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SATELLITE Markets & Research
Industry Trends, News Analysis, Market Intelligence and Opportunities

# Update on the Middle East Satellite Market

**By Peter I. Galace, Associate Editor**

Despite the ongoing impact of the Arab Spring protests and a dramatic re-ordering of political affairs still reverberating, the Middle East region remains a key growth area for commercial satellite industry.

This was the assessment of Gordon McMillan, Director of Government Services for global satellite network provider Inmarsat, who projected that the global government and military communications will rise to US$9 billion by 2018 with the Middle East becoming a key growth region for the commercial satellite industry because of the exponential demand for greater bandwidth.

**New services such as 3D will be driving demand for bandwidth in the MENA region.**(image courtesy of OSN )

"As military budgets come under increasing pressure, the commercial satellite industry fulfils an increasingly greater proportion of the communications needs of government and military customers," said McMillan, who spoke at Milsatcom Middle East held at Abu Dhabi on January 24, 2012.

McMillan said that in the future, fewer dedicated military satellite communications systems will be launched, and military forces will need to augment military systems with greater use of commercial satellite communications networks."Commercial satellite communication systems that are designed with military and government users in mind will provide these users with a greater degree of flexibility in how they fulfil their communications requirements, for land, sea and air operations.," he added.

**New Satellites for the Region**

Proof of the growing confidence on the continued growth of the satellite industry in the region is the number launches scheduled for 2012. Global satellite operator SES S.A. is set to launch this first quarter SES-4, a 20-kilowatt satellite with 52 C-band and 72 Ku-band transponders. SES-4 will have C-band beams that will serve the eastern hemisphere of Europe and Africa, full coverage of the Americas, and a global beam to support mobile and maritime customers. Four high-power, regional Ku-band beams will provide service to Europe, the Middle East, West Africa as well as North and South America with extensive channel switching capability between C- and Ku-band transponders for enhanced connectivity.

The new satellite is based on Space Systems/Loral's

*Continued on page 4*

## What's Inside



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From the Editor

# The Year is off to a Great Start

One month has passed in 2012 and we have already seen three major trade shows that bode well for the satellite industry. The year started January 8-10 with the annual Consumer Electronic Show (CES) in Las Vegas, Nevada. This year's CES was the largest in its history and accentuated the important role of the consumer sector in today's economy. It was the usual display of tablets, mobile devices and large screen TVs, but it also gave a glimpse into the future: ultra-tablets and ultra-definition TVs that will require much more bandwidth. The consumer market has been instrumental in the growth of the satellite industry in the past. It will be recalled that it was the explosion of Direct-to-Home (DTH) services in the 1990s that made satellite a "household" name all over the world. In this decade, the insatiable broadband bandwidth demands will be driving growth for satellite services.

In contrast to the glamour and glitz of CES, the Pacific Telecommunications Council (PTC) Conference in Honolulu, Hawaii held from Jan. 15-18, was a more subdued affair, but no less significant. Lou Zacharilla reports on the proceedings in his column on page 8. The PTC affirmed that there will be a dramatic increase in bandwidth requirements in emerging markets like the Asia-Pacific region, but current satellite capacity is inadequate to meet the growing demand.

Finally, the month ended with the WEST show in San Diego, California which focused on the military satellite communications market. There was much apprehension in past military shows on the looming budgets cuts in the defense sector. But at the WEST show, there is a bit more optimism, especially in the satellite sector, where analysts see less of an impact from the budgets cuts. See my report on page 22 for more details.

We have a full schedule of events to cover globally in 2012. We will be at every major satellite industry show and region this year in North and South America, Europe, Africa and the Asia-Pacific. We'll be at CABSAT Satellite MENA in Dubai this month and at the Satellite 2012 in Washington D.C. next month. At CABSAT, visit our booth at the Arena Hall, stand no. S-47.

Keep following us as we help you navigate through the industry developments and trends this year and beyond.

Virgil Labrador

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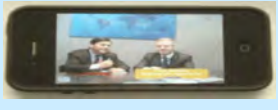

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*The Middle East Market.. From page 1*

1300 platform and designed to deliver services for 15 years or more. In a further show of confidence in the MENA region, SES moved its SES –3 satellite from its postiion in North America to the Middle East and South Asia in January.

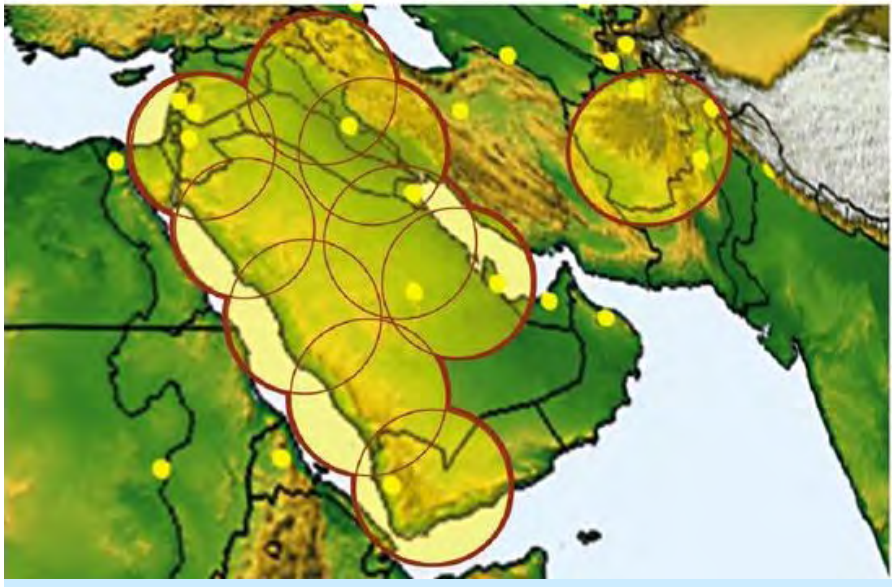
Al Yah Satellite Communications Company (Yahsat) will launch its second Yahsat satellite in early April from Baikonur. Yahsat 1B will be placed at 52.5° East on a geo-stationary orbit and will operate for no less than 15 years. It will provide broadband satellite communication, Internet and corporate data transfer services to military and civilian customers in the entire Middle East, Africa, Europe and Southwest Asia.

The first Yahsat satellite was successfully launched by Arianespace on April 22 last year, alongside Intelsat's New Dawn satellite. Both Yahsat satellites are based on Astrium's Eurostar-3000 models and carry Ka-band communications payload, a launch mass of 6,000 kg, and an electrical power of 15 kW.

Yahsat, a wholly owned subsidiary of Mubadala Development Company, the Abu Dhabi Government's investment arm, signed in August 2007 an agreement with a European consortium comprising of EADS Astrium/Thales Alenia Space to manufacture the two-satellite system worth US$1.66 billion.

The Yahsat venture is the latest phase in Abu Dhabi's strategy to become both a regional telecommunications and media hub. The move forms an important part of its plan to diversify its economy away from its current reliance on oil, under its 'Economic Vision 2030'.

The Gulf emirate of Abu Dhabi already has a majority stake in the region's Thuraya mobile satellite communications venture, while the Abu Dhabi government-owned Aabar Investments also holds a 32 percent stake in Virgin Galactic, the first commercial space flight initiative from British entrepreneur Richard Branson.



**The new Arabsat 5-C satellite launched last September 2011 will have steerable Ka-Band beams shown here in this coverage map of the Middle East. Ka-Band uses spectrum much more efficiently by re-using frequencies and is ideal for two-way broadband applications. (Image courtesy of ARABSAT).**

Eutelsat Communications is also set to loft W6A, a 40-transponder Ku-band satellite, in the third quarter of 2012. W6A, to be built by Thales Alenia Space, will enable a 50 percent increase in capacity operated at 21.5° East, where it will be located in geostationary orbit. W6A satellite will replace Eutelsat's W6 craft at a core neighborhood anchored for data, professional video and government services across Europe, North Africa, the Middle East and Central Asia.

In the meantime, Israel-based Spacecom Satellite Communications Ltd.'s Amos 5 communications satellite began commercial operations during the last week of January after it was lofted on December 11 last year after lengthy delays.

Amos 5 is Spacecom's first satellite that was not built by Israel Aerospace Industries Ltd., a former Spacecom shareholder, but was built instead by Russia-based JSC Information Satellite Systems-Reshetnev Company, which had to reportedly pay fines of $13.5 million for late delivery from the Amos 5's US $200 million cost.

Amos 5 is aimed at Africa's emerging satellite services market, taking position at the new 17 East location. The satellite features a fixed pan-African C-band beam and three steerable Ku-band beams – all covering Africa with connectivity to Europe and the Middle East and supporting multiple transponders in both C-band and Ku-band.

Together with the Amos 2 and the Amos 3 satellites co-located at Spacecom's 4° W orbital "hot spot," the Amos 5 satellite will give the company's customers coverage over many of the world's fastest growing and highest-demand satellite markets in the Middle East, Central and Eastern Europe, Central Asia and Africa. With an expected lifetime of 15 years, Amos 5 sports 18 Ku-band and 18 C-band transponders, providing a variety of coverage, including Direct-to-Home) DTH broadcasting services.

