SUMMIT TO ADDRESS FUTURE OF MOBILE/ICT WORLD

REMOTE SURVEILLANCE
SAFA TELECOM ENABLES CLIENTS IN DUBAI TO KEEP A CLOSE EYE ON PROJECTS IN IRAQ AND UGANDA

RURAL MALAYSIA
Remote areas soon to have 2G and 3G access

TOURING SPACE
Law and risks remain uncertain

DANGER ZONES
Satellite devices provide security for journalists
The success of today’s enterprises highly depends on reliable and secure connectivity.

The MDM3100 is designed to:

- combine with Consumer/SME broadband access
- support Private Networks and Branch office connectivity

Packaged with a performing outdoor unit portfolio.
Join in the positivity

It was the American humourist and social commentator Will Rogers who said: “A conference is just an admission that you want somebody to join you in your troubles.”

While I’m sure that this statement may have held some level of accuracy for some in the past, as I consider CommunicAsia 2013 together with its new SatComm 2013 installment, I find that it does not hold true for me. I keenly look to join the industry players – some I’ve already had the pleasure of meeting, others I look forward to getting to know – in sharing news, catching up and debate, which always seems to have a mind-opening effect. I look forward to learning about new companies, products and services, and bolstering my positive stance regarding the people involved in the industry.

I think it more accurate to view this conference with optimism, especially as it has grown in the last year. According to the event organisers, CommunicAsia has seen a 5% increase. Surely this is a good omen: if the industry wasn’t developing with new offerings, why would such an exhibition need to expand? It’s true, growth is always good – so let’s abandon all troubles, if any, and join each other in this positivity.

Shifting between themes and topics of remote surveillance, space tourism and GSM backhaul via VSAT to name a few, I have enjoyed putting this issue of SatellitePro ME together. I am ready for the challenge of producing the following edition and invite all of you to share your thoughts and, of course, press releases with me. Please feel free to drop me a line.

And don’t forget to visit us online.

Adrienne Harebottle
Editor
New offices, divisions, launches and more
Eutelsat, Astrium, Intelsat, ViaSat, Advantech Wireless, Thuraya...

Keeping a close eye on faraway projects
An overview of two remote surveillance assignments addresses issues of mobility, costs and other challenges

On Show
We catch up with some of the exhibitors at SatComm 2013 to find out what they’re showcasing and what they’ve been up to recently

A first for Malaysia
Using architecture at a scale never before seen in the country, Majanusa brings 2G and 3G services to remote areas for the first time

IP+ gives security to a journalist in Iraq
Speaking to a correspondent using Thuraya IP+, we learn how its impacting his work, safety and profession

In part one, an expert discusses some of the risks and insurance issues related to this market

A look at some of the newest product and technology available to the market

Attendees share their opinions and event highlights
Arabsat to build new HQ in Riyadh

Arabsat has signed a contract to build its new headquarters in the Diplomatic Quarter in Riyadh by Al-Bawani Co. Within 30 months, the new office will be constructed on land provided by the government, covering an area of nearly 14,000 sqm.

Khalid Bin Ahmed Balkhyour, President and CEO, Arabsat, commented that the project is being developed in collaboration with the High Commission for Development of Riyadh, where the prince issued his consent so that “Riyadh Principality takes over the supervision of the design and implementation of the building through an international competition in which more than 25 local and global designers have participated”.

Balkhyour praised the role and support provided by the Saudi Government since the establishment of Arabsat, when the kingdom hosted Arabsat’s headquarters in the Diplomatic Quarter and its main station in Dirab outside Riyadh, allocating land for these facilities. The government also provided a grant to help Arabsat build its new headquarters, which will be one of the main features of the Diplomatic Quarter in Riyadh.

www.arabsat.com

Astrium adds Yahsat’s Military Ka-band to its US Government offering

Astrium Americas’ subsidiary, Astrium Services Government, will offer UAE-owned Yahsat Military Ka-band service to the US Government. In order to achieve greater global coverage and reliability, this service allows any end user from the government or Department of Defense to utilise Yahsat Military Ka-band capacity that is compatible with the WideBand Global Satellite constellation.

