

Industry Trends, News Analysis, Market Intelligence and Opportunities

## Satellite Industry Remains Stable...*For Now*

by Elisabeth Tweedie

Well no one can complain that this year's World Satellite Business Week didn't start with a bang. Delegates arrived at the venue to find the hotel cordoned off, crawling with police, broken glass and the remains of a burnt out vehicle in the street. In the small hours of the morning, thieves had driven their SUV into a jewelry store in the hotel's entrance and made away with US\$ 2.6 million worth of jewelry. I'm pleased to report that the rest of the conference was somewhat calmer and ran very smoothly as always!

Pacôme Revillon CEO of Euroconsult opened the conference by giving the usual "State of the Industry Report". On the whole the sector continues to grow at a relatively stable pace with a 4% increase in capacity used for FSS in 2012 compared to a 4.2% for the previous year and operator revenues increasing by US\$ 300K from last year reaching a total of approximately US\$ 12 Billion.

As always there is considerable regional variation hidden in these numbers; Arabsat for example showing a 14% year on year growth in revenue. Latin America and Asia continue to be growth markets but StarOne sounded a caution suggesting that in the fervor to serve this market there was a real danger of over capacity in both C- and Ku-

Bands in the years to come. In Africa, Eutelsat considered that there may be over capacity in the short term, but not in the long term.

This year there was consensus among the major manufacturers and Euroconsult that the year was on course for a total of 20-22 commercial GEOs. However with six manufacturers competing for those orders it remains, as John Celli from SSL pointed out, a very competitive market place. A market place where costs are being driven down as Electric Propulsion for orbital positioning and lower cost launches from SpaceX impact the industry lowering the very high barriers to entry that have always existed in our market.



**High Throughput Satellites, Ultra HD and OTT technologies predominated the discussions at the World Satellite Business Week held last month in Paris.**

Investments in High Throughput Satellites (HTS) continue and 9 of the 19 satellites ordered YTD are either dedicated HTS (with ViaSat2 and Jupiter 2 being the most notable) or include an HTS payload. John Celli of SSL commenting that he could envisage a one Terabyte system

in the years to come. However as we have all become aware in recent years the price per GHz on an HTS is lower than on a conventional FSS bird and this point was brought home very clearly by Euroconsult with a chart predicting an 11% increase in capacity in the period 2012-17 but just under a 7% increase in revenues. The other factor

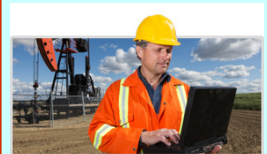
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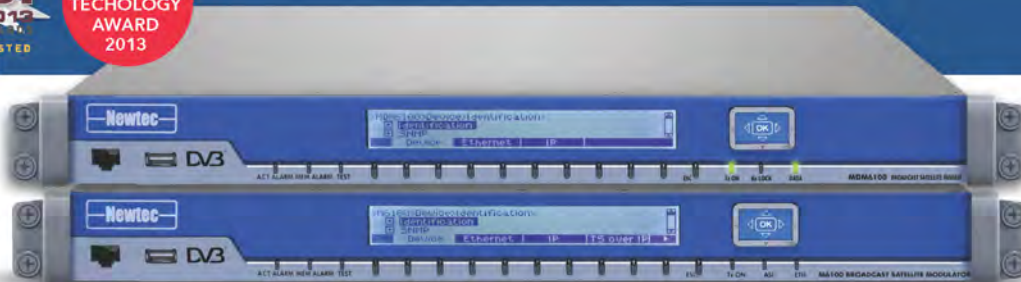
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# IBC 2013: The Future is 4K TV



Summarizing the latest edition of the IBC Conference and Exhibition in Amsterdam last month is easy—you just need to add two more acronyms to your vocabulary: 4K TV and HEVC. 4K TV or also called Ultra HD is the latest development in TV standards that promises up to four times the resolution of High Definition TV. HEVC which stands for High Efficiency Video Coding is the new compression standard that will enable the cost-effective distribution of 4K TV, much as MPEG-2 was the key enabler for HD.

For satellite operators, Ultra HD couldn't be rolled out fast enough. The high bandwidth requirements associated with Ultra HD presents a potential boom for satellite operators. Not surprisingly almost all the major satellite operators were showcasing or providing live demos of Ultra HD at their booths at IBC.

Peter Ostapiuk, VP-Media Product Management of Intelsat said that a key driver for Ultra HD would be sports programming. He said the high quality and immersive nature of Ultra HD technology is an ideal match for fast-moving sporting events. Perhaps it was no surprise that most of the Ultra HD demos at IBC were featuring sporting events. The only operator that did not show a sporting event in Ultra HD was Spanish operator Hispasat, which presented a live broadcast of a documentary on the Prado Museum.

No doubt the announcements made at both the Satellite Business Week (which was held the week before IBC) and at the IBC that the FIFA World Cup finals next year will be broadcasted in Ultra HD would provide the necessary boost to Ultra HD adoption.

## WEB EXCLUSIVES:

Access video and audio podcasts from IBC 2013  
Amsterdam, the Netherlands

[www.satellitemarkets.com/marketcast](http://www.satellitemarkets.com/marketcast)



**Peter Ostapiuk**  
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**Doron Revivi,**  
COO, Satlink Communications

**Matthew Rosenstein**  
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*Satellite Industry Remains Stable ...From page 1*

contributing to the lower revenues is the provision of Ka-Band to consumers in less affluent regions. In Russia for example the Average Revenue per Subscriber is US\$ 5 per month. This is insignificant at present as the service has limited availability and only 3,000 subscribers, but the service will be extended next year as more Ka-Band is made available.

In the MSS sector revenues were relatively stable at US\$ 1.5 Billion. The main news in this sector was the announcement by Iridium of Iridium Prime which when it is made available in 2017 will offer a new approach to hosted payloads by effectively making the whole payload available. Aireon is a hosted

payload being carried on Iridium Next, but there were apparently over 30 different payload opportunities considered before settling on this one. Iridium Prime will take advantage of the established Iridium infrastructure but since the satellite will not carry the Next payload the customer has control over the timing, something which has always been a major issue in other hosted situations with the “passenger” not always being able to agree to the same time-scale as the primary operator. Without the Next payload greater capacity and power is available to the customer: 17Mbps vs. 1Mbps and 250Kg vs 50Kg.

High Definition (HD) video continues

its growth accounting for approximately 15% of the 34,600 video channels and 75% of DTH platforms now have at least one HD channel with 40% offering more than 10HD channels and 20% more than 30 HD channels.

The slowdown in growth is not deterring new entrants and both Ex-Im and Coface reporting that most of the US\$1 Billion demand for financing is coming from new entrants rather than estab-

spite of the fact that much of the world still has not made the transition to HD. This issue was explored further in the Symposium on the Prospects for TV Distribution – a new event for World Satellite Business Week.

In the introduction Pacôme while sounding a note of caution pointed out that the time for a new viewing format to reach significant penetration (in this case 75% of European homes) was diminishing. It took 25 years for Black and White TV sets to reach that number, 20 for Color TV and only 10-12 for HD sets. He predicted that starting from around 2015 4K sets were likely to take around 10 years to reach that level of penetration in Europe.

Bill Tilson CEO of Encompass and Olivier Barberot Chairman & CEO of Globecast agreed with that prediction with Barberot comment-

ing that he had not seen one customer asking for 4K and pointing out that the world has less money than it did two years ago. They both agreed with Pacôme that the introduction was likely to be slow attributed also in part to the vast base of legacy Set Top Boxes (STB) that would need to be swapped out in order to implement 4K. This is also a major issue in some parts of the world for the introduction of HD. Barrie Woolston from Arqiva made the comment that we are doing 4K “because we can – not because there is a demand for it.” For the content producers Tim Joyce, VP of Broadcast Operations for Fox International said that for the National Geographic Channel everything was already shot in 4K



**Sky Perfect JSAT's Minoru Yonezawa announced at the World Satellite Business Week that Japan is planning to broadcast the FIFA Football World Cup in 2014 in 4K and the 2016 Rio Olympics in 8K. (image courtesy of FIFA)**

lished players. John Schuster from Ex-Im admitted that in the last few years the export banks had created a market by lending to organizations that would not have succeeded in getting financing from more commercial banks. Criteria for new players are now tougher and Régine Shapiro from Coface stating that in order to obtain financing a new entrant must have a sound business plan with a large range of studies to back that up and be planning to use a reliable manufacturer and launch vehicle. Many applicants apparently also have advanced contractual sales.

Both the manufacturers and operators were bullish on Ultra High Definition video, otherwise known UHD or 4K, in

# YAMAL-402 SATELLITE



Russian satellite operator – Gazprom Space Systems – presents the new Yamal-402 satellite opportunities to the International Market.

