

Partner Perspective

Partner Perspective: Telesat

Nigel Gibson, Telesat's Vice President of International Sales, offers his perspective on high throughput satellites (HTS), the company's key initiatives and why it's an exciting time to be involved in the satellite communications industry.



Please give a bit of background on who Telesat is as a company and what makes it unique.

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 expertise with the rapid response and high levels of service that have become critical for success in today's business world. We are a global satellite operator that is recognized within our industry as one of the Big Four FSS (fixed satellite services) companies. Telesat had its best year ever in 2013 with strong growth in both revenue and EBITDA and we are well positioned for continued success.

You've mentioned Telesat innovations. Please give some examples.

There are several over the last few years that continue to be felt across our industry. When we launched Anik F2, it was the first satellite to successfully commercialize consumer Ka broadband services. This

satellite really started the global boom in Ka-band by validating demand for consumer broadband and this, in turn, has led to the wave of HTS we are seeing today. When Telesat's Telstar 11N launched in 2009 it was the first satellite to provide Ku-band coverage of the Atlantic Ocean from the Arctic Circle to the equator. Telstar 11N, along with Telstar 14R launched two years later, have spurred demand for satellite broadband across the oceans, which is one of the most exciting developments in our industry. Wireless broadband is now becoming as available on planes and ships crossing the oceans as it is at your local coffee house. This is due to many factors including iDirect innovations, but it is also due to the coverage and performance over the Atlantic demonstrated by Telstar 11N.

What about Telesat's relationship with iDirect?

This year marks iDirect's 20th anniversary and we are very pleased to say that, over most of that history, Telesat has worked closely with iDirect to improve the performance of corporate VSAT networks –for both terrestrial and mobile applications. Telesat has the iDirect ground infrastructure deployed across our facilities around the world. iDirect's technology platform is an extremely scalable solution that enables our customers to do more with their bandwidth and we have

seen how improvements in bandwidth efficiency can lead to even greater demand for satellite capacity. For example, in the maritime sector the transition from SCPC services that require dedicated bandwidth for each vessel, to greater use of TDMA networks that offer comparable services to SCPC while sharing bandwidth across vessels, was a huge change for our industry driven by iDirect technology. The shift to shared bandwidth resulted in high-speed, always-on, flat-rate VSAT connectivity being within reach of everyone in the maritime community. Telesat appreciates how our close working relationship with iDirect has led to satisfied customers and more business for both our companies. We believe even greater opportunities for growth are ahead of us using high throughput satellites, both for mobile and fixed applications.

With so much excitement around the launch of HTS, give us your interpretation of how this will change the role of satellite as part of the overall communications network.

The introduction of HTS has become one of the most exciting developments in the communications industry. HTS rely on multiple spot beams and frequency reuse to deliver increased throughput versus conventional satellites which, in turn, drives down the cost per bit for the customer. Telesat's new Telstar 12 VANTAGE satellite, scheduled to launch late 2015, will give customers access to a combination of broad regional coverage and high throughput beams that will yield important operational advantages in network performance, including backwards compatibility with existing Ku-band terminal equipment. In considering the impact of HTS on the world's communications networks, Cisco issues a global IP traffic forecast annually that looks at three categories: Fixed Internet, Managed IP and Mobile Data. Mobile Data is presently the smallest component, but is growing the fastest by far (a CAGR of over 60% projected to 2017). Mobile Data is where we expect HTS will have greatest impact on the world's communications networks. The impact on the terrestrial side will be greatest in emerging markets of Latin America, Africa, Eastern Europe and Asia where existing infrastructure is limited.

Given Telesat's strong presence in mobility, talk about some of the unique challenges associated with this market and how Telesat addresses such challenges.

Readers may recall that, around the middle of the last decade, there were big concerns about the aeronautical part of the mobility

market. Telesat had plans at that time to launch a major new satellite with extensive coverage of the North Atlantic called Telstar 11N, but mobile broadband was far from proven and there was no big aero customer to step forward with a commitment that would de-risk the project. So there clearly were some risks that had to be managed in launching Telstar 11N in early 2009. Fortunately Telesat had the vision, market knowledge and relationships with customers and suppliers like iDirect that gave us confidence to go forward. Telstar 11N played a key role in firmly establishing the mobility market and the satellite's broad, single-beam coverage of the North Atlantic from the Arctic Circle to the equator continues to be highly attractive – both to maritime and aeronautical customers. The aero market has come a long way in a few short years and is an especially promising business now that we can reliably deliver broadband performance over many trans-oceanic routes.

In your opinion, what is the number-one challenge facing the satellite industry in the year ahead and how should it be addressed?

The biggest challenge for the industry involves continuing to drive down the cost per bit – drive down the cost of satellite networking. A number of elements are coming together to make this happen. I've already mentioned the many high throughput satellites on order, which is a key trend. Another element is the lower launch costs provided by lighter electric propulsion satellites in combination with a single rocket, such as Falcon 9, that allows two of these all-electric satellites to launch on the same mission. This innovation, along with the growth of launch vehicle alternatives, such as Mitsubishi's enhanced H-IIA rocket that Telesat has selected to launch our new Telstar 12 VANTAGE satellite, represents another key trend helping the industry deliver better value to our customers. A third factor consists of advances in network management systems that are being introduced by iDirect to further boost efficiencies and drive down costs per bit. So the industry is working hard on many fronts to meet the challenge of driving down costs, which will make satellite networking more competitive and deliver an even better experience for our customers.

In your opinion, why is now an exciting time to be involved in satellite communications?

I'm excited by how our industry continues to find ways to innovate and remain a highly attractive communications solution for customers around the world. On the broadcast side, the industry is working with technology partners to bring about the widespread adoption of ultra high definition video, which has the potential to reshape the video market just as high definition did in the last decade and is still doing so in some regions.

There are many exciting development that are helping our industry drive down the costs per bit, which should help us expand the satellite market. These developments include the advent of HTS, greater use of Ka-band, the use of more cost effective means to reach geo orbit, and implementing improved network management tools.

I'm excited that Telesat will likely order additional HTS Telstar VANTAGE satellites in the near future, as we continue to invest in our satellite fleet to meet the fast-growing bandwidth requirements of the user community. There are a number of innovations in our industry that Telesat is helping to bring to the market – innovations that hold the same promise for connecting people and improving our world just as satellite communications has done for over 50 years.

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