Astrium was the prime contractor for the construction of Yahsat’s satellite fleet. Astrium Services will provide end-to-end services using Yahsat Military Ka-band capacity in order to meet DoD requirements on contract vehicles such as the Defense Information System Agency’s Future Commercial Satellite Communications Services Acquisition programme.

www.astrium.eads.net

Iraq revokes licences of 10 satellite TV channels

The Iraqi Government revoked the operating licences of Al Jazeera and nine other satellite television channels for allegedly “inciting sectarian unrest”. Among the other channels affected are the Dubai-based Al-Sharqiya and Al-Sharqiya News, and Baghdad TV.

Local channels Salhuddin, Fallujah, Taghyeer, Babiliya, and Al-Gharbiya are the other channels which had their licenses revoked on April 28.

Iraq’s media commission, meanwhile, said the channels had broadcast “misinformation, hype and exaggeration” and deepened sectarian divisions in the country. It had the power, it said, to restrict news that it believed was encouraging “hatred on the basis of national, ethnic or religious identities that can incite discrimination, hostility or violence.”

www.cmc.iq

Intelsat signs new Boeing deal amid fiscal health

Intelsat is purchasing four new high-performance EpicNG 702 MP satellites from Boeing, allowing the company to benefit from Boeing’s exclusive technology. Intelsat has now ordered a total of eight satellites from Boeing as part of its EpicNG programme.

According to the company, this technology provides differentiation of its services to the applications it serves and meaningful benefits to its customers.

Despite the US Government’s budget sequestration, Intelsat reported a 2% revenue increase in 2013’s Q1, says David McGlade, Chairman and CEO of Intelsat. The company also reported that for the Q1 of 2013, Intelsat’s On-Network revenue saw a 4% increase.

www.intelsat.com
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www.unicode.org

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www.intelsat.com
EUTELSAT 3D launches successfully

Eutelsat’s 3D satellite was successfully launched by International Launch Services (ILS) last month using a Proton launch vehicle. The Eutelsat 3D design strengthens the fixed satellite service provider’s overall in-orbit flexibility and back-up from multiple orbital slots. EUTELSAT 3D will operate at 3 degrees East until the deployment of the EUTELSAT 3B satellite to this position in 2014 to provide spectrum growth and high levels of operational flexibility in C, Ku and Ka bands. It will subsequently continue service at 7 degrees East.

It will serve customers in Europe, North Africa, the Middle East and Central Asia through a configuration of Ku- and Ka-transponders connected to three footprints. A fourth service area in the Ku-band will serve markets in sub-Saharan Africa.

Based on the Spacebus 4000 platform Eutelsat 3D weighed 5,400 kg at launch. It offers a design life exceeding 15 years, and is the 22nd Spacebus satellite built by Thales Alenia Space for Eutelsat.

“This successful launch was a shared effort along with Eutelsat Communications and ILS,” commented Jean-Loic Galle, President and CEO of Thales Alenia Space.

“Together with Eutelsat, we are now carrying out the orbital positioning operations and in-orbit tests, with the satellite’s service entry expected next month.”

www.eutelsat.com

Radarsat-1 retires following 17-year service

The Radarsat-1 Earth observation satellite, built by Ball Aerospace & Technologies for the Canadian Government, concluded its mission after serving the organisation for more than 17 years, a period 12 years longer than its mission life. Radarsat-1 was launched in 1995 for an expected five-year mission. It was Canada’s first and oldest Earth monitoring satellite and conducted the first complete radar survey of the Antarctic continental ice shelf that helped monitor the effects of global climate change.

By circling the Earth once every 101 minutes, Radarsat-1 relayed images for use in resource management with details about the Earth’s geologic features, oceans, ice, weather and vegetation. The satellite’s synthetic aperture radar instrument acquired images of the Earth, day and night, in all weather and through cloud cover.

www.ballaerospace.com

Lumos Networks to build 100G routes in Virginia

Lumos Networks has made plans to build 100G optical wavelength routes connecting Richmond to Ashburn and Lynchburg in Virginia. With a 92-mile metro fibre ring that connects Richmond to key parts of Lumos’ existing markets, the telco will offer its ethernet, IP and wavelength services to business parks, carrier points of presence and data centres.