**Yamal-402 satellite**, built by Thales Alenia Space (France), was launched in December 2012. Its capacity is 46 Ku-band transponders (66 equivalent transponders per 36 MHz each). Together with Russian and Northern beams the satellite includes:

- **European Beam** having four transponders per 54 MHz each covers the territory of Western and Central Europe, the Middle East and Northern Africa;
  - **Southern Beam** having 8 transponders per 54 MHz each covers Africa to the south of Sahara;
- Southern and European beams have cross-connection ability.
- **Steerable Beam** having up to three transponders per 72 MHz each can be pointed over African or Asian continent upon the customer request. Steerable Beam can be cross-connected with Northern Beam.

# OPPORTUNITIES FOR INTERNATIONAL MARKET

pointing out that it was a several year production cycle for many programs and therefore the channel needed to look ahead. 4K is also being used for archival purposes. Vince Roberts, EVP Global Operations & CTO Disney ABC Television Group mentioned that all Disney animation is also shot in 4K.

Minoru Yonezawa from Sky Perfect JSAT Corporation commented that it was a ten year cycle to replace Set Top Boxes but only a two year cycle to replace Smart Phones and therefore the High Efficiency Video Coding (HEVC) chip would first be installed in phones for 4K for mobile devices. Opinion is divided as to whether there is any discernable improvement compared to HD when viewing 4K on a small screen, with most opinions still on the negative side. Yonezawa was also more bullish than the others saying that Japan is planning to show the 2014 World Cup in 4K and the 2016 Olympics in 8K.

As would be expected in a Symposium on the prospects for TV distribution Over the Top (OTT) was also a topic for discussion. The content producers both agreed that linear TV was here to stay and there would always be a need for passive consumption. Branding however becomes even more important in this scenario as from their point of view it becomes even more important that the viewer be made aware of exactly what s/he is watching. Fox and Disney did not see OTT as a threat rather as just another means to get content to the consumer, for SkyPerfect JSAT had the opposite opinion. In the main symposium (the Summit for Satellite Financing) the major operators were more cautious about OTT, Intelsat saying that the jury was still out as to whether this was “friend or foe” and cautioning that satellites needed to find a way to stay relevant by offering seam-

**“...certainly not a boring year for the industry with the order of two more advanced HTS, the launch of the first four O3b satellites and some interesting regional expansions,...But rather a stable year, with some growth, some consolidation and some potential changes in the wings including the first launch of a commercial GEO (SES-8) by SpaceX due later this year...”**

less integration and larger pipes the latter coming from HTS.

So, certainly not a boring year for the industry with the order of two more advanced HTS, the launch of the first four O3b satellites and some interesting regional expansions, most notably Eutelsat with Satmex and Arabsat with Helle-sat occurring. But rather a stable year, with some growth, some consolidation and some potential changes in the wings including the first launch of a commercial GEO (SES-8) by SpaceX due later this year. Watch this space!



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# The Fall Harvest: A Ripening ‘Satellite Nation’

by Lou Zacharilla

**T**he annual September swing through Europe is a harvest time of information and networking. It is my best opportunity to ask questions about where the satellite industry is headed. I use the panels I moderate to glean insights, and to confirm—or not—what I have been thinking. Last month, I moderated panels at the Summit for Satellite Financing in Paris, produced by Euroconsult. I then hopped the TGV to funky Amsterdam and IBC, where I moderated an Executive Dialogue session for WTA. What I saw this year is “Satellite Nation” continuing to evolve, and in uncharacteristically aggressive ways. The financing summit in Paris demonstrated why the industry generates bullish investments and continues to consolidate. IBC revealed innovation after innovation in a massive display of the diversity of the media and communications industries we serve. My take-away is that we are breaking out from the “engineers only need apply” society to something approaching a mature, customer-centric industry where consolidation is part of the natural order, along with equity-financed buyouts and start-up activity on a pace never seen before.

The events in Europe are also good for “speed-meetings.” The social events at Paris - including my own Society of Satellite Professionals International cocktail reception and the crammed show floor and venues of IBC – lend themselves to meaty, quick interchanges of opinions and gossip. (My two favorite things.)

Here are excerpts from various conversations with people who were on my panels or with whom I had coffee, food or a drink, including David Hartshorn, Secretary-General of the GVF; David Bettinger and Kevin Steen, CTO and COO respectively of *iDirect*; P.J. Beylier, CEO of *SpeedCast*; and Marco Brancati, Senior Vice-President, Networks and Connectivity, *Telespazio*.

To get a sense of what was happening in the world of VSAT, I sat with **David Hartshorn**, who leads fellow industry trade group, the **Global VSAT Forum**. I asked him about mega-trends in the industry.

*Lou Zacharilla (LAZ): Where are we today in VSAT, David?*

Hartshorn: The real trend is in the economics of VSAT. The consumer side of the business is driving a deeper penetration into the enterprise sectors. Innovation and lower equipment costs are among the results.

*LAZ: Are you bullish enough to say that VSAT continues to grow, even as fiber penetration expands? I heard Andrey Kirillovich of RSCC say that the growth of VSATs in Russia will be in the range of 240,000 additional terminals, which is a whole lot more over the current 60,000.*

Hartshorn: Definitely. In 1998, a good sales year for the entire industry was 70,000 units. This year a single VSAT service provider in one country sold more VSATs than that in six months. Nothing is tailing off.

*LAZ: Is the growth coming from new markets?*

Hartshorn: Some of it. We see new activity from mobility

sectors, including aeronautical, maritime, rail, SNG, and other “satcom on the move” and “satcom on the pause” applications. M2M is also rising. But continued increase in demand is coming from the traditional base of customers: banks, retail, backhaul, government, and user groups that are the mainstay of the business.

Hartshorn went on to say that the hurdles going forward were signal interference and the challenge from the wireless

**...We see new activity from mobility sectors, including aeronautical, maritime, rail, SNG, and other “satcom on the move” and “satcom on the pause” applications...**

**-David Hartshorn  
Secretary-General,  
GVF**





sector for spectrum. I asked iDirect's CTO, **David Bettinger** and its COO, **Kevin Steen** to identify other challenges to the industry.

*LAZ: What can slow VSAT down in your view?*

Bettinger: The advancements to satellite technology, coupled with the exploding demand for bandwidth has positioned the VSAT market as a significant business opportunity. End users are increasingly leveraging their satellite networks for more critical, bandwidth-intensive applications. High throughput satellites will accelerate this trend.

*LAZ: How?*

Steen: They promise to increase data speeds and lower capacity costs. We see a new era of possibility – one in which the challenges of quality, reliability and cost are overcome.

Bettinger: Satellite is poised for exponential growth and mass adoption. HTS, coupled with rising demand for satellite, will change our business on an order of magnitude never seen before. End users will gain greater access to satellite communications at lower price points. Markets that have been developing will hit new levels of growth. And markets that have been somewhat out of reach will now be open.

*LAZ: That doesn't sound like an answer to 'my original question: 'what will slow things down?'*

Bettinger: It will be a major accomplishment if we truly do lower the overall cost of satellite capacity. However, we cannot expect mainstream adoption unless we also make satellite communications infrastructure more cost effective to deploy and easier to manage, while enabling a high quality customer experience and seamless integration with core terrestrial networks.

*LAZ: Is there concern that with falling prices we end up looking like our fiber brethren and find ourselves in a commoditized environment?*

Steen: It is another issue we need address. With lower cost comes commoditization. Service providers need to find ways to continually deliver value to their customers.

*LAZ: How? I'll be bet one answer is that they need to find ways to add value.*

Bettinger: Of course. Service providers need to find ways to offer higher value and differentiated services. That's Business 101. But they also need to run their business and network operations at peak performance levels. As opportunities increases, thanks to those HTS birds, we need to see a phase of renewed innovation across the entire industry – satellite operators focusing on ways to make satellite capac-

**“...The advancements to satellite technology, coupled with the exploding demand for bandwidth has positioned the VSAT market as a significant business opportunity. End users are increasingly leveraging their satellite networks for more critical, bandwidth-intensive applications. High throughput satellites will accelerate this trend...”**



**-David Bettinger, CTO, iDirect**

ity more affordable, ground infrastructure developers focused on ways to make their systems faster and market-driven, and service providers discovering ways to bring continual value to their customers.

*LAZ: Can you be specific?*

Bettinger: Ground infrastructure providers must partner with the operators and service providers to develop a roaming model for the satellite industry. A satellite remote must be able to travel across multiple operators' satellites with seamless connectivity, while the end user maintains a single service provider relationship and service level agreement.

*LAZ: That sounds an awful lot like a commercial model.*

Steen: Absolutely. It is the cellular model.

On the financial side, **Pierre-Jean Beylier**, CEO of **SpeedCast**, which has been on an acquisition binge, took on the question of what will happen if satellite operators, in order to generate more market share, sweep down and buy VSAT services companies.

*LAZ: Is it a problem?*

Beylier: It can be, as the teleport industry found out.

