



Tom Eaton, Telesat's Vice President,
International Sales ●●●

Telesat is a leading global satellite operator, providing reliable and secure satellite delivered communications solutions worldwide to broadcast, telecom, corporate and government customers. Headquartered in Ottawa, Canada, with offices and facilities around the world, the company's state-of-the-art fleet consists of 15 satellites plus the Canadian payload on ViaSat-1 with two new satellites under construction. An additional two prototype satellites are under construction for launch into low earth orbit (LEO) as part of Telesat's plans to develop an advanced, global LEO satellite constellation offering low latency, high throughput broadband services. Telesat also manages the operations of additional satellites for third parties. Privately held, Telesat's principal shareholders are Canada's Public Sector Pension Investment Board and Loral Space & Communications Inc.



Telesat Headquarters ●●●

Leading global satellite operator

Telesat was established in the 1960s and is now one of the largest and most successful satellite operators in the world. Headquartered in Ottawa, Canada, the company provides video and IP networking to broadcast, telecom, corporate and government customers in over 50 countries through its global fleet of 15 satellites. Telesat has another four satellites in the works – two LEO scheduled to launch this year and two GEO HTS planned for launch in 2018. The company is also a leading consultant on technical and commercial matters related to satellite services having advised governments, satellite operators, spacecraft manufacturers, and other industry participants in over 40 countries across six continents. Amy Saunders spoke with Tom Eaton, Telesat's Vice President, International Sales, to find out more about the company's recent activities, market development, and coming plans.

Question: Can you provide an introduction for Telesat, from its founding to where it stands today?

Tom Eaton: During the 1960s, early communications satellites like Telstar amazed the world with their ability to instantly connect people across oceans and continents – both with live phone calls and live video broadcasts. Canadian government officials saw the potential of satellite to serve their vast country and established Telesat in 1969. The company was given the mandate to provide satellite services to all of

Canada including remote areas where terrestrial alternatives were unavailable or too expensive. To fulfill this mission, Telesat hired the finest engineers and technologists of the time and built an organization whose breakthroughs in the 1970s and decades to follow transformed the world of global communications. A few examples include:

- Anik B (1978) – Anik B was the world's first domestic communications dual-band (C and Ku) satellite. With Anik B, Telesat started providing the world's first direct-to-home (DTH) TV service, which laid the groundwork for the global DTH industry, which today has over 200 million subscribers.
- Anik F2 (2004) – At the time of its launch, Anik F2 was the largest communications satellite ever carried into space. It started the global boom in Ka-band and opened an important new market – consumer Ka broadband services. Within two years of its launch, Anik F2 was serving 100,000 subscribers in the US for WildBlue (now ViaSat) and bringing broadband to many homes and businesses for the first time. Satellite broadband is now forecasted to



grow to almost seven million global subscribers by 2025. The unique Ka-band spot beams of Anik F2 are also recognized as a precursor of today's high throughput satellites (HTS) that are transforming the industry and which are expected to generate billions of dollars in new revenues through the next decade.

- Telstar 11N (2009) – Telstar 11N was the first satellite to provide Ku-band coverage of the Atlantic Ocean from the Arctic Circle to the equator, making it a winning solution for both maritime and aeronautical broadband. Telstar 11N, along with Telesat's Telstar 14R, launched in 2011 and Telstar 14, launched in 2004, spurred demand for satellite broadband across the oceans. Mobility applications for maritime and aeronautical broadband are now forecasted to be among the fastest growing markets for the global satcom industry.

Question: What services and capabilities does Telesat provide, and to which end users?

Tom Eaton: Telesat operates a robust global teleport and terrestrial infrastructure that is seamlessly integrated with our global fleet. By combining our state-of-the-art assets in space and on the ground, Telesat provides high performing communications solutions – nationally, regionally and globally. North America is our primary market and much of our business there is tied to video distribution. Telesat also has a large and growing presence in Latin America serving telecom, corporate and government customers with six satellites.

Mobility services is another dynamic market where Telesat is well positioned, both with conventional and high throughput satellite (HTS) capacity over the Atlantic to meet growing maritime and aero requirements. Later this decade, Telesat will deploy new mobile coverage over the Pacific with Telstar 18 VANTAGE, which is planned for launch in mid-2018.

Telesat also offers Ku-band coverage over Africa with Telstar 11N and our new Telstar 12 VANTAGE satellite, which support the delivery of broadband services for enterprise and government users in Africa and

backhaul services for African telcos.

Question: Which industries and world regions are key to Telesat's operations, and how has this changed over the years?

Tom Eaton: For most of our history, Telesat was focused on North America. In 2007, Telesat's operations were combined with the satellite operations of Loral Skynet, a US company with a strong technical background tied to the achievements of AT&T Skynet, Bell Labs and the Telstar program. As a result, Telesat greatly expanded its coverage and became a truly global operator. Today, about half of Telesat's business is broadcast services. Most of the remainder is data services for enterprise, government and mobility customers. As mentioned, Telesat's growth in mobility markets and strong position in Latin America are two of the biggest changes to our business over the past decade.

Question: Where does Telesat see itself in the market, and how does it differentiate itself from competitors?

Tom Eaton: What makes Telesat unique, according to our many broadcast, telecom, corporate and government clients, is our ability to deliver superior technical innovations along with industry-leading customer service. Telesat creates real competitive advantages for customers by combining our size, resources and satellite know-how with the rapid response and high levels of service that have become critical for success in today's business world. People we do business with cite our outstanding technical expertise – expertise backed by an industry leading consultancy and R&D lab. Others value our customer-oriented culture. These are key to Telesat's value proposition, but our differentiation really centers on how we apply these elements to creating satellite innovations that give our customers a better way to serve their customers.