This move will enable the telco to handle bandwidth growth and address the requirements of its carriers and enterprise customers for lower latency and route diversity in key verticals including healthcare, education, financial and wireless backhaul.

www.lumosnetworks.com

ViaSat announces next generation broadband satellite

ViaSat has announced that Boeing will build ViaSat-2, which is based on the company’s next generation Ka-band satellite technology and architecture. ViaSat-2 is expected to be the world’s highest capacity satellite at the time of launch, which is scheduled for mid-2016, and will achieve an unparalleled mix of capacity and coverage, according to the company.

Building on the market success of the ViaSat-1 based Exede internet service, the satellite is expected to significantly improve the speed and availability of broadband services over a greatly expanded coverage area that includes North America, Central America, the Caribbean, the northern portion of South America as well as the primary aeronautical and maritime routes across the Atlantic Ocean between North America and Europe.

www.viasat.com
Thuraya’s Innovation Division to chase technology development

Thuraya Telecommunications, a mobile satellite services operator, is forming a new division focused on spearheading strategic initiatives for the development and implementation of innovation in products, services and business models. This organisational enhancement comes at the back of the successful launch of the company’s SatSleeve for the iPhone, and is driven by Thuraya’s ambitions to further pioneer state-of-the-art solutions in the satellite industry.

Al Jazeera’s beIN SPORT unveils streaming service

Al Jazeera’s beIN SPORT has unveiled a streaming TV service for authenticated subscribers across the United States. Launching immediately, the new beIN SPORT Play will be a 24/7 streaming platform dedicated to live, exclusive coverage of top class football from European leagues and tournaments, plus action from competitions in motor sports, cycling and other international sports.

Authenticated beIN SPORT fans will gain full access to beIN SPORT and/or beIN SPORT en Español in accordance with their subscription. Subscribers will receive e-mail notifications 30 minutes prior to kick-offs of relevant news and information on their favourite teams and games.

All programming from beIN SPORT and beIN SPORT en Español will be streamed in HD and be available on any broadband-connected PC and mobile-connected device such as a tablet or smartphone. In addition, authenticated subscribers will be able to stream live overflow matches.

OSN announces 30% subscriber growth

OSN has recorded more than 30% subscriber growth in 2012 and expects similar growth levels this year, according to a statement from the Dubai-based pay TV network. OSN claims that its growth has been led by the launch of several industry leading innovations including OSN Play, the region’s first digital TV platform.

OSN recorded the highest growth in Saudi Arabia at 35%, underlining the strong inroads made in the market. OSN’s current retail network spans more than 420 touch points across the region and significant investments are being made by OSN to expand its presence by 20% this year, particularly in Saudi Arabia. The network is also focused on strengthening its presence in new growth markets including Qatar and Libya.

Comcast is No 1 for hosted business Voip service

Comcast, 8x8, Verizon and West were the top hosted Voip providers in North America while Verizon, XO, AT&T and Windstream were the top IP connectivity providers in North America, according to Infonetics Research’s scorecard.

The nationwide push of Comcast’s Business VoiceEdge service has helped the company grow its installed base and maintain its No 1 position in Infonetics’ hosted Voip leadership scorecard for the second year in a row, says Diane Myers, principal analyst for Voip, UC and IMS at Infonetics Research.

Making a big leap this year is 8x8, which is right on the heels of Comcast. This advancement is due to improved financial stability, continued growth of its installed base and a focus on service enhancements, says Myers.

SatNews
**ShoreTel**

**President and CEO to retire**

ShoreTel, a provider of unified communications platforms including business phone systems, applications and mobile UC solutions, has announced that Peter Blackmore, President and CEO, will retire as soon as a successor is announced.

ShoreTel board member Chuck Kissner, who was recently appointed chairman, attributes the company's nearly doubled revenues and significant growth to Blackmore's strong leadership.