Also on October 13 last year, Arab Satellite Communications Organization (Arabsat) successfully launched Arabsat 5C, its third satellite of the fifth generation, from French Guyana in South America by the Ariane-5 Rocket. Arabsat-5C is a multi-mission satellite which now provides satellite capacity in both C-band and Ka-band frequencies at 20° E, for a wide range of satellite communications services over a coverage area including the whole of Africa and the Middle-East. The satellite is based on Astrium's Eurostar E3000 product line, with a launch mass of 4770 kg and a spacecraft power of 10 kW at the end of its 15 year design lifetime.

Arabsat owns an integrated fleet of satellites that provides all communications and TV satellite broadcasting services with a full pack- up in orbit on all Arabsat positions 20, 26 and 30.5 degree East.

**Middle East Pay-TV Springs to Life**

The Middle East and Africa (MENA) have the fastest-growing pay-TV markets in the world with subscription rates expected to treble between 2011 and 2015. In 2000 there were just over 2.5 million pay TV subscribers across the region. But by the end of 2010 that total had more than trebled to 9.2 million and expected to have hit the 9.6 million mark by the end of 2011.

According to a recent research from Informa Telecoms and Media, record numbers of households across the Middle East and Africa are signing up for pay-TV and subscribers will surpass 10 million this year.

"Until now, pay TV has been very much targeted at affluent demographics, either wealthy locals or well-paid foreign workers" says Adam Thomas, Informa's Media Research Manager. "But services like Al Jazeera Sport are increasingly putting the cost of pay-TV within the grasp of the mass market. If you add to that the Arab Spring movement, with one of its aims being to close the income disparity gap, then you have a situation that is increasingly positive for pay-TV."

A Pyramid Research study confirms the healthy growth of pay-TV in the Middle East and predicts that subscription rates are expected to treble between 2011 and 2015. The study said subscriber numbers will achieve a compound growth rate of roughly 11 percent a year over the next five years.

**Satellite TV is ubiquitous in the Middle East. Most of the channels are delivered Free-to-Air (FTA) and signal piracy remains a big problem in the region.**

Revenues for the sector will double, while overall penetration will achieve a compound annual growth rate of 9 percent, with pay-TV services reaching 16 percent of homes in the region by 2015.

Many in the pay-TV industry have long been pointing out that still more "aggressive" increases were possible if certain barriers to growth —including weak "last mile" infrastructure, a lack of competition and a lack of content — were overcome.

Although pay-TV services currently experience high costs and limited reach in the region, satellite experts point out that infrastructure problems can be sidestepped by mobile networks replacing fixed-line networks in some areas.

"The lack of fixed infrastructure and the dominance of mobile access in most African countries constitute a huge opportunity for mobile operators to become the main pay-TV providers in Africa in the long term," says Mehdi Ben Said, senior analyst of Pyramid.

**TV via Satellites Dominate**

Satellite, both pay and free-to-air (FTA), remains the dominant platform in the region and there has been only limited cable and IPTV activity although IPTV, in particular, is growing fairly quickly, although from a very low base. Some fiber upgrades are being undertaken and there will therefore be pockets of IPTV-positive infrastructure, where the technology will thrive. But, in general, broadband penetration in the region remains low. IPTV is therefore restricted from even greater progress, both by this lack of broadband penetration and also by the fact that where broadband is in place it is not always suitably robust to facilitate IPTV provision.

Currently, there are over 500 FTA channels broadcasting on Arabsat, NileSat and Eutelsat. For the price of a low cost receiver, households can tune into FTA services. Operating costs are covered by various governments and private groups who are entering the market strategically; as a result, they may currently not be viable from a financial point of view. As a result of the plethora of FTA services in MENA, the adoption rate for satellite TV is upwards of 90%.

There are also fundamental issues to

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address, like how to get the sector to be run on a fully commercial basis. Much-needed consolidation among the main pay TV platforms has finally taken place, resulting in the creation of OSN, a subscription television service in the Middle East and North Africa. It has added some attractive premium content to its roster, but the most significant omission from its line-up is the most sought after sports content, particularly soccer.

The pay-TV industry is also confronting signal piracy, which may account for lost revenues of $500 million to pay-TV operators in the Middle East and North Africa according to news reports. As early as February last year, it is estimated that across the Arab world, around US$ 500 million is lost across the Arab world to those siphoning premium TV content without paying those who own the rights to legally distribute it, according to media consultant Ali Ajouz.

Industry sources have estimated that two million subscribers in the Arab world are lost to signal theft, with around 56,000 commercial operations redistributing pay-TV signals illegally. In the meantime, despite the recent social and political turmoil, rapid conversion to digital TV continues in the Middle East and Africa, according to Digital TV Research. Report author Simon Murray said digital penetration will reach 81 percent of TV households by 2016 and eight countries will achieve 100 percent penetration with Israel becoming the first to reach it. "Another bonus for the region's TV industry is the high birth rate, with nearly 20 million TV households to be added between 2006 and 2016," he said.

***"...digital penetration will reach 81 percent of TV households in the Middle East by 2016 and eight countries will achieve 100 percent penetration ..."***

**-Digital TV Research**

**Strategic Tie-ups**

In the meantime, GlobeCast and Arabsat have announced in January that the Global Arabic Bouquet (GAB), a grouping of premium Arabic channels from the Arab States Broadcasting Union (ASBU) available anywhere in the world, is now located on the 5C satellite over Africa. GlobeCast, Arabsat and ASBU are partners for the worldwide distribution of the GAB providing all the technical services required for end-to-end delivery. The terrestrial delivery is done from Amman by Jordan Media City. This service via ARABSAT replaces the bouquet's previous distribution.

Since the launch of their partnership in 2004, GlobeCast, Arabsat and ASBU have expanded the Global Arabic Bouquet's potential viewership and footprint, offering a single global coverage to ASBU members.

Globalstar, Inc. announced in the last week of January that it has signed a letter of intent with Shahad Al Sahra Trading Est. (SAS), for SAS's ownership and operation of a satellite gateway ground station located in Saudi Arabia.

The gateway, which is already constructed, will provide Globalstar mobile satellite voice and data services to all of Saudi Arabia and throughout parts of the surrounding Middle East region. The transaction would also provide SAS as the independent service provider, with access to one of the world's largest remote petrochemical exploration markets.

Belgium Satellite Services and Intersat Africa Limited have also recently forged a strategic tie-in to expand Into the Middle East and Africa. Intersat currently offers Internet via satellite connectivity to major organizations, government institutions and the private sector through the African continent and the Middle East. The company has invested in new technologies to make service delivery more efficient and reliable.

Thuraya, the Dubai-based mobile satellite operator, signed in January a service partner agreement with Africell Holding, a subsidiary of Lintel Holding. The partnership will allow Africell, one of Africa's GSM operators, to provide Thuraya's data and voice services in Gambia, Sierra Leone and the Democratic Republic of Congo.

Although Middle East oil exports are expected to decline a little from US$793 billion in 2011 to US$725 billion in 2012, according to the Institute of International Finance, the still high level of revenues will continue to spur government spending for infrastructure development. It said that years of US$ 100 oil prices have already left Gulf States in the pink of economic health and Gulf economies which grew 7 percent despite global and regional turmoil in 2011 will see a slightly lower growth rate in 2012. Many economists believe Gulf States will continue to be persuaded to invest in big ticket projects such as telecoms development, which augur well for the satellite industry.

**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

# "Everything is Illuminated"

**By Lou Zacharilla**

What is the difference between the Mid-Pacific Conference Center in Honolulu, Hawaii and the Congressional Ballroom of Renaissance Hotel in Washington in mid-March? 8,000 miles, 60 degrees (F.) in daily temperature and the same numerical gap in the respective systolic and diastolic rates of the people working in them.

Despite the familiar sound of a snicker when you announce to people that you are attending the Pacific Telecommunications Council conference in the Aloha State for work, PTC happens to be one of the hardest-working conferences in the telecommunications industry. Perhaps that is because we telecom types take it over every for four days each January.

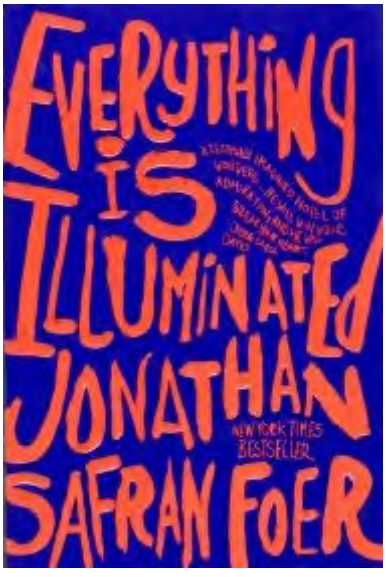
Yet because of the presence of so much pleasure, it has also become highly conducive to expansive and strategic thinking about our industry. Goodness knows, an industry whose ultimate plumbing faces the universe needs to think expansively now and then.

As the Society of Satellite Professionals International prepares to celebrate its 25th Gala, which includes its second Stellar Awards and Reception, held this year at the Renaissance Hotel on 13 March, I thought it would be fun to gather a handful of thought leaders in Hawaii and use a Sunday afternoon workshop at PTC to conduct a think tank. The goal was to begin to identify areas ripe for innovation and to take a look at the needs of Asian markets and landscapes.

