



## ***PLENARY SESSION*** ***Executive summary***

### **TREND IN THE SATELLITE INDUSTRY**

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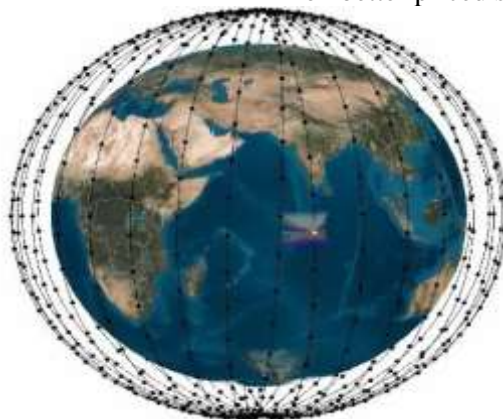
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#### **OVERVIEW OF SATELLITE INDUSTRY**

Many people would say that nowadays the satellite business is declining. However, the facts are presenting a different picture. The satellite industry has a sustainable growth every year and the approximate increase for 2018-2019 is 6% according to a report from the leading market research company "Northern Sky Research". The largest segment of Satellite services has a minor decrease of 1.7% based on the competitive satellite transponders market. Satellite manufacturing revenues increased by 26%, Launch equipment and Ground segment also has a positive upsurge of 26% and 5% respectively. The overall turnover is expected to skyrocket up to 1\$ trillion in 2040. Talking about the trends and foreseeing the future, we must mention the new revenue stream - the non-satellite space industry which includes the Government space projects and the commercial human spaceflights. This should not be underestimated because the potential market presented revenues of 82.5\$ billion in 2018 according to SIA report.

#### **I. NEW LEO SATELLITE CONSTELLATIONS**

Revolutionizing the space - I believe that is the right sentence that describes the passing year. The three Sirs Musk, Bezos and Branson want to lead humans in space, and they are in a fierce race who will succeed first. One of the most popular topics in 2019 was the LEO / Low Earth Orbit / satellites which will provide affordable Internet connectivity to everybody across the globe. Space X has announced the plan for the mega constellation of 12 000 satellites. Elon Musk has already proved that he can change the industry, cutting the prices of the satellites launches and providing a reliable service. On May 23, 2019 Space X has successfully launched the first 60 Starlink satellites in orbit. One Web has sent also in February the first 6 satellites and registered the start of the project. Telesat and Kuiper of Amazon are in addition some of the significant names in this market and they will be definitely part of the major players. One thing is sure - the end customer will win from this competition and at the end will receive service on better priced service.



\*Constellation pattern for OneWeb's system. Source – [www.oneweb.world](http://www.oneweb.world)

## II. TELEPORT FACILITIES

The trend for consolidations of the Teleport facilities continued in 2019 as well. Smaller operators became part of larger companies in order to provide a wider portfolio of services and to be more competitive on the market. However, the revenue of the services increased from 2016-2018 according to a report of WTA. The Teleport providers also faced a lot of challenges - they had to provide more services

in existing hardware - fewer antennas and less capacity and invest in new hardware or in cloud/virtualization services for better operational capabilities and competitiveness. They also tried to dodge the process of migration to terrestrial connectivity which is in some cases the cheaper solution for the customer but still not the best option because of the lower reliability of the service.



\*Plana Teleport facility. Source – <http://satellitemarkets.com/productservices/teleport-view-future>

## III. VSAT MARKET

The most fertile business direction in 2019 remains the VSAT / very small aperture terminals / market. The average expected growth for the period 2019-2023 is 10%. In 2018 the Maritime connectivity market reached 1\$ billion. The VSAT market is growing rapidly because of the higher capacity demand of the passengers or the crew. The number of terminals will rise up to 65 000 by 2028. The satellite operators provide also better pricing squeezed from the hard competitors and in addition, the HTS /High Throughput Satellites / deployments ensure better throughput and better efficiency in the link budgets / MHz converted to Mbps /. The on-

board applications which deliver different optimization of the vessels also require more capacity. There is also a raised interest for additional services on board like Video on Demand services, TV solutions, Voice over IP, 3G/4G services close to the shore, vouchers for the crew and IP network management. This supposed automatically the purchase of additional capacity from the VSAT providers. The total GEO HTS capacity is expected to grow up to 680Gbps by 2023 Finally it should be mentioned that the biggest players in this market Newtech & iDirect have merged aiming to provide more sophisticated service to the customer.



\*Euroconsult Maritime report. Source - <http://euroconsult-ec.com/>

#### IV. BROADCASTING

The broadcasting market is getting more and more challenging. In some regions like Europe, some customers migrate the services to IP infrastructure because of cost optimizations. The transition to IP is the biggest threat for the satellite providers. According to a report from Euroconsult the leased satellite capacity will increase by 2021 but the overall revenue will decline. The company foresees that the total leased capacity will go up to 10Tbps. The viewer also became more sensitive in terms of quality and additional services. This is why

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there is an increment of IP TV subscriptions with additional options like catch-up, pause and Video on Demand services. A lot of customers also tend to watch often the content or live events directly on smart devices. Therefore there is an increase of the OTT /Over the Top/ subscriptions and this trend will continue in 2020. The biggest players remain Netflix, Amazon Prime Video, Hulu, HBO, Disney+. At the end, we cannot miss the merger between FOX and Disney in March 2019.



\*OTT Service on mobile device. Source - <https://www.ictbusiness.biz/analysis/ott-service-churn-reached-35-percent-in-2019>