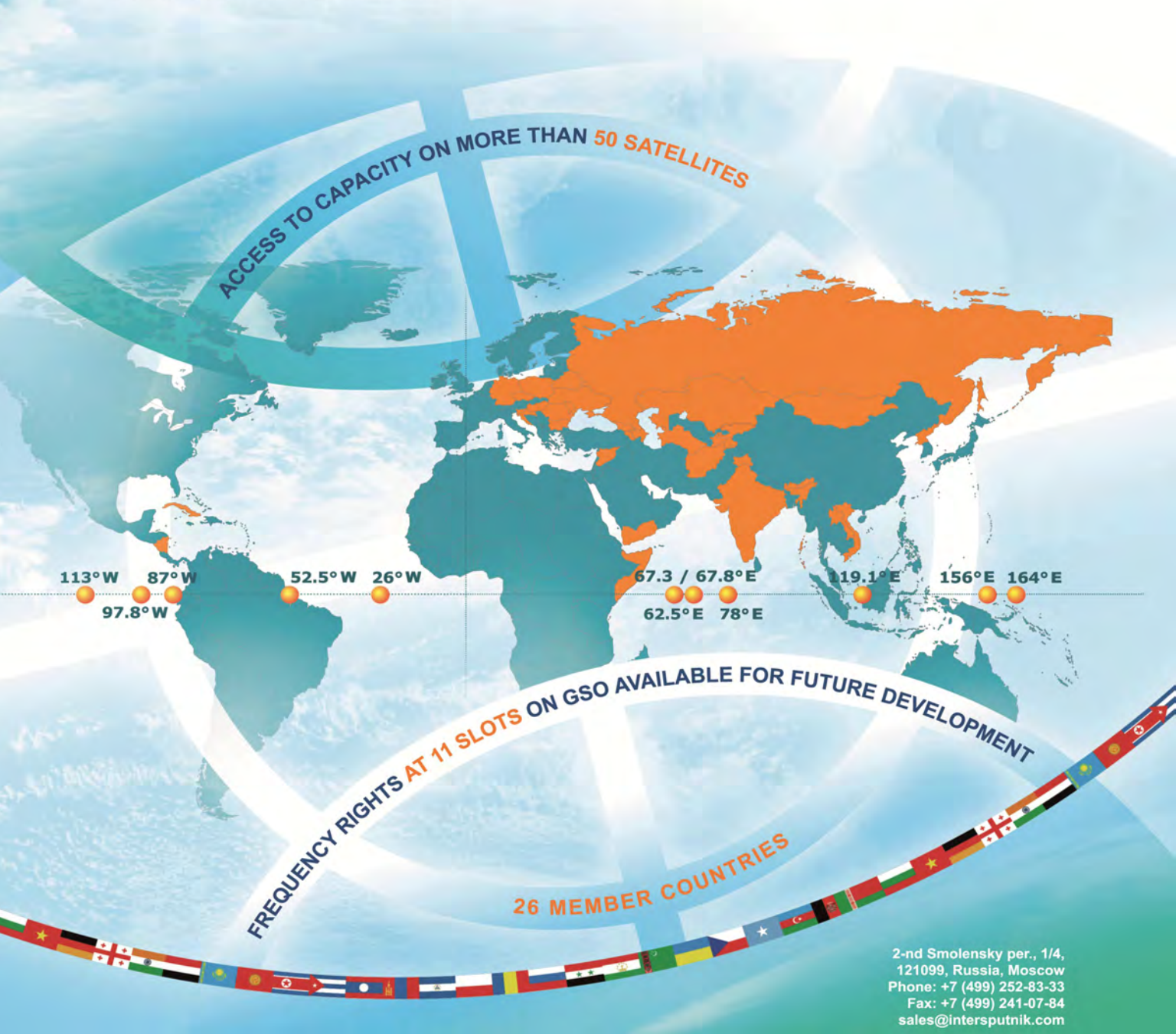
*LAZ: World Teleport Association took on the issue and made sure that teleport operators, which provide nearly 30% of total business to satellite operators, were being heard. Their leverage was felt. WTA now benchmarks operators on their relationship with teleport operators.*

Beylier: Yes. However, keep in mind that satellite operators are conditioned to experience high margins. They operate at much higher margins than a service company, perhaps 50-



One of the world's first satellite operators -  
was established on November 15, 1971

Intersputnik core business is to make satellite capacity available to telecoms operators, broadcasters and corporate customers under agreements with partner operators (ABS, RSCC, SES, Eutelsat, Intelsat and others) and to offer full-scale services via its subsidiary Intersputnik Holding Ltd for the purpose of installing and operating satellite telecoms networks.



60% higher. So it may not be in their interest to swoop down too low. Companies like Speedcast and others employ a lot of people. Satellite operators run like real estate companies. They employ very few people, on a per capita basis, versus other sectors. So perhaps the economics really are not there when you break it down.

Finally, I asked Telespazio's Marco Brancati where he believes the next "harvest" for the VSAT industry will occur.

*LAZ: Marco, you are a senior guy in the area of networks and connectivity. Where does Telespazio think that demand for VSAT and other satellite services will be coming from over the next few years.*

Brancati: Latin America and Brazil in particular. They are very appealing. Latin America is a market which is expected to grow in the few next years for us, pushed by demand coming from institutional and enterprise customers. Consumer broadband is a very promising market segment there as well.

*LAZ: Yes, I have been hearing how Colombia, for example, has committed itself to connecting every city and village. It is attacking digital divide with strong government intervention.*

Brancati: Yes. You also can see where commercial market potential is by watching the USA and Europe. You can see big American and European operators showing interest in

**"...Latin America is a market which is expected to grow in the few next years for us, pushed by demand coming from institutional and enterprise customers. Consumer broadband is a very promising market segment there as well..."**



**-Marco Brancati, SVP-Networks, Telespazio**

providing service in Latin-America.

*LAZ: A "Brazil is the next big thing" mantra has been chanted forever. Might it actually be Brazil time?*

Brancati: It is quite possible.



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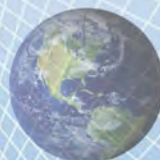
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# Satellite Terminals Extend Visibility for Remote Monitoring of Leased Equipment

by Anu Sood

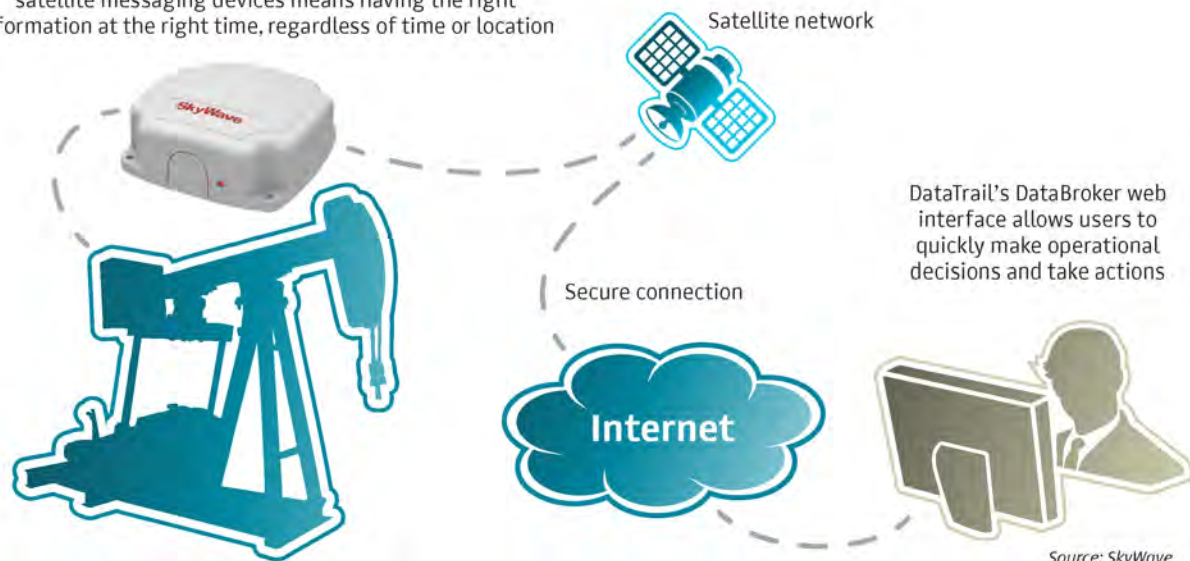
Leased equipment used in remote oil and gas sites are often technically advanced and requires special skills to maintain peak efficiency. Remote field workers do not always have the training to operate these highly specialized and complex equipment pieces.

A leading manufacturer of oil and gas equipment had no option other than to send its technicians to remote sites when an issue needed to be investigated. For the customer leasing the equipment, waiting for the manufacturer's technicians to diagnose, configure and maintain the leased equipment

To meet these real-time remote monitoring objectives, the solution would require connectivity, even where cellular coverage was spotty or non-existent. Without it, the result would produce an incomplete picture and not allow the manufacturer to reduce the costs associated with sending technicians onsite.