I asked Globecomm's Steve Yablonski, Glen Tindall of SES, Gary Hatch, CEO of ATCi and David Ball, an industry veteran and now with upstart Australian company Newsat to leave their Powerpoint slides home and come unprepared. No ties allowed, of course.

In his book, *Everything is Illuminated*, Jonathan Safran Foer writes that "the great advances are made not by individuals so much as by environments. It is not a coincidence that innovations tend to come in bundles."

There is no question that the satellite industry contains environments that have been active with innovation. While persistent innovation is not necessarily always apparent, it is found. Or at least, the opportunity to be innovative is present because the challenge to satisfy complex markets will never go away. We need to innovate, in other words, to persist.




Among the areas of note were that each person agreed that the satellite industry needs to break free from an "graying industry" image and begin to attract talent and ideas that will put a spark into it. Upon closer drilling, however, what we learned was that we may have mistaken "old" for cautious. The two usually are seen together, but as Newsat's Ball said, "Until we are able to increase the number of launches, our planning will inevitably revolve around a product that takes years to build and, when in service, remains in service with very limited capability to change for nearly two decades."

***"…In his book, Everything is Illuminated, Jonathan Safran Foer writes that 'the great advances are made not by individuals so much as by environments. It is not a coincidence that innovations tend to come in bundles'…"***

Yablonski added, " We need to think differently about how we solve problems. We need more stuff in the tool kit." He added that the industry is getting it with Ka-band.

The innovation needs to come on the ground, said Hatch. "In areas like product development, embedding new media into the teleport value chain and leveraging our unique ability to reach distant shores."

Tindall picked up on that. He noted that SES has embarked on a large investment program which will include nearly 3B Euros in all. Eighty-five percent of the capacity will be destined for the developing markets in Asia, Latin America, Africa and the Middle East, which are key growth markets.

"The demographics of Asia, with large volumes of customers who are poorly served in terms of broadband, create a huge market opportunity for a high-volume high-bandwidth consumer product. I suspect that the market may develop somewhat the way that the DTH or cellular market has in India,

with high demand coupled with intense competition driving market prices to very competitive levels."

In the end, all roads led to a discussion of broadband. Perhaps the most important person in the room, or persons, were Mark Dankberg, whose ViaSat-1 project looms large in this industry's consciousness, and Suvi Linden, the former Minister of Communications of Finland. An increasingly unknown politician outside of the circles of the intelligent community movement and the U.N., where she serves as a commissioner on the Digital Development Commission, Madame Linden was responsible for pushing forward in Finland the world's first legislation which declared broadband to be a human right. The law then mandated a minimum a one megabit connection to every single home, building and institution in the country.

This will serve to put the world on notice about the importance of broadband, I suggested. The rest jumped onboard. Globecomm's Yablonski tied it back to Ka-band systems. "I believe that these systems will prove that delivering broadband by satellite is effective at least in a fixed rather than mobile delivery environment. These systems will make it possible to deliver broadband anywhere. The simplified network architecture, along with the higher capacity (lower cost per unit bandwidth) satellites will allow our services to be cost-effective for data delivery over a larger area than current systems.

David Ball, CTO of Newsat, whose company will be launching a Ka-band satellite, nodded. It looked a lot like the future to him.

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# Interview with Patrick Rayermann

**At the West show in San Diego last month, we caught up with Patrick Rayermann, the newly appointed Senior Director for Strategy and Development for Orbital Sciences Corporation. Rayermann joined Orbital in November 2011 after 30 years of service in the US Army, where he retired as a full colonel. His final military assignment was the chief steward of Department of Defense's (DoD) architecture for satellite communications and to serve as the Chief of Staff of the DoD Executive Agent for Space (EA4S) Staff.**

**He spoke frequently at industry trade shows on the military market for satellite communications and in his first interview since he joined private industry, he shares with *Satellite Executive Briefing* his views on the transition from the government to the private sector and his perspective on the launch services market, among others. Excerpts of the interview:**

**Patrick Rayermann**

*You retired from active duty after over 30 years of service in September 2011 and you assumed your new position in industry just three months ago. How's the transition been for you from the government to the private sector?*

I've been looking forward to the transition for some time, wanting to try my hand in the private sector. I was part of the broader government machine basically since I started nearly 40 years ago at the Jet Propulsion Laboratory. So far it's comfortable. It's largely what I expected. It's fun to be part of an organization like Orbital that really wants to apply its strengths in agility and rapidity of response to meeting government needs.

*Talk about your new position as director of strategy and development—do you do strategy just for the government sector or for both government and commercial businesses?*

The corporate strategy group is a relatively new group at Orbital. Led by Mike Hamel, Orbital's Senior Vice President for Corporate Strategy and Development, our group on the corporate staff incorporates everything from government relations to corporate communications to strategic planning. I was primarily hired to help Orbital better understand and better communicate with national security customers like the Department of Defense and intelligence agencies. There may be some opportunities as well for me to work with the commercial sector in the future but that is not my initial focus.

*So, what's the mission of this new strategy group? What are your goals in the next few years?*

We are working to develop Orbital's longer-term strategic approach, as well as coordinating a shorter-term customer engagement plan to be sure the company's capabilities are well-known throughout the industry. Longer-term, Orbital must be well positioned for business opportunities on a horizon of three to five years and before they are actually right on top of us with a request for a proposal or a solicitation for bid. The intent is to allow Orbital to prepare over a multi-year period for business opportunities that the company's innovative, reliable and cost-effective solutions will benefit the customer. This may entail the refinement of a product or at least better understanding of the cost and effort it will require to do so. This process may also evolve into establishing relationships with industry partners that will allow us to formulate an integrated solution that we might not been able to offer otherwise.

*For those who are not familiar with Orbital's business, what percentage of its business is commercial and military/ government?*

We have a very favorable balance in our overall business, with about a third of our revenues derived from defense and intelligence customers, a third from NASA and other civil government customers, and another third from the commercial market, primarily for communications satellites.

*So it's a very even distribution?*

Yes, and we like the balance between the three major markets, so that we are not overly reliant on any one particular segment or business area.

*As you know, the theme here at the West show seems to be the impending budget cuts to the military, how will that affect Orbital's business?*

The potential for budget reductions in the coming years is very real. One of the reasons Orbital hired me was its assessment that if the company is going to meet its growth targets, it needed to gain a greater share of the defense segment. Our whole team believes that not only do we have a real opportunity to grow, but that we can definitely be part of the solution for the "vicious cycle" of excessive development timelines, cost-overruns, the deployment of outdated technology, and a resistance to innovative new business models, such a hosted payloads, that the industry has seen over the past decade or longer. Orbital offers a more "virtuous cycle" of innovative approaches to space systems development, short cycle times under which we execute our programs, and disaggregated architectures that are more resilient than "single point of failure" large systems; all of which lead to a better cadence of deploying new technologies and are manageable investments on the part of our customers.

*I know you've only been on the job for three months but how do you view the launch industry, it seem to be getting more competitive with more new players coming on board?*

Competition is good and Orbital has never been afraid of competition. But the primary launch vehicle competition going on in the U.S. right now is in the market for larger-class rockets that support government missions. As you probably know, Orbital focuses on the small- and medium-class of rockets. Our fleet is currently being headlined by the development of Antares, a Delta II –class replacement, which we will introduce later this year for NASA's cargo delivery missions to the International Space Station.

In addition to the domestic market, we are certainly aware of the growing capabilities in places like India and China, as well as lower-cost Russian vehicles. However, our focus is on the U.S. market and we will remain very competitive in each of the classes in which we offer our products and services.