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**MDA signs USD 8.2m contract**

MacDonald, Dettwiler and Associates (MDA), a global communications and information company, has signed a contract amendment for USD 8.2 million with an undisclosed customer to provide multiple advanced technology solutions for a telecommunication satellite.

MDA is a global communications and information company providing operational solutions to commercial and government organisations worldwide and has 4,500 employees operating from 11 offices located in the United States, Canada and internationally.

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**China’s launch an anti-satellite missile test?**

A Chinese rocket that was launched on May 13 raised concerns in the United States over the possibility of an anti-satellite missile test. While China claims the launch carried a sciences payload to study our planet's magnetosphere, reports indicate that the rocket didn’t place any objects in orbit, raising suspicions that the launch was a test for a new interceptor that could be used to destroy a satellite in orbit.

The rocket, launched from the Xichang Satellite Launch Centre in western China, reached an altitude of 6,250 miles above Earth, making it the highest suborbital launch worldwide since 1979, according to reports. The vehicle then re-entered the atmosphere above the Indian Ocean. US intelligence fears the rocket could be used in the future to carry anti-satellite payload. This concern began in 2007 when China launched a missile that destroyed one of its own defunct satellites in orbit. The event created an important amount of orbital debris, risking other satellites circling the Earth.
Our world. Now more connected than ever. Your world.

With Arabsat’s new generation of state-of-the-art satellites, your world is growing larger — and closer — than ever. With four orbital positions in the sky covering an ever-expanding footprint across the Middle East, Africa, Central Asia and Europe, now you have unrivalled capacity to reach farther and connect in more ways than ever before. That means all the power to meet the growing and evolving needs of large telecom companies, government entities, the military sector and VSAT or IP networks. Connect more of your world, and join the Arabsat neighborhood today!
In 2012, Safa Telecom was awarded a contract to implement a remote surveillance system for a construction project in Uganda. A new road was being built in a remote location and workflow, progress and equipment needed to be monitored. Another project of a similar nature was awarded in the beginning of 2013 for an oil and gas pipeline in Iraq. “Both began shortly after the contracts were awarded. The Uganda project went live three hours after we finished – it was a very quick turnaround. The Iraq project is scheduled to go live this summer,” says Nabil Ben Soussia, Managing Director of Safa Telecom Abu Dhabi.

“Regarding the road construction in Uganda, the client was based in the UAE. The problem was that the workflow was not consistent and every time management went to the site in Uganda, everything seemed to be going well, all workers were going ahead without any problems, and everything seemed fantastic. ”

“The client, therefore, wanted to remotely monitor the workers, check on how streamlined the processes were and look at how to increase efficiencies. But as the company was constructing this new road, there were no communications in place, 3G or any way to connect a camera for surveillance.”

Safa Telecom designed a mobile system involving a car appointed with surveillance equipment so that it could go to site and transmit live the on-going work over a Thuraya network. While the system had limited bandwidth, it enabled...
mobility, which was important for this project. Additionally, the client needed to have access to video conferencing, as video reports often provide better understanding. A crucial aspect was for the monitoring to be as non-invasive as possible, else this project would yield the same results as management going there in person.

“We sent in a car fitted with a vehicular antenna and a Thuraya IP so that it could stop at various points where there was on-going construction and shoot the activities live. This let the management based in the UAE monitor activities and understand the situation. Monitoring had to be done remotely because everyone would know management was watching, and if this happened, all work would go along well.”

“Part of the reason why remote surveillance is largely under developed within this region is because of the costs involved... But YahClick will dramatically change this.”

Mobile Surveillance

The solution for the project in Uganda offered optimisation of bandwidth for video conferencing and reporting. The solution can be tailored and includes:

- Encryption
- Peripherals
- Deployable, rugged equipment
- PC and internet
- Video recording with fast transfer
- Data conferencing
- Video and audio conferencing
“We have started working with YahClick, something new to the market. It will allow us to accommodate a lot of sites as the cost of the link to the satellite is going to be around USD 150 – a massive difference compared to the current USD 3,500."

The surveillance equipment for this project comprised an installed camera, antenna and a briefcase-sized Rapid Deployment Kit (RDK).