To turn this desire into reality, the manufacturer turned to DataTrail, a provider of end-to-end location-based and telematics products and services, to develop a solution that allows remote equipment to communicate data without the

Remote monitoring of leased equipment using SkyWave satellite messaging devices means having the right information at the right time, regardless of time or location



meant delays. This process often caused frustrations over lost time, increased operations costs and decreased productivity.

## Making the Move to 360 Degree Visibility

To differentiate itself from its competition, the manufacturer made a business decision to provide an innovative way to minimize both downtime and frustration for their customers. To be cost-effective, the solution needed to incorporate an automated method to remotely monitor the equipment and provide real-time feedback even when the equipment was located in very remote areas.

cost of physically visiting sites. With this application in place, technicians could gather information about how the equipment was operating as well as any error codes to help provide guidance on how to make the equipment work at optimal efficiency without the cost of site visits.

## Low-bandwidth Satellite Terminals Connect All Points

DataTrail worked with SkyWave, a global provider of wireless data communications for the Machine-to-Machine (M2M) market to develop a solution. SkyWave's satellite-based communication equipment offers the functional benefits of cellular-based equipment, with the advantage of filling

in the gaps with little or no other wireless coverage.

Driven by competition, satellite communications has evolved from being an expensive and unpredictable choice to a highly available, dependable and cost-effective solution. However, the technology of choice makes a big impact on the costs of operation. In many cases, high data throughput capability does not make financial sense for applications such as fleet management and asset tracking.

“Low bandwidth satellite communication offers a cost-effective way to monitor the status of equipment and production between a remote site and technicians” said Marcia Hofmann, President of DataTrail. According to Hofmann, satellite machine-to-machine communication is often the answer when the goal is to meet increasing demand for richer information as this allows businesses to share data across diverse operations without the added cost associated with continuous connectivity required for Internet, video and voice applications.

The SkyWave-based communication solution includes a compact satellite Class 1 Division 2 (C1D2) terminal certified for operation and resistance to chemicals found in hazardous environments. It connects to the RS-485 and uses the Modbus protocol to read data. Integrating SkyWave satellite terminals with DataTrail’s DataBroker back office, the manufacturer of the equipment now has the following functionality:

- The SkyWave terminal connects directly to the equipment and reads the value of various parameters using the Modbus protocol. The state of the equipment is read every 15 minutes and stored in the data logger of the SkyWave terminal.
- When a Modbus fault is raised, the manufacturer is notified in real-time via email and can query the log files stored on the device using DataTrail’s web interface. Log data can be retrieved in small sections as defined by the user (i.e. last hour, last 4 hours, etc.) which eliminates the time and costs to sort through large volumes of data.
- Real-time device notifications are generated based on the manufacturer’s requirements including when the device is turned on or off, when the thresholds of the Modbus registers fall out of range or when a register has passed a set threshold for an extended period of time. Customized email notifications with fault details can be sent to multiple people.
- Reports via DataTrail’s web interface are available to show the state changes of the monitored registers on the Modbus and the full log data when retrieved.

SkyWave’s technology enables two-way communication

between the remote equipment and the office when there is no cellular coverage. Technicians are now able to monitor and often maintain a malfunction, or other issue that is compromising optimal use of the rental equipment.

The satellite terminal solution allows both the manufacturer and the lessee to:


- Log data in real-time and monitor fault codes from the equipment
- Transmit selected data in real time, even in areas with no cellular coverage
- Operate in hazardous locations
- Minimize the required number of trips to customer sites
- Adapt to changing customer and business needs

### Costs Recovered By Replacing Site Visits with Remote Monitoring

With these advancements, the manufacturer was able to recover the initial capital investment cost and several months of airtime within a few reduced site visits. The number of site visits has been reduced by 50%, making a substantial impact on labor hours as well as vehicle and fuel costs. The solution has also helped to increase customer satisfaction and allows the manufacturer to allocate technical resources to other functions within their company.

“Working with SkyWave satellite terminals offers unprecedented benefits to the manufacturer and to their customers,” explained Hofmann. “The SkyWave satellite terminal solution has surpassed the original requirements of the client.”

There are many different types of businesses that can benefit from this M2M satellite application. With operational decisions and actions made in the moment, lag costs are eliminated and the time it takes to diagnose and resolve problems is reduced from hours to minutes.

“For any businesses that operate in remote areas, it’s all about having the right information at the right time.” added Hofmann. “That’s the essential ingredient for maximum productivity, utilization and profitability.” 

**Anu Sood** is Global Channel Marketing Manager of **SkyWave Mobile Communications**. SkyWave is a global provider of wireless data communications for the Machine-to-Machine (M2M) market. Over the past 15 years, SkyWave has designed, manufactured and shipped more than 650,000 Inmarsat-based satellite terminals to customers globally in the transportation, maritime, oil and gas, utilities and government sectors. For more information, please visit [www.skywave.com](http://www.skywave.com)

# ICT in an Expanding Hydrocarbons Marketplace

by Martin Jarrold

Communications solution spending in the oil and gas exploration and production (E&P) environment represents only a fraction of the total CAPEX and OPEX of energy extraction and production companies. As levels of CAPEX and OPEX grow, resulting from expanding E&P portfolios, it is of prime concern to understand precisely how the communication solutions expenditure is affected, and why it is affected in a particular way, or ways. Does it grow proportionately to growth in CAPEX and OPEX? Does it increase in absolute terms, becoming a greater percentage of the whole? Does it, conversely, represent a smaller proportion of overall CAPEX and OPEX as communications solutions technologies become more efficient, more cost-effective, and less expensive, through economies of scale and other mechanisms?

It is vitally important that these factors are well studied, and that the answers to such questions are well understood, because, as is well-recognized, a well-managed information and communications technology (ICT) network plays a disproportionately great role in reducing the costs of not only exploration, drilling, and production, but of every other area of an energy company's operations.

Multiple professional disciplines contribute to oil and gas exploration and recovery. The mission critical operational success of all professionals in the upstream E&P environment depends on access to the most efficient ICTs, as well as to the wealth of sophisticated applications these technologies bring to the disposal of the teams of geologists, geophysicists, drilling engineers, seismic data analysts, etc., etc., who locate new reserves and get them out of the

ground and from beneath the ocean floor through the collection of massive amounts of disparate data in multiple formats (including GPS, acoustic, compass and other sensor data) and using the information for predictive analysis.

It is particularly important that the above cited factors are understood as the nature of an energy company's ICT expenditure is affected by greater changes in the direction and structure of its overall CAPEX and OPEX, such greater changes being dictated by operational considerations – for example, where depleting shallow water oil and gas reserves necessitate expansion of E&P into hostile deep water offshore environments. As well as elsewhere around the globe, this is particularly true of the South East Asia/Asia Pacific/overall Asian oil and gas patches, where E&P cost-cutting is an essential aspect of the search for new supplies that extend the regional hydrocarbon resource base.

Again as elsewhere in the world, the continuing priority of Asian countries in respect of energy industry policy is tightly centered on ensuring national energy security and on the injection of measures to promote continued national, and by extension, pan-regional, economic stimulus. But, even in the context of boosting energy security and maximizing potential for accelerated economic growth, keeping hydrocarbons import dependency under some degree of control – by meeting as much oil and gas demand as possible from domestic reserves – is of equal importance. Asia's offshore energy industry does, in fact, have significant enough a



potential to deliver on the need for assured domestically-sourced oil and gas supplies, but this potential does depend on the accelerated exploitation of newly discovered deep water reserves. Whereas deep water currently accounts for just 7% of regional offshore production volumes, the prospects are for an increase to 17% by 2020, a 54% increase in expenditures on offshore oil and gas infrastructure to 2018, resulting in Asia Pacific accounting for 20% of the global US\$223 billion deep water CAPEX over the next five years.

Historically, Malaysia has been one of the key drivers of offshore CAPEX in the region, and this is expected to continue as the country dominates the region's offshore infrastructure CAPEX levels. The country's strategic geographical location is one of the key influences in its determination to increase offshore production, because although it has to support domestic needs (as alluded to above), it is also situated near East Asian economies with an insatiable demand for hydrocarbons. In addition to the drilling of more than 50 new offshore exploration wells over the next few years, it is anticipated that Malaysia will have a large number of field developments in the period to 2018, building on discoveries of the last few years, 40% of which have been in deep water. Moreover, the national oil company, Petronas, will spend more than US\$5

# The Journey Has Begun

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billion (jointly with several partners) to develop gas fields offshore, with the Rotan floating liquefied natural gas (FLNG) project off the coast of Sabah seeing the highest expenditure in the country.

