

# Delivering customer solutions

Eutelsat was established in 1977 to operate satellites over Europe, and its business has come on in leaps and bounds ever since. Today, the company's fleet has grown to provide coverage throughout the world, serving video, data and telecommunications services to commercial customers, government and enterprise. Amy Saunders met with Jean-François Fenech, CEO Eutelsat Asia, to find out more about the company's activities in Asia, and discuss recent market developments.

**Question: What can you tell us about Eutelsat's business development over the years?**

**Jean-François Fenech:** Eutelsat was originally developed as a regional satellite operator, and has grown progressively into one of the world-leading operators. Our focus used to be primarily in Europe.

While that region is still important for us, today it represents less than half of our business. We have a growing presence in the Americas, Sub-Saharan

Africa, Asia, the Middle East and North Africa.

The company has a fleet of 39 satellites operating around the world, which serve video, data, broadband and government markets. We have a revenue backlog of almost four years, mainly from our video customers who frequently have long term contracts with us. About 16 percent of our revenue comes from data. Broadband services comprise about seven percent of our business, but this is growing through

fixed and mobile connectivity initiatives we are driving in Europe, Africa, Russia and the Asia-Pacific.

**Question: Can you outline Eutelsat's presence in Asia?**

**Jean-François Fenech:** Our development in Asia is mainly centred at two satellite positions: 70.5 degrees East hosted by the EUTELSAT 70B satellite, and 172 degrees East currently hosted by EUTELSAT 172A. Both positions address the Asia-Pacific region, and the



Jean-François Fenech, CEO Eutelsat Asia



combination of the two footprints provides complete coverage of the region. EUTELSAT 70B is a bridge between Europe, Africa and Asia, while EUTELSAT 172A is the bridge between the Americas and Asia. Both are particularly solicited for data and mobility applications.

Going forward, we will leverage our position even further with a new satellite at 172 degrees East that will replace EUTELSAT 172A before the end of its life. EUTELSAT 172B, that will be launched in the second quarter of this year and go into service in Autumn will improve our coverage over China and the Pacific Islands, enhance our Ku-band coverage for the Direct-to-Home (DTH) market, and build more comprehensive coverage for maritime users. It will also include high throughput coverage over the North Pacific Rim to serve aircraft travelling between the USA and Asia. Panasonic Avionics Corporation, one of the fastest growing providers of in-flight entertainment and communications, has signed a long-term agreement with Eutelsat for this capacity. This agreement will make Panasonic the anchor client for the satellite's high throughput payload for broadband services, as well as a user of its regular Ku-band capacity for live TV.

**Question: What are Eutelsat's key markets in Asia?**

**Jean-François Fenech:** In Asia, most of our current business is in data. We plan to leverage the improved performance and coverage of the EUTELSAT 172B to boost our offer to our existing clients and extend it to new

prospects. We believe there is a very good outlook for satellite as long as the industry provides services that are compatible with certain price points. That's exactly what we've been working on with our high throughput satellites (HTS) and payloads for consumers, which operate using the concept of frequency reuse, just like a cellular network.

We're building HTS with multi beam coverage for different regions. This is bringing down the cost of capacity to a point where we can provide services to end users at prices which are competitive with terrestrial telecommunications networks. In Europe, service providers using our infrastructure are proposing connectivity for around Euro30/month, in line with the price of terrestrial alternatives.

This has allowed us to capture a great deal of the unserved areas. We are now replicating this model in other regions of the world, notably in Russia, Sub-Saharan Africa and Latin America.

When it comes to serving Asia, we can go beyond services in connecting Asian countries to intercontinental connectivity. More than 200 Asian channels are broadcast through our satellites around the world.

This is one of the benefits of being a global player; we're able to bring solutions to our customers, whenever and wherever they want to expand their business. We have very strong activities with Chinese customers in Africa, for

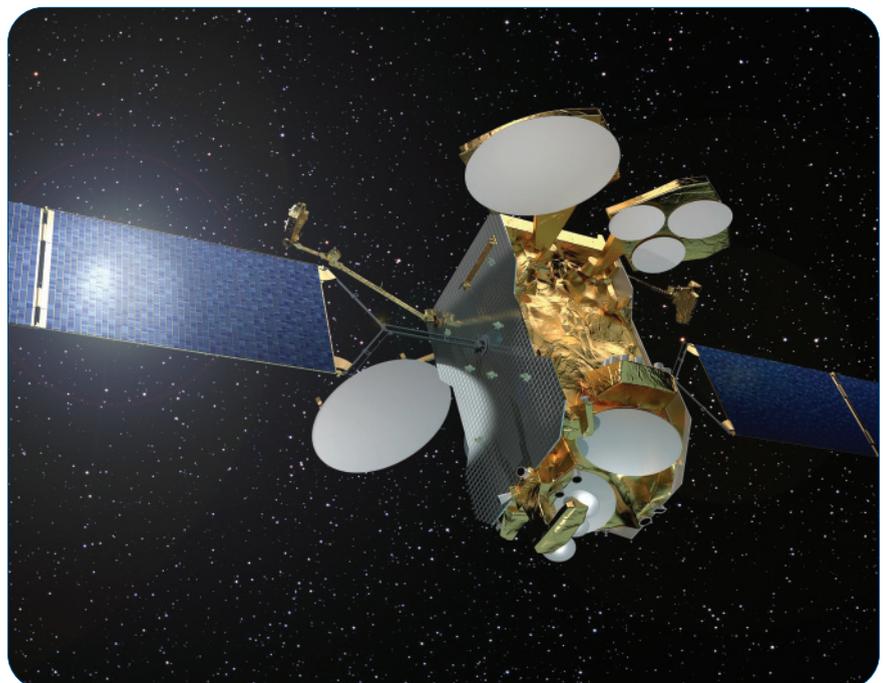
instance, who are now considering further expansion to Latin America with us.

