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SATELLITE Markets & Research

MARKET BRIEFS

Executive summaries of market trends and opportunities in key market segments and regions worldwide

Latin America Highlights

- With 130 platforms across 18 countries covered in the Latin America Pay TV Operator Forecasts report, 25 operators will collectively generate 88% of Latin American pay TV subscribers by end-2016 – again this share will be maintained until the end of the forecast period. The regional pay TV subscriber total will climb from 72.02 million by end-2016 to 83.56 million by 2021.

- Nearly a fifth of Latin America's TV households will pay for an SVOD [subscription video on demand] package by 2021, up from 10.9% in 2016.

Latin American Satellite Market Update

by Bernardo Schneiderman

The economic outlook for Latin America according to a report by the International Monetary Fund (IMF) describes the Latin American market as continuing to struggle to regain its footing. Growth in Latin America and the Caribbean has been negative for the second consecutive year in 2017. The regional recession masks the fact that most countries continue to grow, modestly but surely, with the contraction driven by developments in a few others. While the external environment has had a differentiated impact on the region with South America heavily affected by the decline in commodity prices and Mexico, Central America, and the Caribbean benefiting from the U.S. recovery and, in most cases, lower oil prices disparities in growth performance also reflect domestic factors.

Despite a downturn in the Latin American economies, Direct-to-Home (DTH) and other satellite services are growing at a modest pace.

After disappointing growth over the past few years, economic activity in Latin America remains on track to recover gradually in 2018 as the global economy gathers steam and recessions in a few countries in the region come to an end. Long-term growth, however, remains weak, hampering income convergence toward advanced economy levels. Fiscal space to support demand is limited, particularly for commodity exporters. But monetary policy can play a supportive role because inflation has been moderating rapidly. More importantly, this is the time to urgently press ahead with much-needed structural reforms to ensure sustainable and inclusive growth. Priorities include closing infrastructure gaps, investing in human capital, encouraging female labor force participation, reducing labor market informality, enhancing governance and curbing corruption, and furthering trade and financial integration.

Recent events in Latin America show how the global economic slowdown is affecting the market. From the point of view of key executives of the main satellite operators operating in the region, the recession in 2015 and the continuation of the unfavorable economic environment in 2016 do not affect the long-term plans of the operators or the revision of investment plans, but there is an immediate concern with costs in dollar and the effects of the downturn on customers.

"This is an industry that does not work in short-term cycles and decisions are made with a very long term planning. We see a still strong demand especially in the video market and a lot still need to be defined," said Jurandir Pitsch, SES, during the Latin American Congress of Satellites, held in Rio de Janeiro, Brazil. Lincoln Oliveira, Embratel's Star One operator mentioned, another component that needs to be considered beyond the crisis is the entry of new competitors arriving with more aggressive pricing strategies, but he said the fact that Star One be linked to a large group size which operates in several areas helps give strength to business. "We are strong because of our customers and to have a great Telecom operator behind," he said (Star One is the satellite operating arm of Embratel, which in turn is part of the America Movil-Mexican group).

Top five Latin American pay TV operators by subscribers (000)

Ranking	Operator	Country	2016	Ranking	Operator	Country	2021
1	DirecTV Latin America/Sky	Pan-regional	20,221	1	DirecTV Latin America/Sky	Pan-regional	23,286
2	Claro	Pan-regional	15,209	2	Claro	Pan-regional	17,719
3	Telefonica/Movistar	Pan-regional	4,814	3	Telefonica/Movistar	Pan-regional	6,501
4	Televisa Cable	Mexico	4,294	4	Cablevision	Argentina	3,832
5	Cablevision	Argentina	3,417	5	Dish	Mexico	3,662

Source: Digital TV Research. Note: paying subscribers only

Mauro Wajnberg of Telesat Brasil said that Brazil is still at a very poor overall stage in telecom infrastructure and this helps to give stability to the business in the satellite sector. "In recent years, we have experienced a very rapid cycle of expansion, but the infrastructure is still insufficient," he said.

Some satellite operators, however, emphasize the importance of a new commercial and strategic approach, working with new business proposals and new services. For Márcio Brazil of Intelsat, the time for the industry is good despite the crisis, but he points out that the new technologies of high-capacity satellite (HTS) and broadcast spot beams also changed the way of providing the service. "With the change in traffic volume, we have to think about more performance, more flexibility and accessibility," he said.

Rodrigo Campos, Eutelsat, the big step that is being given by the satellite companies today is toward more flexible models of service delivery. It also highlights the opportunity that the economic downturn brings that seek a more adequate planning of companies.