In order to study these factors, and to set-out the answers to such questions as have been posed above, GVF (and its partner EMP) have successfully sought over the last several years to work with major oil and gas extended networking opportunities for communications end-user and solution vendor expert practitioners, set within the context of conference programs in which the applications and connectivity imperatives of the energy market vertical are addressed.

In 2013, and using a new venue, the InterContinental Hotel in central Kuala Lumpur, Malaysia, the 6th Annual **Oil & Gas Communications South East Asia: Evolving the ‘Big Data’ Digital Oilfield for Offshore & Deep Water** conference – the 19<sup>th</sup> event in GVF-EMP’s overall global series – will take place on 19<sup>th</sup> & 20th November.

Over a two-day program, the conference will examine the subject of satellite-based communications, and integrated satellite-terrestrial hybrid communications, solutions to which the oil & gas industry upstream segment (and also the downstream segment) turns to provide the essential connectivity to access the vital applications necessary to facilitate:

- Regional oil and gas industry optimization of production and exploration activities;
- Efforts to enhance the region’s upstream domestic production?
- Maximized use of the potential for Information & Communications Technologies to enhance oil and gas recovery.

Many compelling topics point-up the reasons for a conference like **O&GCommsSEA2013**. Included in the program for the first time will be a

**“...the nature of an energy company’s ICT expenditure is affected by greater changes in the direction and structure of its overall CAPEX and OPEX, such greater changes being dictated by operational considerations...”**

dialogs on ‘Big Data’ – focusing on solutions and services to store, manage, protect and analyze information extracted from the large volumes of data generated by the oil industry – and the implications for oil and gas E&P of the interface of machine-to-machine (M2M) communications and satellite connectivity.

Planned discussion on the interface and synergy of M2M communications and satellite, with particular reference to the remote environment of offshore and deep water E&P, relates to the evolution in M2M which brings together parallel demand for both legacy SCADA-type data flows (which continue to drive narrowband connectivity demand), together with evolving ‘Big Data’-driven broadband connectivity demand arising from, for example, complex seismic survey, well-logging data flows, etc. This year the conference program will also feature heightened coverage of the impact of high throughput satellite (HTS) communications for the oil and gas upstream.

Key conference program highlights for 2013 include:

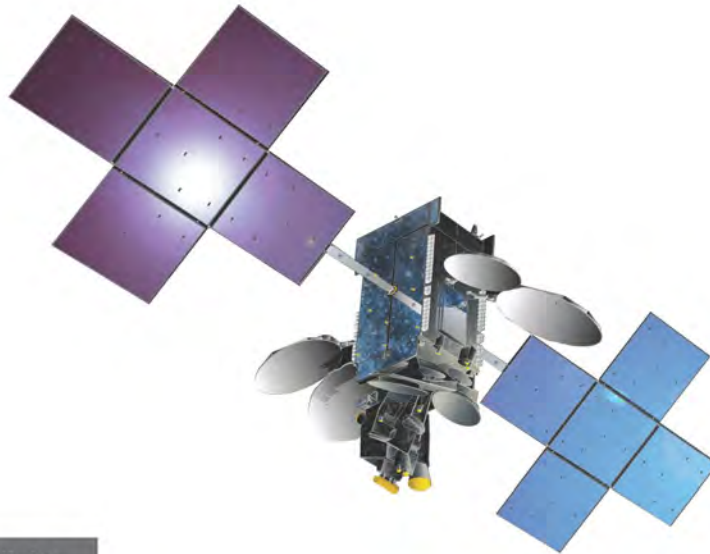
- Analyzing the Future Evolution of Oil & Gas Patch Communications: Trends in the Asian Sphere;
- Cutting-Edge Communications for Digital Oil & Gas: High Throughput Satellite;
- The 21st Century Asian Oilfield: Maximizing Growth through E&P ICT;
- M2M in Oil & Gas E&P: From the SCADA Data-Flow to the Video Application Environment;

- Southeast Asia’s E&P and the ‘Internet of Things’;
- Offshore, Deep & Ultra-Deep Water E&P: South East Asia’s Mission Critical Communication Requirement;
- New Satcom Capacity Business Models: Achieving More bang per Buck (or Barrel)!
- Comparative Portfolios of Satellite Services for the Oil & Gas Industry;
- Advanced Oil & Gas ICT: High Demand Communications for Crew Welfare, Crew Safety, and Crew Training Applications;
- Networking Solution Innovations for Cloud-over-Satellite in E&P;
- The Asian Digital Oilfield in Real-Time: Data Monitoring & Management, Remote Collaboration & Operations Support Centers;
- Development, Deployment & Return on Investment: Advanced Networking Communications Infrastructures & Value-Added Services to Realize Deep Water Reserves;
- Satellite Operators in the Asian Oil & Gas Patch: Bandwidth & Footprint Planning & Provision;
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For more information on all of the above please contact the Series organizers'. Their contact details are, with **GVF**, me at [martin.jarrold@gvf.org](mailto:martin.jarrold@gvf.org), and with **EMP**, Paul Stahl at [paul.stahl@uk-emp.co.uk](mailto:paul.stahl@uk-emp.co.uk).

Details of all the events in this series can be accessed by following the individual event links from [www.uk-emp.co.uk/](http://www.uk-emp.co.uk/).



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- The Remote Application of Auto-Deploy Antenna Technology for Oil & Gas;
- The WAN Optimization Imperative for Oil & Gas E&P;
- MWD: Measurement While Drilling & Other Real-Time Down-Hole Services in the Digital Oilfield;



**Martin Jarrold** is Director of International Programs of the GVF. He can be reached at [martin.jarrold@gvf.org](mailto:martin.jarrold@gvf.org)

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## EMC Acquires STM

**Miami, FL, Sept. 23, 2013** — **Emerging Markets Communications (EMC)**, a satellite and terrestrial communications solution provider and satcom technology manufacturer, has acquired STM and its affiliate entities **Global IP** and **Vodanet Brasil**.

Financial details of the transaction were not disclosed.

STM is a satellite hardware manufacturing company developing VSAT products based on the DVB-RCS2 standard. STM's affiliate company, Global IP, provides satellite connectivity and specializes in the mobility, maritime and oil and gas markets. Vodanet serves as an operating company in Brasil, fully licensed to provide VSAT services both onshore and offshore.

In a news release, the company said the combined STM organization has over 20 years of industry experience in 150 countries with over 150,000 VSAT terminals deployed in to service.

EMC's satellite connectivity includes a global C-band and Ku-band footprint for enterprise networks. EMC also owns and manages 32 in-country field

support centers worldwide.

"STM, Global IP and Vodanet Brasil bring significant value to EMC's portfolio of services and capabilities, complementing our infrastructure, technology and vision of delivering a fully integrated solution to customers in the most remote locations worldwide," said Abel Avellan, founder and CEO of EMC.

"The collective STM entities' expertise in providing network services in key verticals, particularly offshore and mobility, combined with its innovative satellite technology are tremendous assets to EMC and STM customers," he said.

EMC's customer base and vertical expertise includes oil and gas, maritime, telecom, governments, NGOs, mobile operators and corporate enterprises. Oil and gas customers in onshore, offshore and maritime segments have VSAT installations in the Gulf of Mexico, Brasil, West Africa, the North Sea, as well as the Indian and Pacific oceans.

EMC also has additional mobility customers in fishing boats, ferries, high-



speed trains and helicopters. These customers leverage EMC's wholly-owned support centers and global Ku-band and C-band networks to maximize their business performance on land, in the air or at sea.

Analysts say EMC's research and development facilities in United States and India, and its 18 patented technologies, combined with STM's research and development facilities in Norway and innovative design and manufacturing of high quality, bandwidth-efficient satellite systems, positions EMC as a leading provider of the DVB-RCS2 standard.

## Quintech Purchases DEV Systemtechnik

**Indiana, PA, September 12, 2013** — **Quintech Electronics & Communications** is acquiring 100 percent of all shares of **DEV Systemtechnik GmbH & Co. KG**. Quintech, headquartered in Indiana, PA, supplies RF signal routing equipment for over 24 years. Quintech's product line includes matrix switches, routers, splitters, combiners, amplifiers, and LNB power supplies.

DEV Systemtechnik, headquartered in Friedberg, Germany, produces RF and RF over fiber signal routing equipment, including the Optribution product line.



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"Both companies represent the highest standards in product design, quality, reliability, and customer support. I expect the combined companies to provide our customer base with a greater selection of available solutions with

faster service and lead times," he said.

Prushnok added that with the acquisition, the merged company will be able to provide a full suite of RF products, including matrix switches, routing switches, splitters and combiners, amplifiers, LNB power supplies, RF over fiber transmitters and receivers, and optical splitters and combiners.

DEV will be a wholly owned, independent subsidiary of Quintech, with Joerg Schmidt remaining as Managing Director. The cost of purchase was not disclosed.