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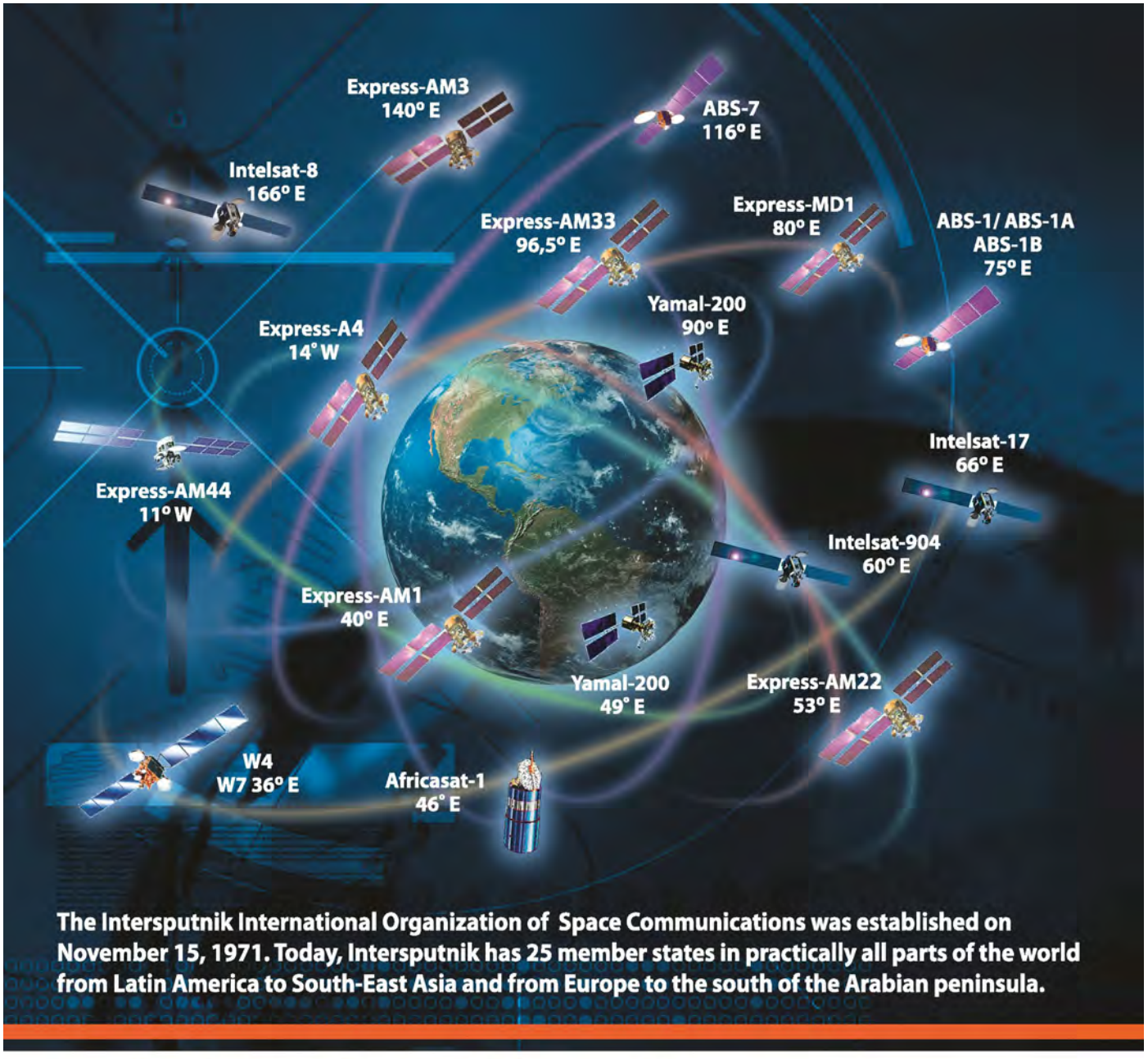


Intersputnik's core business is to make satellite capacity available to telecommunications operators, broadcasters and corporate customers under agreements with partner operators and to offer full-scale services via its subsidiary Intersputnik Holding, Ltd. for the purpose of installing and operating satellite telecommunications networks. Such full-scale services include access to internet backbones, uplink services, switching and digital platform services as well as supply and integration of ground equipment. The Russian satellite telecommunications operator Isatel LLC, which is part of the Intersputnik Holding, Ltd. group, offers Russian and international telecommunications operators and corporate customers the required technological platform for the establishment of satellite telecommunications networks and provision of telecommunications services based on this platform.

Currently, we are offering the capacity of telecommunications satellites located in the geostationary orbit from 11° West to 166° East. One of our key partners is Russia's domestic operator – the Russian Satellite Communications Company – that owns a fleet of up-to-date Express-series spacecraft. Also, Intersputnik is the official distributor of satellite resource belonging to the European operator Eutelsat and the resource of the Africasat-1 satellite owned by the Asian operator Measat. We provide service using the resource of the global systems such as Intelsat, SES World Skies, Telesat, have long-lasting partnership with the Asian operator «Asia Broadcast Satellite» and cooperate with other regional and domestic satellite telecommunications operators.

Intersputnik distinctive feature and main advantage is that it is an all-purpose supplier of satellite capacity and technological solutions. This is why Intersputnik's government and private customers in over 40 countries have a very wide choice of satellite resources in various systems operating on the global market and can receive all kinds of information from a single source.

Intersputnik's principal asset is its long-standing experience while the availability of its own orbit and spectrum resource guarantees its successful development. Using this resource, Intersputnik is implementing projects aimed at procuring and deploying spacecraft in its own orbital positions to provide service in the most rapidly developing regions with growing demand for satellite telecommunications services.

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# Products and Services Market*Place*

**A guide to key products and services showcased at CABSAT SATELLITE MENA 2012 exhibition in Dubai, UAE from February 28-March 1.**

## ARABSAT
### Arena Hall stand no. S-F1
### www.arabsat.com

**Arabsat** has recently succeeded in executing its plans to transfer its telecommunications network services from Arabsat-2B satellite to its new Arabsat-5C satellite at 20 degrees East which was launched successfully in September 2011.

The new satellite carries telecommunications networks for the Arab States and the African continent and private networks operating at Ka-band in addition to Direct To Home bouquets transmitted in C-band to the African continent.

## ATCi
### Arena Hall stand no. S-51
### www.atci.com

**ATCi** enhances its customers' opportunity for profit by providing custom global satellite communications systems and services. The company is committed to delivering innovative technologies to meet the emerging needs of cable television, corporations, government, educational institutions and small- and medium-sized enterprises. ATCi is headquartered in Chandler, Arizona with operating sales offices in North America and China. For further information on ATCi products and services, please call +1-480-844-8501.

## Cobham Tracstar
### Arena Hall stand no. S-B36
### www.cobham.com/tracstar

**Cobham TracStar Land Systems** is an international provider of mobile satellite communications technology to Government (military and civil), Commercial Media, Energy and Mining, and Enterprise markets. We have a comprehensive offering of products and services including Comm-on-the-Move, Comm-on-the-Pause, and Man-Packable antenna systems delivering video, data and voice connectivity worldwide.

**Tracstar LVT Series Terminal**

The TracStar LVT Series of Manual Backpack Terminals provides a heavy duty, ruggedized, self-contained mobile system designed for easy portability and field-swappable Ku, Ka and X band operations. Pictured here is the LVT 750P8, with an 8-segment carbon fiber reflector and tripod. BUCs, LNBs, and manual pointing tools for smartphones are also available.

For more information, contact Cobham at +1 (407) 650-9054 or sales@tracstar.net.

## Dev Systemtechnik
### Hall Sheikh Saeed 2 Stand no. S2-18
### www.dev-systemtechnik.com

**DEV Systemtechnik** is now shipping the first models in its new CFP (Core Function Products) series, which offers up to 70% cost savings for cable and satellite headends by reducing devices to their core features. Among the first DEV CFP models available are bi-directional RF switches, the DEV 1228 (up to 4x1:8) and the DEV 1236 (up to 2x1:16).

Like all DEV CFP models, the new RF switches offer the same superior RF signal transmission quality for which DEV is known worldwide. DEV's CFP product series can be offered at substantially lower cost than the standard full-featured versions of DEV products because CFP units come without all the extra power supplies, alarm, monitoring, and sensing features provided in DEV's standard feature-packed top-of-the-line professional models. DEV first unveiled its CFP series at the International Broadcasting Convention (IBC 2011).

## Gazprom Space Systems
### Arena Hall stand no. SK-31
### www.gazpromspacesystems.ru

**Gazprom Space Systems** (formerly Gascom) is a private commercial, non-governmental satellite operator based in Russia. The main shareholder is Gazprom, one of the largest energy companies in the world. Gazprom Space Systems' orbital fleet consists of three mid-

size satellites under the Yamal brand. Gazprom Space Systems' ground infrastructure consists of four teleports in the city of Moscow and in the surrounding Moscow region, which are connected to the main telecom backbones by means of fiber-optic lines. The company also has a wide network of earth stations across Russia.

In Russia Gazprom Space Systems is not only a satellite operator but also a service provider and system integrator. Within Russia, along with satellite capacity, it provides satellite services including satellite links, video distribution, Internet access and network development and management.

Gazprom Space Systems has a long-term development program. Having rights to five orbital slots, the company plans to expand the constellation of GEO Yamal satellites thereby creating good development opportunities for the customers.

## O3B Networks
### Arena Hall stand no. SH-13
### www.o3bnetworks.com

**O3b Networks Ltd** is building a next-generation network that combines the reach of satellite with the speed of fiber. O3b's groundbreaking services will enable emerging market telcos and ISPs to make the internet a truly global and universal experience.

O3b stands for the 'Other 3 billion', a reference to nearly half of the world's population living in markets that are not adequately served with broadband internet access or mobile phone services.

With world-class financial and operational support from investors, O3b is creating a global internet backbone to serve several billion consumers, businesses and other organizations in 177 countries. O3b became fully financed in November, 2010 and Arianespace will launch the first eight satellites in the first half of 2013 with a Soyuz launcher from French Guyana.

The O3b satellite constellation will deliver on its promise to its customers by enabling them to cut down on the cost of transmission. While traffic in urban and sub-urban areas justify the transmission costs of fiber optic and microwave transport networks, the same cannot be said for rural and remote areas.

Getting capacity into difficult terrain is the next major challenge faced by most mobile operators as they try to extend their networks further out of the competitive urban areas in search of new subscribers and profitability. O3b Networks can help facilitate access to new markets.

## Work Microwave
### Arena Hall stand no. SF-33
### www.work-microwave.de

**WORK Microwave** will unveil a range of innovative new solutions, product updates, and technology advancements at CABSAT 2012.

WORK Microwave is a well-known standard in the industry for its highly reliable frequency converters. At CABSAT 2012, the company will showcase its wide range of IF, block, and monopulse tracking converters (S to Ka-band). WORK Microwave will also display its portfolio of modems, modulators, and demodulators, including a live demonstration of the company's enhanced DVB-S2 IP-Modem SK-IP where an interactive test-bench setup will help attendees experience firsthand the company's core OptiACM functionality.

