dry mass into space, additional payload can be hosted and longer life can be achieved.

E115WB COMING SOON (ALL-ELECTRIC)



- Expected to be launched Q1 2015
- < 6 months orbit raising
- Up to 7.5kW payload power

E117WB HOSTING ADDITIONAL PAYLOAD

- Expected to be launched Q4 2015
- Will host a payload for the US FAA Wide-Area Augmentation System (WAAS), to enhance aviation safety.



SATELLITE SERVICE DEMAND IN THE REGION

INCREASING C BAND DEMAND, ADVANTAGES

- Video distribution services
- Growth supported by an active regional market
- Strong SD / HD penetration
- New DTH platforms
- Connecting entire continents in a single beam
- Critical telecommunications for public safety and disaster reliefs efforts
- Not subject to rain attenuation

Professional video links

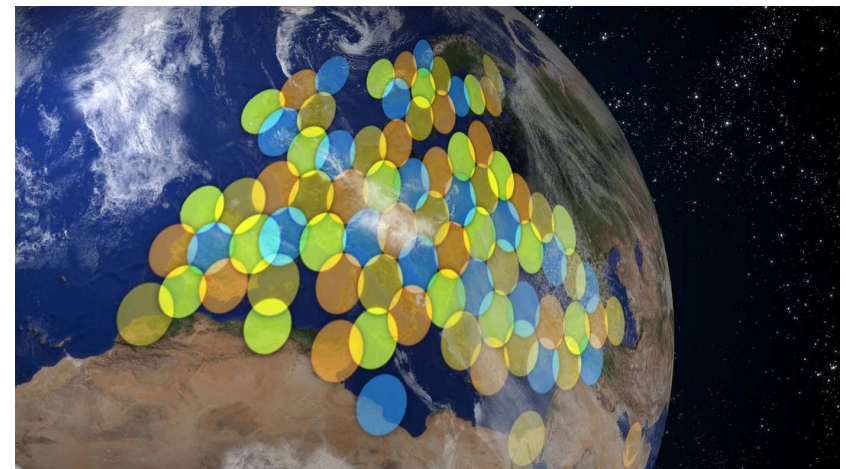
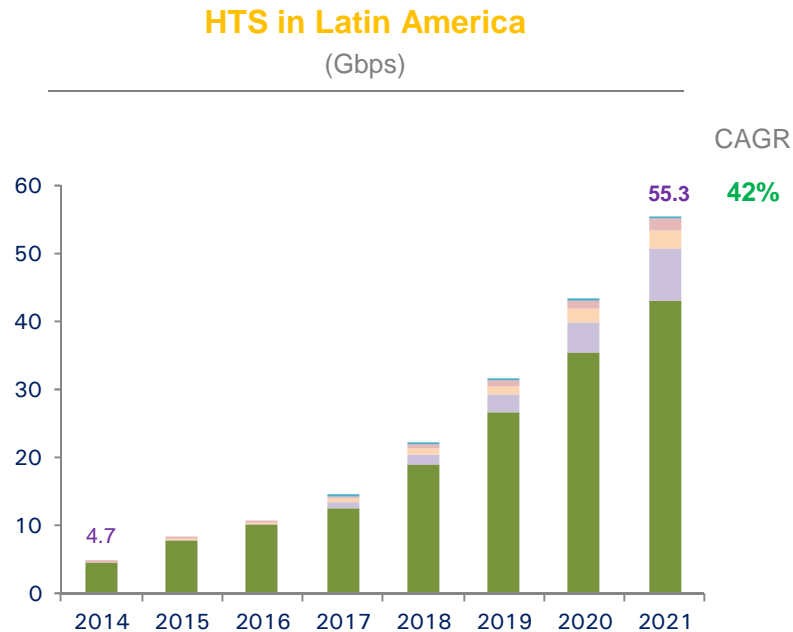
Consumer broadcasting



SATELLITE INDUSTRY TRENDS IN THE REGION

NEW TECH AND MORE THROUGHPUT

- High Throughput Satellites (“HTS”) become a reality in the region
- Broadband Access, Data Services and Mobility Applications for HTS
- High throughput allows customers to optimize bandwidth and concentrate power, more Mbps per MHz



- Eutelsat Americas internal analysis
- CAGR calculated between 2014 and 2021



CONCLUSIONS

- **Electric satellites** represent several advantages against bipropellant propulsion
- **C Band demand** is growing up in the region for different satellite applications
- **HTS** are coming, and with an open architecture will complement traditional use of frequency bands



*Prepared by the Business Development and Regulatory Group
at Eutelsat Americas.*

Many thanks!

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