Sergio Chaves of Hispamar, the Latin American subsidiary of Spain-based Hispasat, underscores the fact that operators now have a large presence in Latin America, and that the performance of markets are different and end up paying off. "When we started, 90% of our revenues were in Europe, and today 70% of them are in Latin America," he said, referring to the numbers of Hispasat, parent of Hispamar. According to him, the crisis has a delayed impact on satellite companies because of long-term contracts.

Chaves emphasizes the importance of satellites in the development of public policies. "Today we see several Latin American countries using satellites to public policy for TV and broadband in underserved areas. The satellite's social role is very important.

Elena Pisonero, President of Hispasat, said that the satellite operator is now more American than European during the Latin American Congress of Satellites "The economic situation in Brazil is not good, but we have been here in Europe and we know that the crisis will pass. Brazil was and is a long-term bet, we are 15 years' operating in the country and the investment in satellite infrastructure is strategic, "said Elena, noting that in the last auction of Brazilian orbital positions Hispamar (joint venture of Hispasat and Oi) acquired two new exploration rights. In Elena's view, the Ka band is great expectation for the future. "We were the first to bring the Ka band for Latin America with the launch of Amazonas 3, we are building the Amazon 5 to launch in the first quarter of 2017 and we still have the Hispasat 1F, also with Ka band in Latin America". "We could say that the Amazon 5 is too large for Latin America (it has 34 spot beams in Ka band), but we believe that demand will be strong. For large countries like Brazil the satellite will always be relevant and it is important to set priorities in times of crisis. what we have seen is that many governments in the region, such as Mexico, Colombia and Chile, as well as Brazil, have placed digital inclusion as a basis for economic growth and social inclusion.

Jurandis Pitsch of SES mentioned "There is also intense competition from new entrants and won the ones that provide the more efficient technology, which avoids rise the cost for customers." But he believes that some operators can review the long-term plans that are being drawn now, and among the possible satellite sector customers, the DTH operator can be particularly affected in the long run.

On the future prospects of the satellite industry in the region, especially with the introduction of new technologies such as the constellations of Low Earth Orbit (LEO) satellites and Ka-band services, there is a mixture of excitement and skepticism among operators.

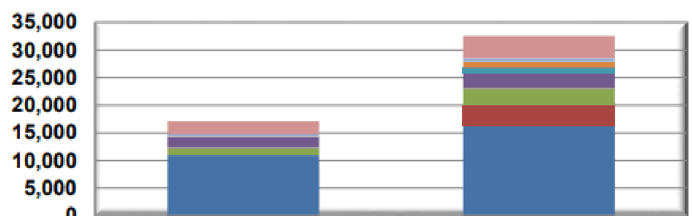
For SES, the model of medium earth orbit satellites (MEO) and LEO is promising, so much so that the company is one of the investors in O3b, which operates a constellation of MEO satellites. But for Jurandir Pitsch, the early experience of O3b shows that often the technology takes a little longer to get the parameters needed for a sustainable business plan than initially projected. "The O3b took seven years to get on the air. I think oneweb may be overestimating the ability to get to market on schedule, and a lot can happen there," said Pitsch. Lincoln Oliveira said: "Today the technology to launch tens and hundreds of satellites of these projects is the same as used for geostationary satellites. It is important that this technology moves too, but I think these projects can contribute to the evolution of the general industry."

DTH

With the availability of new HD channels in Europe and North America and expanding business in emerging markets, the operator SES satellites have registered an increase of 11.3% in the number of channels TV in 2015. There were 7,268 channels in total, with 2,900 only in emerging (Latin America, Asia Pacific, Middle East and Africa) an annual growth of 25%. Alone, the Latin American market contributed total of 780 channels, 190 of them in HD.

SES says the last three years, the number of channels in the satellite business has grown at an average rate of 9%. Considering only the channels in high definition, the increase was 15% in the same period. In a statement, the carrier said it expects further growth in HD channels and increase commercial offers in Ultra HD (4K), "in the coming years."