Additionally, the WORK Microwave team will share some exciting news about upcoming technologies that will be launched this year, including the combined data and video modem using the innovative DaVid technology.

New Generation DVB-S/S2 Modulator

**CABSAT 2012 Debut — New Generation DVB-S/S2 Modulator**

The new-generation DVB-S/S2 modulator by WORK Microwave with 50-180MHz IF and/or L-Band (950-2150MHz) output provides high flexibility for uplink station design. It introduces multistream technology, transport stream over IP (TSoIP), and a new, powerful user interface.

Equipped with multistream technology, the modulator can aggregate up to six transport streams into a single DVB-S2 modulated multistream. This reduces the overall equipment need while increasing the efficiency of the transponder use. TSoIP, in addition to the ASI interface, allows users to take advantage of existing network infrastructure to transport video and data — a functionality that's becoming increasingly in demand as IP backbones become more robust and stable. This new, powerful, easy-to-use, and intuitive user interface supports easier access to all the new features introduced with this product update.

The modulator is also available with an integrated RF upconverter in the desired operating frequency and as custom tailored versions, per WORK Microwave's standard offer, to meet stringent user requirements specific to operating environments.

# Industry*Briefs*

**Major industry news and developments**

## MERGERS & ACQUISITIONS

### Abertis Sells Half its Stake in Eutelsat

Spanish infrastructure firm **Abertis** sold about half of its 32 percent stake in European satellite operator **Eutelsat** for € 981 million euros (US$ 1.26 billion).

Abertis said the move was aimed at decresing its debt and to free up capital for more investsments. Reports said that Abertis is planning to increase its investment in Spanish satellite operator Hispasat. Abertis currently owns 33.39 percent of Hispasat while Eutelsat owns 27.7 percent of the company.

Abertis said it has a six-month lock-up period on its remaining 15.35 percent share of Eutelsat.

### Thales to Close Acquisition of Tampa Microwave

**Thales Group** expects their acquisition of privately held RF and microwave developer **Tampa Microwave** to close in early 2012 following regulatory approvals.

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Thales initially signed the agreement to acquire Tampa Microwave for an undisclosed amount in early December.

Tampa Microwave will operate as a subsidiary of Thales Communications – a U.S.-based Thales company that operates under a proxy agreement with the U.S. Department of Defense. The business will maintain its location in Tampa, Fla., and the current Tampa Microwave management team will remain unchanged, according to Thales.

"The acquisition provides Thales with the capability to support DoD initiatives for wideband technology—voice, video, and data—at the tactical level," said Michael Sheehan, President and CEO of Thales Communications.

### ORBCOMM Acquires PAR Logistics

**ORBCOMM Inc.,** and **PAR Technology Corporation,** a provider of hospitality technology and services, announced that they have entered into a definitive agreement under which ORBCOMM will acquire the assets of PAR's subsidiary, PAR Logistics Management Systems (PAR LMS).

PAR LMS is a provider of advanced solutions for monitoring transport assets and cargo in the transportation and distribution industries. The acquisition of PAR LMS adds new vertical markets to ORBCOMM and will enhance ORBCOMM's leadership position in providing efficiency, predictability and quality to cold chain management. The combined platform supports ORBCOMM's growth strategy by expanding its satellite, terrestrial and dual-mode offerings and advancing sales growth in these attractive business segments., according to the company

## EXECUTIVE MOVES

### Scott Sprague Appointed ABS COO

Hong Kong-based satellite operator **Asia Broadcast Satellite** (ABS) announced the appointment of **Scott Sprague** as Chief Operating Officer (COO). In this new position, Sprague will be responsible for managing the global sales, marketing, and operations of value added services.

Prior to joining ABS, Sprague was Senior Vice President, Global Sales for SES. During his tenure at SES, he was responsible for global revenue, led a sales team and built a portfolio of businesses for media, enterprises and customers around the globe.

Sprague held various senior management positions including: Vice President of Enterprise Sales from

**Scott Sprague**

KPNQwest, Vice President of Channel Management for Infonet Service Corporation and General Manager for AT&T. He oversaw functional activities, sales and revenues.

### MEASAT Appoints New VPs

Malaysian satellite operator **MEASAT Satellite Systems** announce the appointments of **Zainudin bin Abdul** as Vice President, Satellite Engineering and Operations and **Yau Chyong Limand** as Vice President – Business Development and Strategic Planning.

In his new role, Zainudin will be responsible for overseeing the management of the fleet of MEASAT satellites. Zainudin has been with MEASAT since 1993. Since joining the company, he has taken on a number of roles related to the design, implementation and operation of the MEASAT fleet. Prior to his new appointment, Zainudin was MEASAT's Director for Fleet Planning and Special Projects.

Yau will be responsible for identifying and developing opportunities for the growth of the business. Yau has been with MEASAT since 1996. With more than 15 years experience in the satellite communication industry,

Yau brings experience in both space and ground segments; video broadcasting and DTH; VSAT and mobile trunking services. Prior to assuming this role, Yau was MEASAT's Senior Director of Sales and Marketing.

## Chris Moore Joins Horizon Globex as Director of Sales

**One Horizon Group Plc** announced that it's wholly-owned subsidiary **Horizon Globex** has appointed **Chris Moore** as the Director of Sales. Moore will lead the sales of the group's Horizon solution, which is marketed to network operators and service providers in the satellite, fixed and mobile markets worldwide.

Chris Moore

Moore joins Horizon Globex with around 15 years' experience in telecommunications and IT. Most recently, he was Sales Director at Inmarsat, where he led channel sales activities across key markets such as maritime, government, media, aeronautical, utilities and oil and gas. Prior to that, he worked for Crane Telecommunications as an Account Manager and Product Marketing Manager.

## IDC Executive Chairman Resigns

**International Datacasting Corporation** announced that **Adam Adamou** has resigned as Executive Chairman of the Corporation last Jan. 18 as IDC continues to focus its attention on its existing business units while deemphasizing its business acquisition strategy previously announced in December 2010.

Adamou will continue to serve IDC as a director and Chairman of the Board, according to the company.

Frank Ruffolo, IDC's lead director, stated "we would like to thank Adam for his work as our Executive Chairman and we look forward to working with Adam in his continuing role as a director and Chairman of IDC as we focus on IDC's core business strengths".

## LightSquared Appoints News CFO

**LightSquared**, a wholesale carrier building a nationwide wireless broadband network announced the appointment of telecommunications veteran **Marc Montagner** as chief financial officer.

In this role, Montagner will report to Sanjiv Ahuja, LightSquared's chairman and chief executive officer, and will be responsible for the company's daily financial operations and will oversee investor and bondholder relations.

Marc Montagner

Montagner will also leverage his experience as executive vice president, sales, marketing and strategy for SkyTerra, LightSquared's predecessor company, where he worked on the regulatory, technical and business issues associated with repurposing SkyTerra's satellite spectrum for terrestrial use. His nearly 25 years of experience also includes working for companies such as France Telecom, Morgan Stanley, Sprint Nextel and Banc of America Securities.

Prior to joining LightSquared, in addition to his role at SkyTerra, Montagner was managing partner of Dupont Circle Partners, a mergers and acquisitions advisory firm specializing in the media, technology and telecommunications industries.

Previously, he was managing director and co-head of the Global Telecom, Media and Technology Merger and Acquisition Group of Banc of America Securities where he advised a number of companies during acquisitions.

## Digital Globe Appoint VPs

Satellite imaging company **DigitalGlobe** appointed **Marcy Steinke** as its senior vice president of government relations and **Tim Hascall** as its senior vice president of operations.

Steinke, a retired U.S. Air Force colonel, previously served U.S. Presidents George W. Bush and Barack Obama as director of the White House Operations Directorate. Steinke will be responsible for enhancing the company's ties with key leaders throughout the U.S. government and promoting DigitalGlobe's EnhancedView program to the company's customer base in the government sector.

Hascall, a former intelligence officer in the U.S. Marine Corps, previously served as division president at TriZetto, an enterprise software company. His new role will involve enhancing the company's operational capabilities to support growth. Both Steinke and Hascall will report to DigitalGlobe President and CEO Jeff Tarr.

## Olivier Promoted to President and CEO of MTN

**MTN Satellite Communications' (MTN)** board of directors announced the promotion of its current President and COO **Errol Olivier** to President and CEO.

Prior to joining MTN, Olivier served as president and CEO of Broadpoint and president and COO of CapRock Communications.

In addition, MTN announced that Board Chairman Joe Wright was promoted to Executive Chairman of the Board. Wright is currently a senior advisor at Providence Equity Partners and Chart Capital Partners. He previously served as chairman of **Int**elsat.

# 100 Million Hybrid STBs to Ship by 2015

**Scottsdale, Ariz., January 24, 2012**-- Hybrid set top boxes are a fast-growing segment of the worldwide set top box market. These boxes include a TV tuner and an Internet connection. It's similar to hybrid vehicles that combine a gasoline engine with an electric motor. Hybrid STBs are appearing in all service categories and new usage models and applications have provided momentum. As television services begin employing applications that are Internet-connected, we see hybrid set top boxes emerging as a key growth driver for the global set top box industry. New In-Stat research forecasts that 100 million hybrid STBs will ship in 2015.


