SPACE INTEL REPORT

EUTELSAT STRATEGY: PROTECT VIDEO WHERE POSSIBLE, AND PLOT SATELLITE IOT GROWTH WITH SIGFOX, SATELLITE BROADBAND WITH TELCOS

Posted by Peter B. de Selding | Apr 2, 2019 | Featured, Mobility, News, Satellite Operators

Eutelsat will use Sigfox frequencies and technical standards for its fleet of IoT satellites. Credit: Sigfox

PARIS — Satellite fleet operator **Eutelsat** has decided to move forward with an initial constellation of low-orbiting, low-bandwidth IoT satellites as part of its partnership with terrestrial IoT provider **Sigfox**, with first batch of commercial satellites to be launched in 2020, Eutelsat Chief Executive Rodolphe Belmer said.

Eutelsat and Sigfox had already concluded an agreement in 2018 under which Eutelsat would launch a single proof-of-concept satellite and contracted with manufacturing **Terran Orbital's Tyvak International** to build it.

That satellite is scheduled for launch this year. An industry official said Eutelsat had issued a request for proposals from industry for a batch of about 10 satellites that would debut commercial operations without a large capex investment. Another industry official said the first batch likely would be no more than six satellites and is intended to validate system performance in ways that cannot be done with a single spacecraft.

Addressing the Space Perspectives conference here April 2, organized by **Euroconsult** and France's aerospace industry association, **GIFAS**, Belmer said the go-ahead for at least an initial commercial constellation is part of Eutelsat's new strategy to compensate for the low growth in its historic video business.

Belmer said the strategy is very high-speed broadband for consumers and governments worldwide, starting with the Ka-band Konnect satellite to be launched this year for Europe and Africa, under construction by **Thales Alenia Space**.

A more-powerful Konnect-VHTS is under construction by the same manufacturer to cover Europe as part of an agreement with defense-electronics manufacturer **Thales Group** and France's **Orange** telco. Belmer said Eutelsat was in negotiations with other European telcos to strike similar distribution deals.

Belmer said the advent of 5G terrestrial networks, offering speeds up to 10 times that of 4G, will heighten the contradictions between government promises and government delivery to rural areas and exacerbate the digital divide.

The mounting resentment of rural populations, which in France alone number 2 million or more, will force the hand of policy makers in Europe and elsewhere.

Belmer said 5G will feature a huge number of small cells that beat anything available today, on a capex-per-megabit basis. But large number of sites required in a given geography will limit the service to metropolitan areas. 5G network operators will not be able to afford the deployment of 5G in smaller towns and rural regions.

Enter satellite broadband. "The resentment people feel today about the digital divide will be even worse with 5G," Belmer said. "The demand for alternative technologies will grow and

satellites will emerge as the only technology able to reach these regions outside the 5G coverage."

Belmer said most terrestrial wireless networks have not yet focused on the satellite link because they are concentrating on the main even, their urban and close-suburban markets. Because of that, there is still work to do on 5G standards for satellite systems and chipsets to be compatible and fully integrated with 5G networks. "This discussion will have to happen," he said.

Several other companies, including broadband providers Viasat Inc. and Hughes Network Systems of the United States, have come to the same conclusion.

The 500-million-euro ($572-million) **Konnect-VHTS** project was blessed by the French government, but Belmer warned that European user-terminal manufacturers were will unable to make terminals of the same quality and price point as Viasat and Hughes.

He suggested it was unclear whether French or European providers, such as Thales Group — an experienced provider of higher-cost military terminals — would be able to raise their game in time to be part of the Konnect VHTS ecosystem in 2021.

At the other end of the throughput spectrum is IoT. Belmer said here the goal is to complement Sigfox's terrestrial low power terminal coverage in regions Sigfox has not reached, including maritime applications.

The Eutelsat project, called ELO For Eutelsat LEO for Objects, will use Sigfox-compatible frequencies and chipsets.

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