“The RDK case just needs to be opened for you to shoot and transmit through an IP to the headquarters of the client company. The RDK case has a camera for video conferencing and an external camera, which can be connected so that various angles or specific activities can be recorded and monitored. Of course, with the RDK you can choose which camera to use in order to transmit footage.

“The latency is around one second, which is not a problem; it even allows dialog. However, regarding such surveillance, latency is not a worry – a second or even five seconds is not an issue.”

**L- and Ka-band**

This project was purely mobile surveillance, although, Safa Telecom provides a variety of solutions.

“However, transmitting video has required L-band, making these solutions quite costly. Of course, when you consider the costs associated with the construction of a new road, it’s not comparatively big. But the recurrent cost of the link to the satellite is USD 3,500 per month. This is why the client only had one terminal.

“This has been the typical surveillance market, but we have started working with YahSat, which is bringing YahClick, something new, to the market. It will allow us to accommodate a lot of sites as the cost of the link to the satellite is going to be around USD 150 – a massive difference compared to the current USD 3,500.”

The reason for this significant difference in price is due to the L-band being replaced with Ka-band, which allows greater bandwidth, lowering costs. However, this does mean that mobility is lost, says Ben Soussia, adding that YahSat will have a mobile solution by July or August this year.

The project for the oil and gas pipeline in Iraq was similar to the Uganda project in that the client needed to monitor staff and workflow while being based in the UAE. It was decided that for the first phase of the project just three cameras would be used.

“Three may sound small but considering the costs involved, it’s really something that just an oil and gas company can afford.”
These three cameras cost USD 10,000 per month, which is too great a figure for many other companies.  

YahClick has major implications for the Iraq project, explains Ben Soussia.  

“The initial size of the project based in Uganda was much larger, but this was reduced to one terminal due to the costs involved. However, on the other hand, the size of the Iraq project radically increased. Initially, it was three cameras but due to YahClick this will be scaling to 50. With the Ka-band system offered by Yahclick, we are able to address the client’s need for numerous terminals while keeping within the budget, something that would not be possible using other systems.  

“The communication budget per camera for the Uganda project was USD 40,000. For Iraq it’s USD 1,800. This difference is really big – one year back, USD 40,000 got you one terminal but today, you can have 50 terminals for USD 90,000.”

Expansion
While surveillance is not a big part of Safa Telecom’s operations, Ben Soussia expects it to increase, especially because YahClick is entering the market.  

“As we are an international company, we will be looking to expand across all markets. Part of the reason why remote surveillance is largely under developed within this region is because of the costs involved. With L-band, the costs are raised and you can’t realise real projects with multiple sites. But YahClick will dramatically change this.”

According to Ben Soussia, the challenges associated with surveillance in general are quality and availability of bandwidth. But regarding the surveillance of remote sites, a challenge is in monitoring people that are not accustomed to or dislike being monitored, and this can lead to some problems arising among the client’s staff and workers.  

“Problems can include cables being cut or equipment damage. A simple solution to this, though, is to have a camera shooting another camera when out in remote places. This can be designed in such a way that the cameras can see each other and have motion sensors that will record when activity is detected.”

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50 terminals at a fraction of the price

The solution for the project in Iraq included Yahclick and the Hughes HN9460, a new-generation dual Ka-/ku-band high-throughput satellite router with advanced adaptive LDPC coding. Features of the HN9460 include:

- MF/TDMA return channel with Aloha diversity
- DVB-S2 with adaptive coding and modulation on forward channel
- Through put of IPv4 (it is also IPv4 ready) up to 60Mbp multicast, up to 45Mbps UDP, up to 15Mbps TCP and up to 5,000 packet per second
- Configuration and software via download from the NOC
- Implements Performance Enhancement Proxy software to accelerate performance by optimising the TCP transmission over the satellite, delivering better user experience and link efficiency
- Implements Hughes TurboPage software to accelerate HTTP traffic for fast browser access
- Secure Network Transmission with bi-directional IPSEC and AES-256 encryption
- Status monitoring and commissioning via the NOC
- Remote terminal management via the Hughes Vision Network Management System or Unified Element Manager and SNMP monitoring
The SatComm Evolution Track, CommunicAsia’s dedicated platform for global satellite operators, brings 130 companies together for industry-related debate and to exhibit the latest offerings. *SatellitePro ME* caught up with some of the exhibitors to find out what they’re displaying and what they’ve been up to recently.