SVOD subscriber forecasts by platform (000)



	2016	2022
Others	2,316	3,973
Movistar Play	393	700
HBO	80	1,065
Crackle	0	970
Claro Video	1,968	2,788
Blim	1,321	3,042
Amazon	0	3,680
Netflix	11,001	16,324

Source: Digital TV Research

VSAT Market

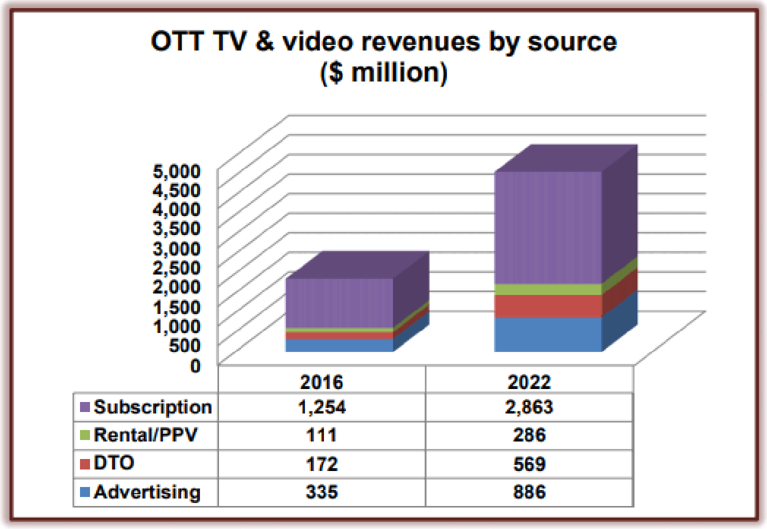
One of the major developments in the Latin American satellite market concerns Hughes in Brazil. With more than 1.3 million broadband subscribers via satellite using the Ka band in the United States, Hughes launched the service for the residential market in Brazil in July 2016, when the satellite Eutelsat 65 West A was released into operation. Last April 2014 Hughes announced the purchase of all the Ka-band capacity in Eutelsat Satellite positioned at 65W dedicated to Brazil, covering about 4000 municipalities. "Our strategy in Brazil is very clear for the next ten years. The Ka band is a project that will happen, regardless of the dollar and the crisis. All Eutelsat capacity (the 65WA) for the next 15 years has been bought and paid by Hughes in Brazil and with this first satellite with 25 Gbps capacity, "says the CEO of Hughes Brazil, Delio Morais.

But Hughes's plans for the Ka band in Brazil will go over after 2020. "For a second phase, Hughes already bought the payload in Ka-band satellite with other coverage in Brazil he could not reveal, but which will be released in 2018 and extend our coverage to 4,800 municipalities. And in 2019, 2020, which is when the fleet oneweb goes into operation, we will cover full coverage in Brazil, "said Morais. In addition to shareholder oneweb, Hughes will market 50% of the operator's broadband capacity to Brazil, said the executive during the Latin American Congress of Satellites last October in Rio de Janeiro. Brazil. The executive said the broadband package for simpler Ka band will be a 10 Mbps connection with 20GB franchise in normal time and 40 GB on-peak hours, but did not disclose the price.

Inflight Connectivity

Another market segment that has promising potential in the region is inflight connectivity. The communications market loaded on aircraft promises strong growth in Brazil and Latin America, according to analysis by ex-

perts during the Latin American Satellite Congress last October. The expectation is that in Latin America this market represents about US$ 430 million with growth forecast, unlike developed markets like the US, where most of the market is taken. According to Anand Chari, CTO of Gogo, a leading provider of Inflight services in the world, the great revolution in this market is the evolution of antenna technologies and broadband satellite, which has enabled faster and cheaper connections. The Gogo can already offer today with the technology called 2Ku (one Ku-band dual antenna) 100 Mbps on board. One of the company's customers is GOL Brazilian Airlines, which launched the services last quarter of 2016. According to Chari, Gogo is working with the GOL Brazilian Airlines engineering to pass the certification and approval of Anatel (Brazil Telecom Regulatory equivalent of FCC) and ANAC (National Civil Aviation Agency). "The whole process of design and approval of the first aircraft takes about a year, but after the first the process accelerates," he explained. In addition to Gol, Azul, Latam and Avianca also prepared broadband releases and embedded telephony, according to satellite operators who have participated in the RFPs with system integrators.



	2016	2022
Subscription	1,254	2,863
Rental/PPV	111	286
DTO	172	569
Advertising	335	886

Source: Digital TV Research

SVOD

Nearly a fifth of Latin America's TV households will pay for an SVOD [subscription video on demand] package by 2021, up from 10.9% by end-2016. Mexico (28.3%), Chile (23.9%) and Argentina (23.5%) will have the highest penetration rates by 2021. However, penetration will only be 12.0% in Venezuela by 2021 – reflecting the country's economic and political woes. The Latin America SVOD Forecasts report (covering 18 countries) estimates 31.81 million SVOD subscribers by 2021, up from 12.19 million in 2015. Simon Murray, Principal Analyst at Digital TV Research, said: "Brazil will account for 36% of the region's SVOD subs by 2021, with Mexico bringing in a further 26%. So, these two heavyweights will contribute nearly two-thirds of the SVOD subs by 2021.