# DirecTV-Dish Merger: Both Parties Open to the Idea but will Likely Face Regulatory Hurdles

by Peter Galace, Associate Editor

Los Angeles, Calif., September 27, 2013--Given the fast changing configuration of the satellite-cable TV market, is the merger of **DirecTV** and its chief rival **Dish Network** now appropriate and sensible? The answer is a clear “yes” from both companies.

Mike White, DirecTV's chairman and CEO, told the Goldman Sachs Communications media conference this week that consolidation between the U.S.'s

two giant DTH players would benefit the consumer and yet still be competitive. He was quoted in an earlier forum saying while it might take a lot of work to do a deal he'd “never say never.”

In a conference early last month, Dish Network chairman Charles Ergen said large companies are essentially monopolies whose market power is pushing pay TV providers toward consolidation. He said a merger with DirecTV makes a lot of strategic sense.

“You have a general momentum, a gravity toward consolidation because programming rates are going up four times the rate of inflation,” said Ergen during Dish's second quarter earnings conference on August 6.

While not mentioning them, Ergen said the largest TV programmers – 21st Century Fox, NBCUniversal, Time

Warner, Inc., and Walt Disney Co.—are really monopolies and lashed at Congress for not doing anything to level the playing field.

White and Ergen have repeatedly criticized TV programmers for demanding high price increases for the right to

merger of Dish, then known as EchoStar, with DirecTV in 2002. The ruled that a merger would reduce competition in the television service market, in particular for rural customers.

However, pay TV competition among cable and satellite providers may have

actually diminished because of the advent of online TV and even mobile TV, provided by companies like Hulu, which offers subscription services for TV shows, movies and other media. The main stumbling block could be the merged DirecTV-Dish company's im-

proved ability to increase pricing.

Even then, White said they need to start educating regulators that there were now “other considerations” than simply the number of players – and potential suppliers – of media services. “It is a very challenging regulatory environment for any deal to get done. That is true in our space as well. If you only focus on distributors, consumer prices will continue to rise,” he added.



**If DirecTV and Dish merge their DTH operations they will have a monopoly of satellite TV in the world's largest market. While analysts are not very optimistic of the chances of such a merger getting regulatory approval, it is not without precedent. Several years ago, the FCC approved the merger of Sirius and XM Radio, creating a monopoly in satellite radio in the US.**

carry their channels. Executives from the pay TV providers said their retransmission consent costs have gone up 50 percent this year after a 500 percent to 600 percent rise since 2010. White said DirecTV customers may become even angrier in 2014 as prices will have to go up again.

Analysts say it is clear consolidating DirecTV and Dish Network could offer meaningful cost savings from administrative and operating expenses and will offer better negotiating clout in dealing with programmers.

But merging the two operators will continue to go through a regulatory environment that remains unclear and “very challenging”. The likelihood of government opposition remains a huge roadblock to such a transaction. The Federal Communications Commission and Justice Department opposed a proposed



**Peter I. Galace** is Associate Editor of *Satellite Markets and Research*. He writes extensively on telecommunications and satellite developments in

Asia for numerous publications and research firms. He can be reached at [peter@satellitemarkets.com](mailto:peter@satellitemarkets.com)

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## Breuer Named Ne Board Chair of Media Broadcast

**Bonn, Germany, Sept. 23, 2013** — **Media Broadcast GmbH**, one of Europe's leading full-service provider in the broadcasting and media sector, has announced that the shareholders' meeting has appointed **Wolfgang Breuer** as the company's new Chairman of the Management Board.

Breuer takes over the management effective October 1, 2013. He succeeds Bernd Kraus, who is leaving the company on the best of mutual terms.

Wolfgang Breuer, 48, has been a member of the Media Broadcast Management Board since 2011. As Chief Technology Officer (CTO), he has to date been responsible for the overall management and development of the infrastructure operator's technology-related matters.

Prior to joining Media Broadcast, Breuer served as CTO at the international telecommunications companies Romtelecom and Comstar-UTS Russia, and as CEO of T-Mobile Croatia. Prior to this he held successive management positions at Deutsche Telekom AG, including Vice President Central Europe.

Breuer began his career in 1990 as an international project manager for the semiconductor manufacturer Leybold AG, after studying at the universities of Cologne and Michigan and the Harvard School of Business.

Dr. Marcus Englert, Chairman of the Media Broadcast Supervisory Board, described Breuer as an experienced



**Wolfgang Breuer**

manager who has successfully led a similar-size company in the role of CEO, and who knows every last detail of the technology-driven broadcasting business.

## Thuraya Appoints Roberts as VP-Innovations

**Dubai, UAE, Sept. 24, 2013** — **Randy C. Roberts**, a seasoned telecommunications executive with over 25 years of experience at leading mobile device manufacturers, has joined **Thuraya Telecommunications Co.** as Vice-President of Innovation. In the newly created role, Roberts will oversee product development, product management and solutions engineering. Roberts will report to Samer Halawi, Chief Executive Officer, and will serve as a member of the company's Executive Team.

Halawi welcomed Roberts saying his extensive experience in product development and management with leading handset OEMs will be a strong asset for Thuraya as we drive new product innovation and expand our offerings.

Roberts joins Thuraya from Siemens Enterprise Communications where he was the Vice President of their Global Mobile Product Portfolio. Roberts has held a variety of leadership roles in product management and development at BlackBerry, Motorola, Nokia and AT&T. Roberts holds a Bachelor of Business Administration in Finance from Texas Tech University.

## Malik Appointed SVP-Sales & Marketing of MEASAT

**Kuala Lumpur, Malaysia, September 20, 2013**—**MEASAT Satellite Systems**

**Sdn. Bhd.** announced today the appointment of **Raj Malik** as Senior Vice President, Sales & Marketing.

In this role, Malik will oversee MEASAT's global sales and marketing activities, focused on building and supporting a strong customer base across Africa, Asia, Australia and Europe. Raj will also join the MEASAT's senior leadership team responsible for the overall development and execution of the company's strategy.

Prior to joining MEASAT, Raj spent seven years with satellite operator Asia Broadcast Satellite in various sales, marketing and operations roles. Raj holds an MS (Biomaterials) & International Business Studies from the University of Minnesota and completed an Executive General Management Programme from the Indian Institute of Management, Bangalore, India.

## Ziegler Appointed New CEO of CET Teleport

**Aerzen, Germany, September 11, 2013** – **CET Teleport GmbH** has appointed **Paul Ziegler** as its new CEO. Ziegler joins CET Teleport GmbH from Gateway Communications, which was recently acquired by PCCW Global, where he was Executive Director responsible for Business Development

across Africa and the Middle East. Ken Armstrong, who has been with CET Teleport GmbH since its inception in 2008 will be stepping down but staying on board till the end of the year as Ad-



**Raj Malik**



**Randy Roberts**



**Paul Ziegler**





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Hidetoshi Saito, Sales and Marketing Director at Yamaha Music Gulf FZE

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visor to the new CEO.

Ziegler will drive the future growth of the business with particular focus on continuing penetration in the African market as well as further expansion into new territories and market segments. Today, GET Teleport delivers VSAT and media broadcasting services to the enterprise, government, military, oil & gas, mining, banking and NGO sectors across Europe, Africa, Middle East and Central Asia.

Stuart Bentham, Chairman of CET, said he and the shareholders welcomed the arrival of Paul Ziegler and very much looked forward to the exciting prospects of him taking the business to new heights. Paul's obvious knowledge of the international markets will be a great addition to the ever expanding team at CET.

**Jordan Joins Eutelsat's Management Team**

Paris, September 9, 2013 — Andrew Jordan, previously CEO of Eutelsat Asia, has joined Eutelsat Communications' Executive Committee. Based in Paris, Jordan will supervise the Group's growth strategy in Asia and drive strategic projects.



**Andrew Jordan**

Ken Loke, previously Chief Commercial Officer of Eutelsat Asia, has assumed the post of Chief Executive Officer of Eutelsat Asia, based in Singapore.

Jordan joined Eutelsat following the acquisition in 2012 of the GE-23 satellite (renamed Eutelsat 172A). He is a seasoned executive in the satellite, broadcast and telecommunications sector, with over 25 years experience in

spearheading businesses, building client relationships and developing joint venture projects in Europe, Asia and Australia.

Andrew holds Irish and Australian citizenships. He is a graduate of the School of Oriental and African Studies, London University, and speaks fluent Mandarin.



**APSCC Honors Outstanding Achievements in the Asia-Pacific Satellite Industry**

Hong Kong, September 24, 2013 – The Asia-Pacific Satellite Communications Council (APSCC) announced the winners of its 10<sup>th</sup> annual APSCC Awards at the APSCC 2013 Satellite Conference & Exhibition at Sheraton Hong Kong Hotel & Towers, Hong Kong.

The awards this year were presented to individuals whose contributions and achievements have been deemed exceptional by the satellite industry and the Awards Selection Committee, consisting of industry experts.