“At SES, we consider CommunicAsia to be ‘the’ event for the satellite industry in Asia. It’s a chance for us to network with global industry professionals and for SES to share some insights into the satellite industry and development in the Asia-Pacific region,” says Deepak Mathur, Senior Vice-President, Commercial, Asia-Pacific and the Middle East, SES.

At the SES booth, the company is showcasing its global satellites and their footprints as well as demos of SAT>IP, Ultra HD and SES Global Access Services.

“The SAT>IP and Ultra HD illustrates how SES is playing a catalytic role in pioneering new technologies with industry partners that will allow satellite TV to be viewed on multi-screens and in the highest quality ever,” says Mathur.

**Recent and current activity**

In the last quarter of 2012, SES announced the decision to launch SES-9, the third satellite that was procured within the last three years. SES-9 will provide DTH broadcasting and other communications services in Northeast Asia, South Asia and Indonesia, as well as maritime communications for vessels in the Indian Ocean.

This summer, the company will be launching SES-8 to deliver vital expansion capacity to thriving video neighbourhoods in South Asia and Indochina. SES-8 will be the first geostationary satellite to be launched by SpaceX on a Falcon 9 rocket.

SES is a strategic shareholder in O3b Networks, a medium Earth orbit constellation that will bring high-speed low latency connectivity to areas with limited broadband connectivity. The first four satellites are scheduled for launch in June, while the second batch of four satellites is scheduled for August and will become operational in this autumn.
Bigger and better

Suggesting a positive outlook for the satellite industry, CommunicAsia 2013 enjoys healthy growth.

The largest congregation of satellite companies from around the world will come to SatComm2013 to address the latest updates in the satellite communications industry, says Agnes Leung, Assistant Project Director, Communications Events, Singapore Exhibition Services, the event organiser.

“It’s a specialised section catering to the satellite communications industry, and provides key satellite companies with a platform to address critical issues across the region. It will be addressing the growing needs of the industry and creating a more prominent space for networking and information sharing.”

More than 130 companies are taking part, showing 5% growth compared to last year’s event, she notes. According to Leung, this growth is an indication of healthy demand for satellite services and products.

“We’re constantly developing and improving our products, so SatComm 2013 is the perfect opportunity to introduce these products and to respond to enquiries right on the spot. It’s also one of the best occasions to speak face-to-face with customers from all over the world,” says Dr Amiee Chan, President and CEO, Norsat.

Some of these products being exhibited include the Ranger Series of MicroSat satellite terminals; ATOM series of Ku-band Block Upconverters (BUCs); Solid State Power Amplifiers (SSPAs); a new line of airborne BUCs and Block Down Converters (BDCs); and Low Noise Blocks (LNBS).

The Ranger terminals include advanced assisted-acquire technology, X- and Ku-band support, industry leading portability, rapid deployment, and an easy-to-use interface. Ranger MicroSats are available in antenna sizes of 45cm and 60cm, and are easily airline checkable, says Chan.

The ATOM series BUCs and SSPAs provide industry best size, weight, power and...
efficiency, says Chan. “The BUCs are easily integrated into a variety of systems, making them ideal for any application,” she says.

Norsat’s airborne line is led with the BDC1000X-AIR, which has been lab and field tested for ruggedness and durability in airborne applications. According to Chan, the BDC is compatible with current airborne service providers, and may be fully customised to meet specific customer requirements for frequency, size and shape.

“We’re also showcasing a new line of multi-band LNBs, including the dual and triple Ka-band 9000 series. Norsat remains a leader in the development of reliable Ka-band products, and the new LNB line on display was developed through several years of Ka-band product expertise.”

Current activities
This year Norsat is also launching a new line of SATCOM Baseband Kits including compact fly-away kits for secure and non-secure communications, emergency communications kits specifically designed to provide first responders with core office functions and communications during emergencies, and gateway kits, which provide converged IP gateway solutions for demanding environments.