OTT

Latin American OTT TV & video thrives despite free services Revenues from OTT TV episodes and movies for 19 Latin American countries will reach $4.60 billion in 2022; up from the $1.87 billion recorded in 2016. SVOD will remain the region's largest OTT revenue source; contributing $2.86 billion by 2022 (62% of the total) according to Digital TV Research.

The Latin America OTT TV and Video Forecasts report forecasts 32.54 million SVOD subscribers by 2022; nearly double from the 17.08 million recorded at end2016. Brazil will account for 34% of the region's SVOD subs by 2022, with Mexico bringing in a further 28%.

Pan-regional services such as Netflix, Amazon Prime Video, Claro Video, Blim, HBO, Crackle and Movistar Play are adding a competitive edge to the SVOD sector. The top seven regional platforms will account for 88% of the region's paying SVOD subscribers by end-2022. Netflix will remain the largest pan-regional SVOD platform by some distance, with half of the region's total by 2022 (down from a 64% share in 2016).

Simon Murray, Principal Analyst at Digital TV Research, said: "Claro Video and Movistar Play will have a relatively modest number of paying subscribers. However, many more people will access these platforms for free as part of their mobile subscriptions. The same is true of HBO Go, where many homes can gain access to the online service for free as part of their pay TV subscription."

Oi one of the provider of Pay TV has reached 100,000 activations in a month of its Oi Total Play service, which allows its broadband customers to access a range of pay-TV content on the OTT model. This volume is twice as large as the net activations volume of the traditional pay-TV platform in DTH, said Roberto Guenzburger, director of products and content of the operator. Oi DTH continues to play a central strategy for the company. The combined plans with broadband, mobile and TV have been fundamental for Oi to maintain the base of fixed services, and for this reason the company has been expanding the pay-TV base for more than a year, unlike the market. The Total

Interview with Andrey Kirillovich
Director of Integration Services and Projects, RSCC

What coverage do you have for the Latin American region and what services can RSCC provide?

RSCC provides full coverage over Andean Region, Brazil, The Caribbean, and partial coverage over Central America and Southern Cone in C and Ku bands. Our services are typical for the satellite operators already working in the region: Lease of satellite bandwidth, TV Distribution/Contribution, Occasional Use, Enterprise VSAT networks, IP Trunking and Cellular Backhaul.

What differentiates your company from the others serving the Latin American market?

Our company is the second oldest satellite operator in the industry. We have been doing satellite communications and broadcasting staring from 1967. We have got a vast experience in delivering various satellite based applications to businesses and individuals all over the world. The orbital position of our Express-AM8 satellite in 14 West gives Latin American customers an opportunity to serve their networks and assets in their domestic region, as well as across the Atlantic in Europe, Africa and Middle East. Besides that we have got a number of a turnkey solutions for local broadcasters, content providers, mobile network operators and satellite service providers, enabling them to receive great savings in the initial investments required to start a satellite network or broadcast a TV channel via satellite.

How do you see the Latin American satellite market in the next few years?

Latin America market is becoming a tough place for satcom service providers as the competition is becoming very fierce. But this will result in the benefits for customers, who will get the most cost effective solution, and will be able to compete with other terrestrial and wireless technologies. I see a lot of potential here for satellite in broadcasting, broadband and cellular backhaul.