The recipients of the 2013 APSCC Awards include:

**Satellite Executive of the Year in Asia-Pacific Award - William David Wade, President and CEO, AsiaSat**

**Measat's Ali Ebadi (second from left) and Asiasat CEO William David Wade (third from left) receiving awards during the APSCC Satellite Conference in Hong Kong.**

Mr. William David Wade was appointed as the Chief Executive Officer on 1 August 2010 to lead AsiaSat with his title changed to President and Chief Executive Officer from 1 January 2011. Prior to assuming his role as Chief Executive Officer, Mr. Wade had served as AsiaSat's Deputy Chief Executive Officer for 16 years. Wade has over 26 years' experience in the satellite and cable television industry. He holds a Bachelor of Arts (Honors) Degree in Communications from the University of Utah, and a Master of International Management Degree from Thunderbird (the Global School of International Management).

**Lifetime Achievement Award - Ali R. Ebadi, Senior Vice President, MEASAT**

Dr. Ali R. Ebadi is the Senior Vice President, Space Systems Development of MEASAT and member of the Radio Regulations Board (RRB) of ITU. He has more than 30 years of experience in the field of Radio Engineering, Spectrum Management and Satellite Communications besides being actively involved in ITU's activities. He is a member of the Institution of Engineers Australia (IE Aust) as a Chartered Professional Engineer, a member of the Institution of Engineering and Technology (EIT) UK as a Chartered Engineer and a member of the Malaysian Institute of Engineers (IEM) as a Professional Engineer.



■ Key industry trends and opportunities.

## UN Releases State of Broadband Report

New York, NY, September 21, 2013 – Mobile broadband is the fastest growing technology in human history, according to the 2013 edition of the *State of Broadband Report*. Released in New York at the 8th meeting of the **Broadband Commission for Digital Development**, the report reveals that mobile broadband subscriptions, which allow users to access the web via smartphones, tablets and WiFi-connected laptops, are growing at a rate of 30% per year.

By the end of 2013 there will be more than three times as many mobile broadband connections as there are conventional fixed broadband subscriptions.

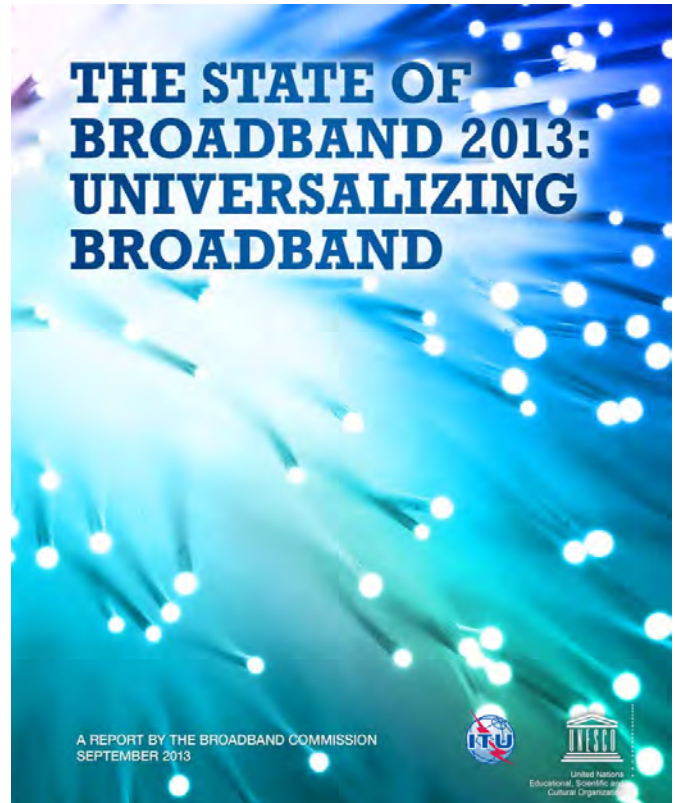
*The State of Broadband* is a unique global snapshot of broadband network access and affordability, with country-by-country data measuring broadband access against the four key targets set by the 60 members of the Broadband Commission in 2011.

The Republic of Korea continues to have the world's highest household broadband penetration at over 97%. Switzerland leads the world in fixed broadband subscriptions per capita, at over 40%. By comparison, the US ranks 24th in terms of household broadband penetration, and 20th in the world for fixed broadband subscriptions per capita, just behind Finland and ahead of Japan.

In terms of Internet use, there are now more than 70 countries where over 50% of the population is online. The top ten countries for Internet use are all located in Europe, with the exception of New Zealand (8th) and Qatar (10th).

“The new analysis in this year's report shows progress in broadband availability, but we must not lose sight of those who are being left behind,” said ITU Secretary-General Dr Hamadoun I. Touré, who serves as co-Vice Chair of the Commission with UNESCO Director-General Irina Bokova. “While more and more people are coming online, over 90% of people in the world's 49 Least Developed Countries remain totally unconnected. Internet – and particularly broadband Internet – has become a key tool for social and economic development, and needs to be prioritized, even in the world's poorest nations. Technology combined with relevant content and services can help us bridge urgent development gaps in areas like health, education, environmental management and gender empowerment.”

“The global roll-out of broadband carries vast potential to enhance learning opportunities, to facilitate the exchange of



information, and to increase access to content that is linguistically and culturally diverse,” said UNESCO's Irina Bokova. “It can widen access to learning, enhance its quality and empower men and women, girls and boys, with new skills and opportunities. But this does not happen by itself – it requires leadership, planning and action.”

For the first time, the *State of Broadband* report also tracks a new target mandating ‘gender equality in broadband access by the year 2020’, which was set by the Commission at its March meeting in Mexico City. ITU figures confirm that, worldwide, women are less likely to have access to technology than their male counterparts. While the gap is relatively small in the developed world, it widens enormously as average income levels fall.

Addressing a packed room this morning, Commission Co-Chair Carlos Slim Helú said: “The Millennium Development Goals should be a strong partnership to direct actions at the national and international levels, and they should be a shared responsibility. It is certain that broadband can make a tremendous contribution towards their attainment.”

 **Key industry trends and opportunities.**

## Government and Military Market to Grow Despite Short-term Turbulence

**Wilmington, DE, September 24, 2013** – NSR’s 10th edition of the *Government and Military Satellite Communications (GMSC-10)* report, published today, projects the industry will generate US \$5 billion in revenue growth by 2022 primarily from rising transponder and bandwidth demand of UAVs and airborne manned missions. The positive impact of HTS and MEO-HTS services for mobility applications (maritime, aeronautical and land-mobile) as well as commson-the-pause, fixed VSATs and bulk leasing, will also play important roles in the market growth.

Before a growth phase takes place however, there will be a lull in the coming years, due to government budget cuts and the hit satellite communications will take from the withdrawal of troops from Afghanistan and Iraq. Despite some regional hotspots and the impending strategic shift of the U.S. towards Asia that could drive demand, NSR’s study points to a real dilemma that could negatively impact market growth. “Governments are weighing the fine balance between cost and efficiency with the latter often taking a backseat in times of uncertainty,” states NSR Senior Analyst and report author, Claude Rousseau. “Furthermore, the build-up of proprietary military capacity on top of the incoming onslaught of cheaper commercial HTS and MEO-HTS satellite supply will impact traditional high revenue growth for FSS

and MSS operators in the coming decade.”

“There is still a clearly identified need for commercial satellite communications to play an integral part of governments’ future network architectures, for mobility in particular, that will translate into demand for FSS transponders, MSS and HTS/MEO-HTS bandwidth” said Rousseau. “We expect fairly strong growth for aeronautical and UAV platforms, but the crux of the matter for our forecast resides in the industry addressing the needs for ongoing requirements while demonstrating that cost-effective solutions from new systems can bring savings across the board.”

NSR’s *GMSC, 10th Edition* study continues a decade of in-depth and highly detailed analysis and forecast of commercial satellite demand for the government and military market as well as introducing another industry first, a demand assessment of emerging Medium Earth Orbit-High Throughput Satellite (MEO-HTS) constellations that will enter into commercial service in 2014. For additional information on this report, including a full table of contents, list of figures and executive summary, please visit [www.nsr.com](http://www.nsr.com) or call NSR at 617-576-5771.



## TV 2025 Report: Industry Reaching a Tipping Point

**Montpellier, France, September 26, 2013** – IDATE has released the latest edition of its report devoted to the future of TV, and to video distribution as a whole.

Supported by its latest research, IDATE indicates a tipping point in TV industry evolution, predicting changes in viewer behaviour and evolving business models, as the new industry player hierarchy is now taking shape. In this report, IDATE identifies how current consumer behaviour is shaping TV services for future years.

According to IDATE’s Deputy CEO, Gilles Fontaine, “this new report provides an opportunity to completely re-

think the distribution models used for TV and video content, much in the way we believe content producers and providers, network operators and app stores are doing”.