Question: What are Telesat's current satellite plans? We understand there are two satellites under production, as well as an additional two prototype LEO satellites?

Tom Eaton: Telesat has two GEO satellites under construction: Telstar 19 VANTAGE, which will mainly serve the

Americas, and Telstar 18 VANTAGE, which will serve the Asia-Pacific region. The Telstar VANTAGE name means these satellites have high throughput capabilities. Both are scheduled to launch in mid-2018.

Telesat also has procured two prototype LEO satellites for launch in 2017, which will allow us to perform testing and trials to assure that Telesat's LEO system is capable of delivering significant benefits to our customers in terms of higher data speeds, high capacity and security, lower latency and other advantages that are central to the system's design.

Question: What can you tell us about Telesat's capabilities in Sub-Saharan Africa (SSA), and how you are positioning the company for success in the region?

Tom Eaton: Telesat currently has two satellites that, together, provide high power Ku-band coverage over the whole of SSA: Telstar 11N at 37.5 West and Telstar 12 VANTAGE at 15 West. These satellites combine two powerful Ku-band beams that enable coverage of the entire SSA region, as shown in the Figure 1. Telesat's SSA capacity can support:

- VSAT applications for financial services (ATMs, bank branches), government projects and corporate networks;
- Video distribution for direct to home (DTH) services; and
- Cellular backhaul and other connectivity that allows carriers to effectively leverage the powerful fibre links that have become operational along Africa's coasts.

Today's African satellite networks serve requirements within the continent itself – intra-Africa for video distribution and VSAT networks – and also support broadband networks between SSA and economic centers in Europe and the Americas. Telesat's Telstar 12 VANTAGE and Telstar 11N satellites excel at both types of coverage – intra and inter-Africa – and are especially in demand for broadband connectivity between SSA and corporate offices in Europe. The second most requested connectivity is between SSA and offices/operations centers in North and Central America.

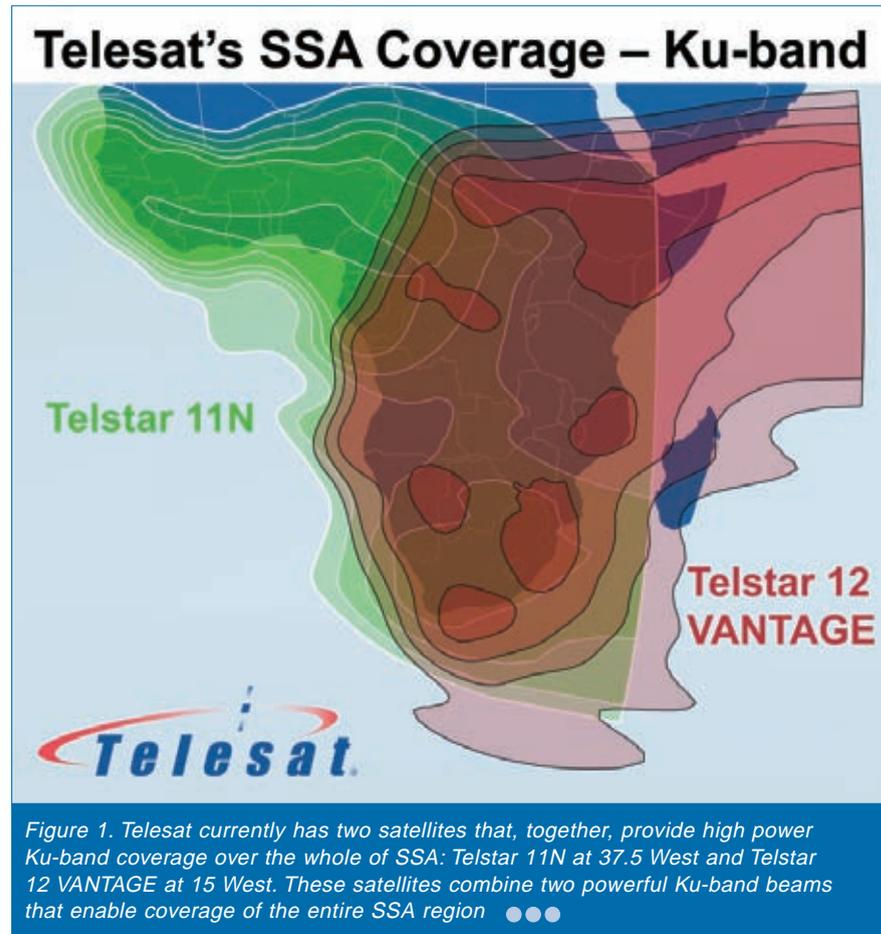
Telesat has been serving the African market for over 15 years and has close working ties with satellite integrators and other specialists in-region who have the expertise and contacts to help customers quickly and cost effectively implement today's satcom solutions. Telesat's two powerful Ku-band satellites offer the advantage of satellite diversity over much of the region, which can improve reliability for mission-critical networks that are driving economic growth across SSA.

Question: Why should satellite service providers in Africa want to work with Telesat compared with the many other satellite operators in the region?

Tom Eaton: African customers appreciate Telesat's market approach in which we focus on provision of space segment capacity to satellite service integrators in SSA versus implementing end-to-end networks. This avoids the problem of a satellite operator competing with their own SSA customers, which remains a challenge for many that participate in the distribution of African satellite services. And with Telesat's global satellite fleet, our customers can readily expand to new markets and capture new business beyond SSA.

Question: How would you sum up Telesat's SSA strategy?

Tom Eaton: It's really quite simple. Telesat



is a leading global satellite operator that has a strong presence in SSA with two powerful Ku-band satellites that fully cover the region. We are looking to build relations with local integrators and

suppliers in satcom who can benefit from our capacity and our market approach as a space segment provider focused on the success of our customers, not competing with them.

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