"As the STB industry continues its forward march, the next logical iteration is for the set top box to enhance and expand traditional TV-related services by permitting access to content from the Internet, or from Internet-like web services that provide a 'walled garden' of authorized content," says Gerry Kaufhold, Research Director. "By combining traditional TV services with 'enhancements' that come in via broadband, content owners and service providers think they can successfully compete with all the emerging over-the-top approaches."

Some of the research findings include:

- Over 23 million hybrid STBs will ship in North America in 2012
- The Asia Pacific annual revenue will approach $1.5 billion in 2015
- Satellite hybrid STBs will represent 58% of the hybrid STB market in 2013

Recent In-Stat research, *Worldwide Hybrid Set Top Boxes* (#IN1104957ME), provides definitions for low-end, mid-range, and high-end hybrid STBs, and presents trends for hybrid STBs in six geographic regions. Hybrid STBs are forecast by region for cable, IPTV, satellite, and digital terrestrial STBs. The worldwide summary includes trend lines by category and by region.

# Two-Thirds of US Households Now Have HDTV

**Durham, North Carolina, January 4, 2012**--New consumer research from Leichtman Research Group, Inc. (LRG) found that 69% of households in the United States have at least one high definition television (HDTV) set -- up from 17% in 2006. Over the past five years, 52% of US households adopted HDTV.

In addition, 48% of HDTV households have more than one HDTV. Overall, about one-third of all US households now have multiple HDTV sets -- up from about one-sixth of all households two years ago, and 4% five years ago. Yet, about 45% of TV sets in HD households, and close to 60% of all TV sets in the US, are not HDTVs.

These findings are based on a survey of 1,302 households throughout the United States, and are part of a new LRG study, *HDTV and 3D TV 2011*. This is LRG's ninth annual study related to HDTV.

Other findings include:

- 85% with annual household incomes over $75,000 have an HDTV -- compared to 67% with annual household incomes of $30,000-$75,000, and 48% with annual household incomes under $30,000
- Mean reported spending on an HDTV set was about $940 -- 23% less than two years ago, and about half the reported spending five years ago
- Among those getting HD programming from a cable, satellite, or Telco TV provider, the perceived mean number of channels of HD programming is 75 -- up from 53 two years ago, and 28 five years ago
- Less than 3% of all US households currently have an HDTV set that is 3D-capable -- and 45% of this group do not watch any content in 3D
- Nearly 80% of adults in the US have heard of 3D TV -- of those who have heard of 3D TV, 5% are very interested in getting a 3D TV
- 21% of all households purchased a new TV set in the past 12 months, and 19% of all households plan to purchase a new TV set in the next 12 months

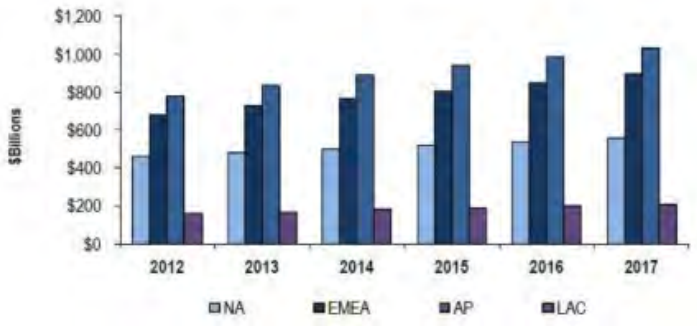
"In just the past five years, over half of all US households have adopted HDTV, bringing the total to nearly 70% of all households having at least one HDTV set" said Bruce Leichtman, president and principal analyst for Leichtman Research Group, Inc.

# Global Telecom Revenues to Reach US$ 2.7 Tril.

**Hartford, Conn., January 30, 2012**--The global telecommunications industry continues to expand as spending by consumers and businesses for wireless services fuels industry revenue growth, says a new market analysis report from The Insight Research Corporation.

According to the new industry market study, telecommunications services revenue on a worldwide basis will grow from US$ 2.1 trillion in 2012 to US $2.7 trillion in 2017 at a combined average growth rate of 5.3 percent.

Figure I-1 Global Carrier Revenue by Region, 2012-2017 ($Billions)




"The 2012 Telecommunications Industry Review: An Anthology of Market Facts and Forecasts" notes that wireless subscriber growth, particularly in Asia and other emerging markets, will raise wireless revenues by 64 percent from current levels, while wireline revenues show only modest growth. Nearly all of the growth in both sectors is expected to occur in broadband services, with wireless 3G and 4G broadband services projected to grow at a compounded rate of 24 percent over the forecast period and wireline broadband services projected to grow at a 13 percent compounded rate over the same forecast horizon.

"Despite global economic uncertainty, the telecommunications industry is showing strong revenue growth, which is being driven by consumer Internet usage and business mobility solutions. These are enabling new applications," says Fran Caulfield, Research Director for Insight Research. .

"Even amidst so much economic uncertainty, the fact remains that telecommunications is a key factor in economic growth. Telecommunications facilitates socio-economic advancement and is a critical utility for economic development, much like water and energy," Caulfield concluded.

In addition to regional and sector forecasts, the report provides an assessment of the key drivers of this growth, including industry trends, network infrastructure and access technologies, telecom services, and enterprise telecom markets.

For further details on this report, visit: http://www.giiresearch.com/report/ir228330-2012-telecommunications-industry-review-anthology.html

## Events Calendar

February 28 –March 1, 2012, **CABSAT – The Middle East's Largest Digital Media & Satellite Expo**, Dubai International Convention and Exhibition Centre, Contact: CABSAT Team, Email: cabsat@dwtc.com Tel: +971 4 306 4505.

March 12-15, **SATELLITE 2012**, Walter E. Washington Convention Center, Washington, D.C. Contact: phone +1-301-354-2100 e-mail: register@SATELLITE2012.com web: www.satellite2012.com

**2012 NAB Show®** Conferences: April 14 – 19, 2012, Exhibits: April 16 – 19, 2012, Las Vegas Convention Center, Las Vegas, Nevada, USA e-mail: info@nab.org, web: www.nabshow.com

May 8, 9, 10, 2012, **SPACECRAFT TECHNOLOGY EXPO 2012**, LA Convention Center, LA, California. US Toll Free: +1 877 842 6289, International Callers: +44 1306 871348, e-mail: info@spacetechexpo.com web: www.spacetechexpo.com/

May 21-24, 2012, **The 15th Annual SatCom Africa, Conference and Exhibition – co-located with The TV Show Africa, Telecoms World Africa and Submarine Networks World Africa** Johannesburg, South Africa. Tel: +27 (0)11 516 4030 E-mail: tarryn.volkwyn@terrapinn.co.za web: www.terrapinn.com/2012/satcom-africa/

June 19 – 22, 2012, **CommunicAsia2012**, Marina Bay Sands, Singapore, Tel: +65 6233 6638 E-mail: communicasia@sesallworld.com web: www.communicasia.com/

# Defense Sector Sees Opportunity Beyond Budget Cuts

**by Virgil Labrador, Editor-in-Chief**

In contrast to recent military shows like MILCOM in Baltimore last November and last year's WEST show, there is more of a cautious optimism over the impending defense budget cuts now that it's inevitability has more or less sunked in.

As Patrick Rayermann, Senior Director of Strategy and Development of Orbital Sciences said: "not only do we have a real opportunity to grow, but that we can definitely be part of the solution for the "vicious cycle" of excessive development timelines, cost-overruns, the deployment of outdated technology, and a resistance to innovative new business models, such a hosted payloads, that the industry has seen over the past decade or longer. " (see the full interview with Mr.Rayermann on page 11).


**At the Satellite Industry Association (SIA) Naval and Maritime Commercial SATCOM User's Workshop held during the WEST show speakers took turns in mapping out the future of the government and military market for satellite services.** (photo: Satellite Markets and Research)

Just before the WEST show, which was held in San Diego, California from January 24-26, 2012 , the US Department of Defense (DoD) released an outline of its Fiscal Year 2013 budget and its long-term plan to reduce spending by US$ 487 billion over the next 10 years. Further cuts of up to US$ 500 million might be mandated in the coming years. Upon closer scrutiny of the proposed cuts, Raymond James and Associates said in its monthly Industry Brief that the DoD budget for satellite programs are "protected" from the cuts and the Pentagon plans to expand its UAV fleet—certainly good news for the satellite industry.

One thing is for certain—it will not be business as usual for both the military and the commercial sector. At the Satellite Industry Association (SIA) Naval and Maritime Commercial SATCOM User's Workshop held during the WEST show, Rear Admiral Elizabeth M. Young, USN (Ret.), Director of the Engineering Directorate of the National Reconnaissance Office (NRO) said that the military and government sector has to change its ways of doing business and learn from the commercial sector. "There are a lot of practices and methodologies that are more efficient and cost-effective that can be adopted from the commercial sector by the military and government agencies," she said.

Vincent Squitieri, Program Manager of Communications Program Office of the US Navy in his presentation at the SIA Workshop affirmed the importance of commercial satcoms for the military. He said that "commercial Satcoms plays a critical role in warfighting arsenal," and that the Navy will continue to rely on the commercial sector to help continue and improve on current capabilities in bandwidth management systems and its space and terrestrial network.