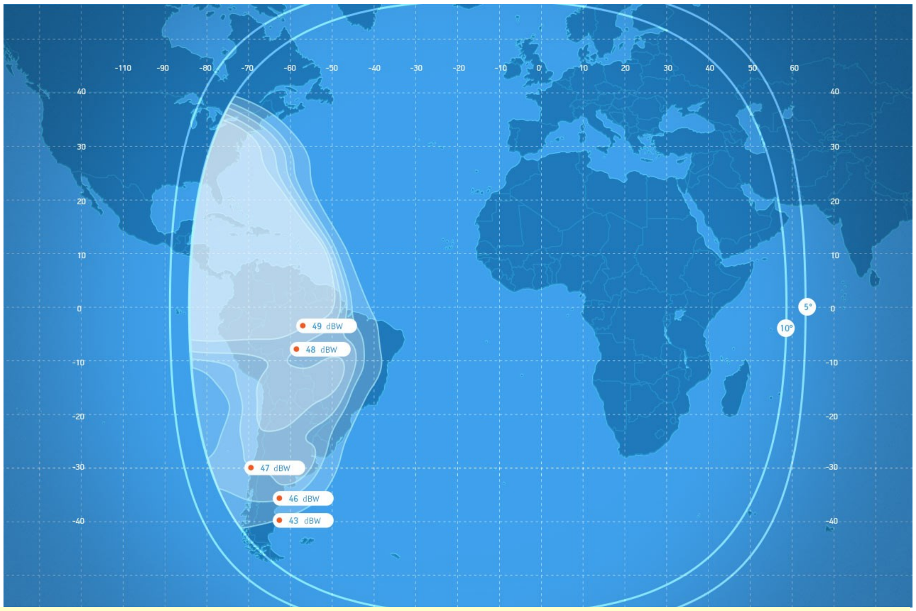
What are RSCC's plans for the region?

Like in other regions of the world RSCC is developing the market with strong assistance of local partners and distributors. Each subregion in Latin America needs specific approach, so we are working with a number of partners, who are at the forefront of our presence in the region. Some regions like Brazil require a completely different approach , mainly from regulatory prospective. Besides that we also see a demand from our existing customers developing their networks on RSCC satellites in EMEA region. Express-AM8 satellite give them an opportunity to extend the reach of their service offering to almost entire Latin America.

Anything else you want to add?

Yes sure. Football is a real passion in Latin America. It is in the DNA of the local people. I am sure almost everybody in the region is waiting for the Summer, when 2018 World Cup is going to start. And this time it will take place in Russia. Since RSCC is the Russian national satellite communications and broadcasting operator, holding 75% of the domestic market, we are ready to provide broadcasters from Latin America a full package of satellite transmissions and live satellite broadcasts from World Cup 2018 venues in Russia via our Express-AM8 satellite launched a couple of years ago. Satellite location at 14 West above Atlantic makes this satellite an ideal tool for delivering live content from Russia to Latin America.

Play service, however, is not offered to customers with connections of less than 5 Mbps, for technical reasons.



The Russian Satellite Communications Company's (RSCC) Express-AM8 satellite has very goods coverage in both C– and Ku-Band of the Americas including all of South America.

"Today, Brazil is the third largest satellite pay TV market in the world, with revenues of nearly US $ 5 billion a year, and this cannot be ignored. But we must recognize that OTT services are growing and there is a generation on-demand 'that requires us another proposal, "says Guenzburger. Oi's response has been to focus on hybrid boxes connected to broadband VoD content. "We are a supermarket of content and we have to deliver in any form, either by satellite TV or VoD." Oi's VoD platform now has 30,000 contents, and 46 channels are offered in the OTT model, of which 25 are linear.

Sky's strategy to maintain the strong DTH product also includes broadband content, connected hybrid boxes and video-on-demand. But Luiz Otávio Marchezetti, the company's engineering VP, recalled during the event that satellite distribution is the basis of Sky's business. "If it were not for that we would not have invested nearly $ 1.5 billion in a new single satellite and a first-rate broadcast center," he says, noting that Sky launched Sky B1 in the first half, a giant satellite with almost 20 years of useful life that will allow the company to add more than 100 channels, matching the HD and SD offerings, and the Jaguariuna / SP teleport, which is in fact a transmission center with all the characteristics and structure of a datacenter.

In digital strategy, the operator's first bet is Sky Media Center, an advanced box that can connect to the Internet, and connect to additional points for WiFi for the distribution of content inside the house. The box is smart as it can record contents of up to five channels based on the habits of the subscriber and offer them on demand. In addition, it is a platform that accesses, online, the service of VoD Sky Play, that will work by streaming, besides the services of PPV and NVoD that run in the own box. Older boxes without Sky Media Center connectivity, provided they have HD capability, will be able to gain Internet access via WiFi dongles that Sky plans to offer customers hiring the service by the end of the year. Sky Play is not confused with the online pay-TV service, completely online and independent of the satellite platform, which the operator plans to launch in 2018.

Marchezetti points out that the Pay-TV industry still lives at a much greater risk than competition with OTT services or the economic crisis. "Our biggest enemy is piracy, which now has more than 4 million users and is the third largest Pay-TV operator in the country," he said.

Conclusion

Despite the challenges, the Latin American satellite market is full of potential and will be a key market for the industry in the years to come.

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