In January, a machine-to-machine solutions line for the oil and gas industry was launched. Its first product, Sentinel RMC, is an all-inclusive equipment and data as a service package that provides global, remote site data monitoring and control in real time through flexible communication services and an intuitive, web-based interface intended to enhance user experience.

“SatellitePro” | June 2013
SatEvents
“We are excited to be back at CommunicAsia once again. We consider the Apac region one of our hottest areas for growth and we believe that CommunicAsia and Satcomm 2013 are great platforms because they allow us to showcase our range of mobile satellite products and services,” says Bilal El Hamoui, Regional Director, Asia Pacific, Thuraya. “Over the years, our participation at CommunicAsia has heralded important milestones for Thuraya where we have seen our service partner agreements grow significantly in the region.”

The mobile satellite services provider is exhibiting its products that are new to the Asian market. Thuraya SatSleeve transforms an iPhone into a satellite phone, while Thuraya IP+ is, reportedly, the fastest and lightest mobile satellite broadband in its class. Together with these products, the company is also showcasing its range of voice and data products to end users in the government, energy, media, maritime and NGO sectors.

Bilal El Hamoui, Regional Director, Asia Pacific, Thuraya
Today Sky Stream has established itself as a leading provider of managed and turnkey VSAT solutions across the Middle East, North Africa and South-West Asia for customers engaged in the Marine, Military and Oil and Gas sectors. Sky Stream provides flexible solutions to meet the ever changing demands of its customers, including the design, build and operation of networks. Its state-of-the-art control centre and hubs are complemented by a highly qualified and experienced team of engineers, project managers and customer service personnel.

Extreme conditions call for exceptional connections
Recent activity
Last year the company launched the Thuraya XT Hotspot, which enables internet connectivity via the XT satellite phone and SF2500 maritime narrowband terminal. According to El Hamoui, the company certified more than 20 industry solutions, which better position the IP broadband terminal within key market sectors including media, energy, government and NGOs.

In 2012, the company also concluded several key strategic agreements including one with SoftBank Mobile of Japan as well as securing business with multiple Nato government entities. The year saw new licensing approvals with launches in Russia, China, Taiwan and Japan, says El Hamoui, adding that Thuraya signed up a number of new service partners including Pivotel of Australia, Chunghwa Telecom of Taiwan and GTNT of Russia.

Xiplink

“We are very excited to be participating at SatComm 2013 this year, and look forward to bringing innovative products and solutions to the market that not only improve user experience, but at the same time dramatically lower operational cost,” says Sasmith Reddi, Managing Director, Asia Pacific and Middle East, Xiplink.

The company specialises in developing wireless bandwidth optimisation products aimed at reducing costs. It recently announced new features and solutions that open avenues in implementing optimisation solutions in new markets and certain key verticals such as cellular backhaul optimisation. Looking to use CommunicAsia and Satcomm 2013 in particular as a platform to showcase these solutions, Xiplink is introducing three of its services.

On exhibit is Xiplink’s Advanced Cellular Compression, Link Balancing with Bonding and Byte Caching at the transport layer. “The explosion in satellite internet usage has created an insatiable demand for bandwidth capacity. Advanced Xiplink optimisation technologies answer this demand by offering capabilities such as one-way optimisation, streaming compression, byte caching, advanced cellular compression, quality of service shaping and many other benefits for network operations looking to reduce operating expenses, as well as wireless network users that simply want to increase performance,” says Reddi.

Current activity
This year, Xiplink is focussed on the launch of its Advanced Cellular Compression solution aimed at cellular backhaul. According to Reddi, it provides a very compelling solution that impacts both performance and financial positively, as is part of Xiplink’s plan to help cellular providers overcome some of the operational and business difficulties they currently face.
“SatComm 2013 is the platform of choice in Asia for the satellite communications community. This event presents the opportunity to meet not only satellite operators, but also service providers and broadcasters, allowing for an opportunity for constructive discussions,” says Kurt Riegelman, Senior Vice-President, Global Sales, Intelsat.