In the session on "Terminal Technology Developments: COTM on the Horizon" speakers from Hughes, SES Government Solutions and Orbital Sciences tackled issues such as interoperability of the different systems currently in the market. The consensus was there is a need to integrate and make interoperable the diverse systems that the Navy and other military branches use today to reduce costs and increase effectiveness.

At the WEST conference, Rear Adm. Jerry K. Burroughs, USN, program executive officer for C4I, outlined a technology wish list that includes changes in traditional approaches. The government will want full data rights for whatever industry is developing, he said. "The days of government not getting proprietary data rights are over," he added.

Some of the items on Adm. Burroughs's wish list include improved two way communications with steerable antenna beams and multibeam antennas; network management technologies for operating in degraded environments; and robust, modular, scalable computer capabilities.

The military and commercial sector has their work cut out for them in the coming years. But it might not be as painful as initially thought.

# GVF MENASAT @ Cabsat:
## Interference Mitigation and the (Ka-) Band Plays On

**By Martin Jarrold**

Taking place on the second (29th February) and third (1st March) days of CABSAT 2012, at the Dubai International Convention & Exhibition Center (DICEC), is **GVF MENASAT @ CABSAT**, which this year will comprise the **Satellite Interference Mitigation Forum**, and the **Satellite Markets & Services Summit**.

The **Satellite Interference Mitigation Forum** is part of the CABSAT Academy, and is organized by **GVF** in association with **sIRG** (satellite Interference Reduction Group), and in coordination with the **WBU-ISOG** (the World Broadcasting Unions-International Satellite Operations Group) and the **RFI-EUI** (Radio Frequency Interference-End Users Initiative), and the **Satellite Markets & Services Summit** – entitled 'Market Drivers & Services Dynamics: Satellite Applications & Technologies in MENA' – is also part of the CABSAT Academy, and organized by **GVF**. Both events feature free-of-charge registration for CABSAT attendees.

**GVF** is delighted, once again, to be working with ***Satellite Markets & Research*** as a Media Partner for its CABSAT program, and looks forward to Virgil Labrador's contribution to the program as a session moderator.

On 29th February, following Registration & Refreshments from 11:00 to 12:00, the **Satellite Interference Mitigation Forum** program will run from noon to 17:30 and will focus on the collaborative efforts of broadcasters and satellite industry leaders to combat satellite interference throughout the world. The key questions to be asked are: "What results have been achieved?" "What challenges remain to be addressed?" And, "What is required to address those outstanding challenges?" This Forum will examine the answers.

Interference causes service interruptions, increases operational costs, decreases reliability rates, and impacts industry competitiveness. Broadcasters' and satellite industry efforts to solve radio frequency interference (RFI) problems have been extensive, but the adoption of viable solutions and their comprehensive implementation have yet to be achieved and there is heightened urgency for results.

The following day, on 1st March, the **Satellite Markets & Services Summit**, 'Market Drivers & Services Dynamics: Satellite Applications & Technologies in MENA', will, as shown below, cover a wide range of topics. Registration & Refreshments will commence at 11:00, and the Summit program will begin at 12:00, concluding at 17:30. A lunch break will be included in the program.

The Summit will include a blend of topical and themed discussions and analysis of cutting-edge product and service solutions from the global satellite industry that are positioned to meet the communications needs of the MENA marketplace, in particular a focus on Ka-band in the Middle East.

MENASAT @ CABSAT 2012
GVF Middle East & North Africa
Satellite Interference Mitigation Forum
(Part of the CABSAT ACADEMY 2012)
29th February / DICEC, Dubai, UAE

Demand for spectrum never abates and over the years satellite systems have responded to this increasing demand by developing ever-more efficient and powerful space and ground segments. Now the satellite market has responded to the demand for spectrum by developing state-of-the-art systems that can use the Ka-band.

Due to increasing congestion in C-band and in Ku-band there has been consi-derable growth in the number of Ka-band satellite systems being deployed and planned for fixed (FSS) mobile (MSS) and broadcasting (BSS) services. Ka-band satellite technology in general is already mature and offers equipment at low cost, leading to Ka-band satellites having become a very important part of the overall telecommunications infrastructure. With their high power and broad coverage, satellites have traditionally been optimized for video distribution and professional data networks. Now, technology allows the Ka-band to provide significantly increased capacity and new services, meaning that costs to users have been reduced, and throughput dramatically increased. Ka-band user terminals are also very attractive in terms of size (smaller) and price (cheaper), even when compared to Ku-band satellite equipment.

With the advent of higher functionality and lower cost, Ka-band satellites can now support a broader range of domestic and international communications services.

WORK MICROWAVE

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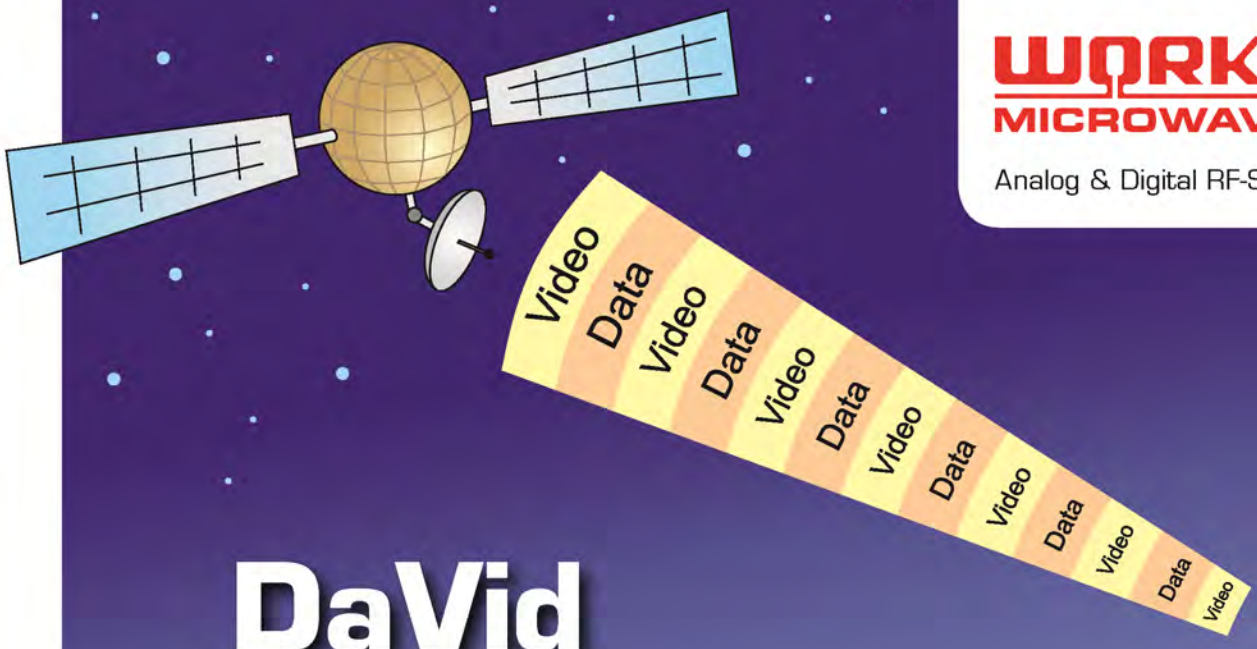


# DaVid Technology

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**Internet, Mobile Applications and HTS**

A high profile and important use of the Ka-band is for broadband Internet access via satellite. In many countries, broadband access to the Internet has been identified as a key enabler of national competitiveness and economic prosperity. Furthermore, many countries have set targets to give all citizens access to the Internet, whatever their location, to overcome the digital divide. Many people living in rural areas today simply do not have broadband Internet access. In many such areas, terrestrial technologies will never provide broadband coverage.

Typical/traditional C- and Ku-band geostationary satellites with broad beams used for consumer broadband provide around 1 Gbps of throughput. Thanks to frequency re-use made possible by using multi-spot beams in the Ka -band, this throughput can be increased 50 to 100 fold. Hence these Ka-band geostationary satellites are referred to as high-throughput satellites ("HTS"). The massive increase in throughput allows these geostationary satellite operators to offer satellite capacity in support of direct end user terminals and backhaul applications at considerably lower prices. In addition, innovative approaches using non-geostationary satellites to provide certain types of Ka-band services, e.g. Internet backhaul, have also now evolved and will become operational shortly.

The Ka-band is a breakthrough satellite communications technology for delivering cost-effective, two-way broadband services with near 100% coverage of world geography. The two-way capability means customers do not need a traditional phone or cable line to receive high-speed Internet access. This enables dramatic improvements in access to two -way, high-speed Internet services for consumers and businesses in rural and remote areas.

Recently there has been a rapid increase in the use of Fixed Satellite Service networks by Earth stations mounted on mobile platforms. FSS networks are currently being used to provide telecommunications services to aircraft, ships, trains and other vehicles using both the C-band and Ku-band. The growing demand for service to these mobile platforms has caused service providers to turn to the Ka-band to meet the need for increased transmission speeds, capacity and efficiency. Taking into account the growing demand for mobile applications, studies are also ongoing in ITU-R and CEPT to determine under what technical and regulatory conditions mobile earth station use in other parts of the Ka-bands could be accommodated and operated in Ka-band FSS networks.