**Question: How is the Asian market changing, and where is there the most room for growth?**

**Jean-François Fenech:** In the Asian video market, we're observing the migration from SD to HD, and in tandem, we're also seeing projects for Ultra HD. We believe this progressive evolution of signal quality will be an important growth driver over the coming years. With Ultra HD, you get a sense of depth, and a new perception of the image.

Within the data business in Asia, there is less IP trunking, but more cellular backhaul. Today, there is little satellite broadband for consumers, so there is a lot of room for growth in this area. In the mobility industry, demand is growing, especially for high-speed broadband for superyachts or big cruise liners. People want to have the same level of connectivity at sea that they have at home or in the office. I think that this will be a big demand driver in the future. We're also in the infancy of airline connectivity in terms of Internet speeds, and I believe we'll see a lot of growth there too. Each of those markets will require the right amount of capacity at an appropriate price.

Indonesia, because of its geography, is a very promising market, making satellite an excellent tool to provide connectivity to the islands. Elsewhere in Southeast Asia there are



EUTELSAT 172B. Photo courtesy Airbus Defence and Space



a lot of regulatory hurdles to overcome. Without them, I think there would be a massive influx of capacity over the area. The market demands a lot of capacity, but we are not able to serve it. Some countries have relatively open markets, such as in Northeast Asia (South Korea and Japan for instance), but still, in my opinion, there are some applications where satellite should play a bigger part in the future, such as disaster recovery and broadband services. Terrestrial networks there are very good, but those who have no connectivity are frustrated and penalised.

**Question: HTS are well on their way to becoming an established technology in the satellite sector. Is Eutelsat exploring other new technologies, such as Extreme HTS?**

**Jean-François Fenech:** We're looking at all possible solutions including HTS, very HTS, or Extreme HTS. We need to be able to bring as much capacity as possible in a relatively flexible manner. Flexibility is a key success factor for us.

We try to find the optimal solution by focusing the right amount of capacity where it's needed with in-built flexibility, in such a way that we reach optimal price points. Having a 1Tbps satellite over the Earth sounds great, but it needs to be in the right location, and have sufficient flexibility to adapt to changing market requirements.

**Question: Do you think that with more and more HTS coming online that overcapacity will be a major problem going forwards?**

**Jean-François Fenech:** I think that the evolution to HTS is a good thing in general for the satellite industry, and each of the main operators has adopted the technology with different models.

We're confident about the future of HTS, and of course we need to adapt to the evolution of the market, which runs in cycles. There are downward cycles which are caused by slowdowns in the global economy and slowdowns in individual markets like the oil and gas sector that we're seeing now. This cycle is currently impacting the data business. However, since data is only a small amount of our activities, we're not over exposed.

**Question: We're hearing a lot about in-orbit beam shaping capabilities. What's Eutelsat's take on this technology?**

**Jean-François Fenech:** Eutelsat is a pioneering company in this field with the Eutelsat Quantum satellite. We are trailblazing new technology that will allow beams to be completely re-shaped in the air, including both frequency and coverage. We will launch the first satellite with in-orbit beam shaping capabilities in 2019. This software-based design has been developed with

Airbus Defence and Space, the European Space Agency and the UK Space Agency.

Demand for this new concept is coming from customers that need to be able to refocus capacity over time to match the evolution of their markets. This is particularly important for the mobility and military sectors; once a military mission is completed, capacity requirements in a specific area are vastly reduced and can move to a new zone.

With in-orbit beam-shaping, we can also eliminate deliberate jamming, since we can reshape the beam to null over the jammer.

**Question: Are you making any preparations for 8K?**

**Jean-François Fenech:** One thing at a time! We're concentrating on Ultra HD 4K that is now taking hold in many markets. 8K is currently very specific to Japan.

4K has been adopted by the Korean manufacturers, thereby creating a growing installed base of displays in viewer homes and encouraging programmers to generate 4K content.

I believe that satellite will be the key enabler for the introduction of Ultra HD. It is very easy to start a new transmission scheme, which is not the case for terrestrial.

And frankly, how many people have a high-speed Internet connection, at 24Mbps, that is capable of streaming 4K? Satellite is the way forward for sure. We're in discussions with many of the Asian channels that wish to broadcast in 4K over our fleet, so promoting that is obviously of great interest to us. 8K will come, but is not on the agenda just yet.

**Question: What are your plans for 2017?**

**Jean-François Fenech:** In Asia, the key milestone will be the arrival of our new satellite at 172 degrees East. In addition to transforming the in-flight connectivity and live TV markets for trans-Pacific flights, we intend to leverage EUTELSAT 172B to offer improved performance and coverage to fixed and mobile customers. We will also leverage our capacity and teleport connectivity to take clients in Asia wherever they need to go around the world and make the best of our knowledge and competence available for our community of users and partners. ■



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