IDATE proposes and describes an "Business as usual" scenario, characterised by several key points including: live viewing partially overtaken by on-demand viewing; piracy that creates obstacles to the switch from physical to online viewing; increased competition in the pay-TV market, affecting prices; and ad rates for live TV decrease and increase for video on-demand (VoD).

According to this prediction, the video market on fixed and mobile networks

worldwide will grow by an average of 3.2% per year from 2013 to 2025 – which includes average 2% growth for live TV and 14% annual growth for on-demand service.

The market’s growth will be much lower in developed markets, however. This means that in Europe’s top five markets (EU-5) – i.e. Germany, France, the UK, Italy, and Spain – average annual growth will stand at 1.6% from 2013 to 2025, with the live TV market (including broadcasters’ catch-up TV services) in decline by 0.7%, while on-demand services experience an average annual increase of 18.5%.



# VSAT 2013 Highlight

## Disruptive Technologies

by Virgil Labrador, Editor-in-Chief

Informa Telecoms & Media partnered with Comsys this year to produce the 15th annual VSAT 2013 conference, in a new venue—Amsterdam, the Netherlands. The conference was held the day after the IBC 2013 convention and there has been some spillover attendance from IBC, which resulted in slightly higher attendance numbers this year.

The global VSAT market is in good shape and had positive growth in 2012, according to Simon Bull, senior consultant at Comsys, who gave the keynote address on the state of the VSAT market. Bull said terminal sales grew to 345,000 in 2012, up 16 percent compared to the previous year, and that 2013 also looks encouraging. In 2012, sites in service also went up 5 percent to 1.7 million globally in 2012, as well as consumer subscribers growing 10 percent last year as well, he said.

Fiber is the catalyst driving lower VSAT site growth, said Bull. The extension of the enterprise is increasing the necessity of ubiquity, he added.

In the changing multiplatform environment, despite the simplicity of IP, networks and applications are increasingly becoming complex, according to Bull. VSATs will always have a place in the provision of solutions, he concluded.

The conference featured a mix of company presentations and panel discussions on various issues affecting the VSAT market. The common theme among the presentations and panels were “disruptive technologies” and how they are impacting the industry.

Some of the presentations included topics such as “Hosted Payloads,” “The

flux of High Throughput Satellites (HTS) in various regions. In the panel discussion on “Maximizing the Potential of High Throughput Satellites,” the session moderator, Christopher Baugh, President of NSR, said that the total HTS/MEO-HTS demand could reach 1 Tbps by 2022 while supply will exceed 2.3 Tbps. The panelists discussed the potential impact of HTS satellites on pricing and traditional service providers and teleports.


In his presentation entitled “The Next Wave: How the Next Generation of Multi-spot Beam Satellites are Bringing a New Wave to the Industry,” Amiram Levinberg, Founder and Chairman of Gilat Satellite Networks said that the evolving market in the next wave will be characterized by significantly higher number of ventures; selective coverage; flexible topologies; multiple applications and a more flexible ecosystem.



The two-day VSAT 2013 held in Amsterdam featured disruptive technologies such as Kymeta’s metamaterials flat panel antenna, among others. In picture is the panel on High Throughput Satellites, from left Vern Fotheringham, Chairman and CEO, Kymeta Corporation; Jay Yass, VP-Global Accounts and Strategic Sales, Intelsat; David Rehbehn, Senior Director, Marketing, Hughes Network Systems and session moderator Christopher Baugh, President, NSR.

Future of Hybrid and Network Services and “Enabling New Applications over Satellite,” among others.

One key development that would be impacting the VSAT market is the in-

The two-day conference was capped by a reception that featured the First Annual VSAT Awards, which presented Hughes Network Systems as the “Service Provider of the Year,” among other awardees. 

# One in Four Households to have Satellite TV by 2018

## Global satellite TV forecasts

	2012	2013	2014	2015	2016	2017	2018
TV households (mil.)	1,438.9	1,461.6	1,484.4	1,507.6	1,531.3	1,555.5	1,580.2
Pay digital DTH subs (mil.)	178.5	195.1	209.6	222.1	232.8	242.2	251.2
Digital free-to-air DTH households (mil.)	118.0	123.1	127.1	131.1	134.9	138.9	142.6
Pay DTH/TV HH	12.4%	13.3%	14.1%	14.7%	15.2%	15.6%	15.9%
Free-to-air DTH/TV HH	8.2%	8.4%	8.6%	8.7%	8.8%	8.9%	9.0%
DTH revenues (\$ mil.)	82,870	86,869	90,045	92,425	94,165	95,456	96,669

Source: digital TV research Ltd.

**C**overing 97 countries, the number of pay satellite TV (DBS or DTH) homes will reach 251 million by 2018, up from 178 million at end-2012 and 103 million at end-2008, according to Digital TV Research. Including free-to-air households, nearly 400 million homes will directly receive TV signals via satellite dishes by 2018, up by almost 100 million on the end-2012 figure. India will be responsible for adding 30 million over this period. A quarter of global TV households will have a satellite TV dish by 2018, up from 21% in 2012 and 14% in 2008.



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## The Satellite Markets 25 Index™

Company Name	Symbol	Price (Oct. 01)	% Change from Last Month	52-wk Range		% change from 52-wk High
<b>Satellite Operators</b>						
Asia Satellite Telecommunications	1135.HK	29.20	-1.02%	26.85	31.20	↓ 6.41%
Eutelsat Communications S.A.	ETL.PA	23.30	0.95%	20.41	28.15	↓ 17.23%
APT Satellite Holdings Ltd.	1045.HK	7.92	4.35%	1.74	8.20	↓ 3.41%
Inmarsat Plc	ISAT.L	717.50	-3.11%	80.01	749.00	↓ 4.21%
SES GLOBAL FDR	SES.F	21.42	-2.64%	20.785	25.00	↓ 14.32%
<b>Satellite and Component Manufacturers</b>						
The Boeing Company	BA	117.75	10.70%	69.20	120.38	↓ 2.18%
COM DEV International Ltd.	CDV.TO	4.13	-1.90%	2.83	4.35	↓ 5.06%
Lockheed Martin Corporation	LMT	127.50	2.60%	85.88	131.60	↓ 3.12%
Loral Space & Communications, Inc.	LORL	67.90	2.93%	51.91	85.84	↓ 20.90%
Orbital Sciences Corp.	ORB	21.62	23.12%	11.90	21.72	↓ 0.46%
<b>Ground Equipment Manufacturers</b>						
C-Com Satellite Systems Inc.	CMI.V	2.04	13.97%	0.60	2.10	↓ 2.86%
Comtech Telecommunications Corp.	CMTL	24.43	-1.09%	22.33	28.17	↓ 13.28%
Harris Corporation	HRS	59.77	2.66%	41.08	59.78	↓ 0.02%
Honeywell International Inc.	HON	83.22	2.79%	58.29	87.55	↓ 4.95%
ViaSat Inc.	VSAT	64.02	-1.23%	34.67	73.43	↓ 12.81%
<b>Satellite Service Providers</b>						
Gilat Satellite Networks Ltd.	GILT	4.97	3.97%	4.00	6.20	↓ 19.84%
Globecom Systems Inc.	GCOM	14.00	0.36%	10.11	14.91	↓ 6.10%
International Datacasting Corporation	IDC.TO	0.1850	-7.50%	0.16	0.25	↓ 26.00%
ORBCOMM, Inc.	ORBC	5.27	11.65%	2.97	5.51	↓ 4.36%
RRS at Global Communications Network Ltd	RRST	7.72	-4.22%	5.31	9.35	↓ 17.43%
<b>Consumer Satellite Services</b>						
British Sky Broadcasting Group plc	BSYBY	57.20	5.95%	45.74	57.49	↓ 0.50%
DIRECTV	DTV	59.80	2.43%	47.71	67.85	↓ 11.86%
Dish Network Corp.	DISH	45.68	-0.39%	30.29	49.44	↓ 7.61%
Globalstar Inc.	GSAT	1.15	81.10%	0.25	1.16	↓ 0.86%
SIRIUS XM Radio Inc.	SIRI	3.9750	7.72%	2.55	3.99	↓ 0.38%

INDEX	Index Value (Oct. 01)	% Change from Last Month	% Change Jan. 03, 2013
Satellite Markets 25 Index™	1,571.67	0.37%	23.24%
S & P 500	1,695.00	2.54%	16.15%

The Satellite Markets 25 Index™ is a composite of 25 publicly-traded satellite companies worldwide with five companies representing each major market segment of the industry: satellite operators; satellite and component manufacturers; ground equipment manufacturers; satellite service providers and consumer satellite services. The base data for the Satellite Markets Index™ is January 2, 2008--the first day of operation for Satellite Market and Research. The Index equals 1,000. The Satellite Markets Index™ provides a benchmark to gauge the overall health of the satellite industry.

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