Here is the session program for the 1st March **Summit**, showing the full range of topics of discussion, in addition to Ka-band.

**Session 1**
**Understanding Today's & Forecasting Tomorrow's MENA Growth Drivers in Communications**
**Jawad Abbassi**, Founder & General Manager, Arab Advisors Group
**Chris Baugh**, President, NSR
**Ghassan Murat**, Head of Strategic Marketing, Eutelsat
**Hussein Oteifa**, Senior Regional Director, Middle East, SES

**Session 2**
**The Energy & Maritime Key Regional Verticals – The Mission Criticality of the Satellite Communications Space**
**Kyle Hurst**, Senior Manager Market Development, Maritime, Thuraya
(Other speakers to be confirmed)

**Session 3**
**Satellite Transponder Supply & Demand, and the Dynamics of Ka-band in the MENA Region**: **Global & Regional Satellite Operators - Local Knowledge & Universal Markets**
**David Ball**, CTO, NewSat
**Tony Colucci**, Vice President, Sales & Marketing, SS/L
**Mike Fiddes**, Sales Director, Middle East & Africa, Avanti Communications
**Jean-François Fremaux**, Business Development Director, Eutelsat
**Simon Maher**, Vice President, Middle East, O3b Networks

**Session 4**
**Mitigating Disaster, Promoting Development, Driving Sustainability**
**Zahid Zaheer**, Director, GMPCS Affairs, Thuraya
(Other speakers to be confirmed)

**Session 5**
**New Regulatory Dynamics: MENA Administrations in a Global Context**
**Ahmed Alomary**, Commissioner, Communications & Media Commission, Iraq
**Zeina Mokaddem**, Director, Abu Dhabi office, Access Partnership
**Kumar Singarajah**, Chair, SAP-REG (Satellite Action Plan-Regulatory Working Group) (Other speakers to be confirmed)

**Session 6**
**Satellite-Wireless Access to Multimedia Solutions on the Move**
**Benoit Denis**, Manager, Consulting & Advisory, Space & Media Industries, Deloitte (Other speakers to be confirmed)

**Session 7**
**DVB-S2 ACM & the Cutting-Edge of Technology Advance: Market Advantages for MENA SatComs**
(Speakers to be confirmed)

For more details about the **Satellite Interference Mitigation Forum** and the **Satellite Markets & Services Summit** please contact Martin Jarrold at GVF (**martin.jarrold@gvf.org**). Information updates will be available through **www.cabsat.com** and **www.gvf.org**.

**Martin Jarrold** is Director of International Programs of the GVF. He can be reached at martin.jarrold@gvf.org


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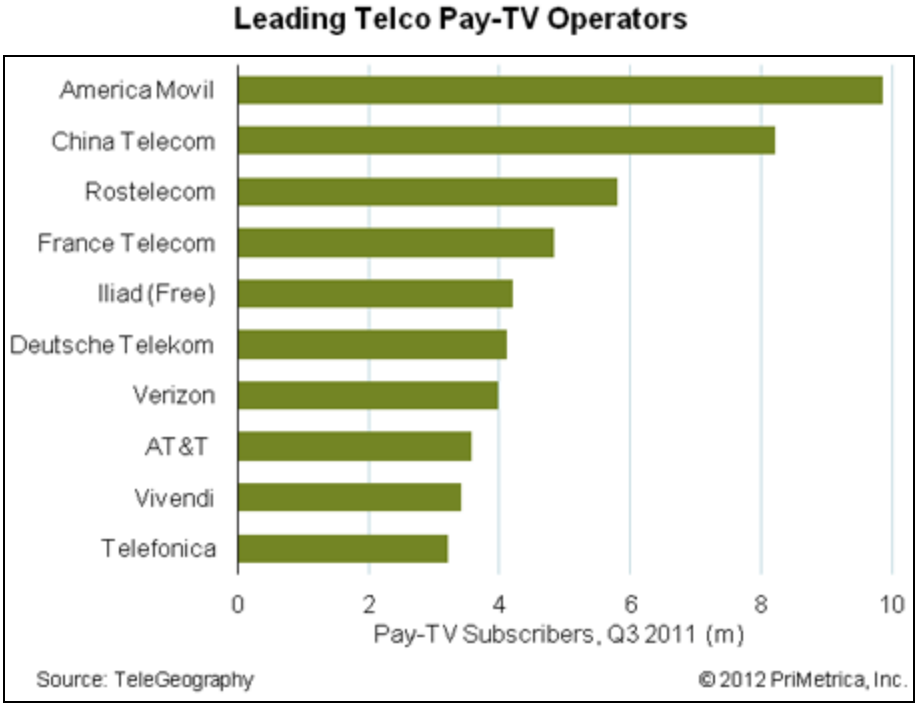
# Vital Statistics

# TELCO Pay-TV Operators

New data from TeleGeography show that at the end of Q3 2011 telcos worldwide had a total of 94 million pay-TV subscribers, giving them a 12% share of the global pay-TV market. Given current growth rates the subscriber total will be passing the 100-million milestone as this article is published (February 2012). Leading the telco charge is America Movil with ten million pay-TV subscribers, thanks to a dominant market position in Brazil and Colombia and substantial pay-TV operations in several other Latin American countries. It is followed by China Telecom and Rostelecom, both of which focus solely on their home markets, and France Telecom-Orange which has pay-TV operations in Poland, Spain and Slovakia in addition to being one of the leaders in the French market.




## ADVERTISERS' INDEX

# The Satellite Markets 25 Index™

| Company Name | Symbol | Price (Jan. 31) | % Change from Last Month | 52-wk Range | % change from 52-wk High |
|---|---|---|---|---|---|
| **Satellite Operators** | | | | | |
| ASIA SATELLITE | 1135.HK | 16.52 | 5.22% | 13.10 - 19.50 | 15.28% |
| EUTELSAT COMM. | ETL.PA | 28.38 | -5.59% | 26.01 - 31.63 | 10.29% |
| APT SATELLITE | 1045.HK | 1.26 | -7.35% | 0.95 - 3.19 | 64.10% |
| INMARSAT | ISAT.L | 400.40 | -4.64% | 287.50 - 724.50 | 44.73% |
| SES GLOBAL FDR | SES.F | 18.08 | -2.95% | 15.70 - 19.46 | 7.12% |
| **Satellite and Component Manufacturers** | | | | | |
| Boeing Company (The) Common Stock | BA | 74.18 | -0.71% | 56.01 - 80.65 | 8.02% |
| COM DEV INTL | CDV.TO | 1.98 | -0.50% | 1.55 - 2.88 | 31.25% |
| Lockheed Martin Corporation Com | LMT | 82.32 | -0.48% | 66.36 - 83.71 | 1.66% |
| Loral Space and Communications, | LORL | 68.96 | 5.62% | 45.65 - 82.49 | 16.40% |
| Orbital Sciences Corporation Co | ORB | 14.49 | -2.29% | 11.80 - 19.38 | 25.23% |
| **Ground Equipment Manufacturers** | | | | | |
| C-Com Satellite Systems Inc. | CMI.V | 0.54 | -5.26% | 0.31 - 0.68 | 20.59% |
| Comtech Telecommunications Corp | CMTL | 30.86 | 5.72% | 23.51 - 35.65 | 13.44% |
| Harris Corporation Common Stock | HRS | 41.00 | 11.11% | 32.68 - 53.39 | 23.21% |
| Honeywell International Inc. Co | HON | 58.04 | 3.98% | 41.22 - 62.28 | 6.81% |
| ViaSat, Inc. | VSAT | 47.53 | 0.38% | 31.18 - 49.16 | 3.32% |
| **Satellite Service Providers** | | | | | |
| Gilat Satellite Networks Ltd. | GILT | 4.0501 | 0.50% | 3.04 - 5.87 | 31.00% |
| Globecomm Systems Inc. | GCOM | 14.27 | -1.59% | 9.09 - 16.43 | 13.15% |
| INTL DATACASTING J | IDC.TO | 0.2450 | -18.33% | 0.25 - 0.47 | 47.87% |
| ORBCOMM Inc. | ORBC | 3.45 | 9.87% | 1.98 - 3.86 | 10.62% |
| RRSat Global Communications Net | RRST | 4.35 | 15.69% | 3.50 - 7.94 | 45.21% |
| **Consumer Satellite Services** | | | | | |
| BRITISH SKY ADS | BSYBY.PK | 43.95 | -5.24% | 38.92 - 56.30 | N/A% |
| DIRECTV | DTV | 45.01 | 3.57% | 39.82 - 53.40 | 15.71% |
| DISH Network Corporation | DISH | 27.92 | -3.76% | 20.89 - 32.56 | 14.25% |
| Globalstar, Inc. | GSAT | 0.6530 | 12.59% | 0.35 - 1.48 | 55.88% |
| Sirius XM Radio Inc. | SIRI | 2.08 | 11.23% | 1.27 - 2.44 | 14.75% |

| INDEX | Index Value (Jan. 31) | % Change from Last Month | % Change Jan. 03, 2012 |
|---|---|---|---|
| Satellite Markets 25 Index™ | 1,030.52 | -1.11% | -1.11% |
| S & P 500 | 1,312.41 | 2.47% | 2.47% |

**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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