Intelsat is presenting its cellular backhaul solutions as well as its global broadband mobility platform. According to Riegelman, this platform is the world’s first global mobility infrastructure, featuring multiple Ku-band beams providing true broadband coverage of the world’s most active transportation routes. This platform is in response to the growth in maritime and aeronautical requirements, says Riegelman, adding that service providers for maritime, aeronautical and oil and gas applications have already selected Intelsat for their mobility needs. Among these providers are Astrium Services for maritime and offshore broadband connectivity services, and Gogo for in-flight internet access.

**Recent and current activity**

Last year saw the announcement of Intelsat EpicNG, a high-throughput satellite (HTS) platform that, reportedly, enables customers to expand their offerings, relying on the combination of the company’s existing wide-beam Ku-band broadband network with the overlay of Intelsat EpicNG high throughput spot beams.

There were also five new satellites launched last year, which have enabled Intelsat to deliver new and replenished capacity.

Additionally in 2012, the company strengthened its premier video neighbourhoods by providing targeted solutions for programmers. The company offered the Intelsat 20 MCPC platform, uplinked out of the du Media teleport in Dubai and part of the IntelsatOne terrestrial network, enabling programmers to reach new viewers and expand their services, including the distribution of content originating in the Middle East, says Riegelman.

This year has Intelsat focussed on the cellular backhaul sector. The company is aiming to meet mobile operators’ needs and requirements as 3G and 4G networks are deployed, and demand in mobile data services continues to grow.

Broadcast is also prominent this year as Intelsat works to support the transmission of new SD and HD channels expected to be launched this year. It is also working to address 4K needs with its Intelsat EpicNG technology, which will allow for cost-efficient high throughput transmission of compressed 4K and UHD.
Speaking about its presence at SatComm 2013, Andy Silberstein, Vice-President and General Manager, Network Services, Globecomm, explains that Asia is an important market to the company.

“Globecomm will be supporting communications growth in Asia, as it has for many years, through the services of its five vertical offerings. We have always excelled at developing complex networks and facilities while using satellite to connect telecom islands and in support of emerging economies,” says Silberstein.

During the event, Globecomm is promoting the products and services that it offers for its five verticals: government, media and entertainment, maritime, enterprise and wireless.

Recent and current activity
In 2012, projects of note included a Ka-band project with Hughes Jupiter, the completion of the deployment of its TempoSM Enterprise Media platform at 1,100 sites across the United States, and an IPTV network for the US Navy. Globecomm currently provides communication to over 3,500 ships through its maritime services.

For 2013, Globecomm is involved in projects to extend its Ka-band services and capabilities. Regarding Asia, the company is working to extend its location in Singapore, which will serve its customers across its five verticals.

The Evolution X7 remote can reach up to 100Mbps of combined inbound and outbound throughput, with more than 20Mbps on the return channel. It features dual DVB-S2 demodulators with fully independent RF chains. According to Bettinger, it’s uniquely suited for a wide-ranging portfolio of enterprise voice and data services, while simultaneously receiving 12 shared, high definition multicast channels over the same or a second transponder or satellite — even combining spot-beam HTS, Ku- and C-band capacity. The remote will also have an embedded eight-port switch, which provides flexibility for physically segregating multiple end-user traffic groups based on VLAN tags, says Bettinger.

Current activity
iDirect forecasts HTS to cause a rise in end-user expectations for network performance, ease of use and affordability. Reacting to this, the company is focused on a major redesign and upgrade of the core technology that powers its platform to handle higher data rates and scale more broadly, says Bettinger.

The Evolution X7 has seen iDirect completely re-engineered its remote product in order to improve processing and operational gains over HTS. The company is working to make iDirect terminals easier to install and quicker to deploy.
Satellite Highlights

- Brings substantial new capacity to our prime location at 75°E
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A FIRST FOR MALAYSIA

With unique and sophisticated architecture across 138 remote sites, Majanusa’s project is bringing 2G and 3G access to rural areas in the country. Shahruddin Salehuddin, the company’s Managing Director, gives us an overview of the GSM backhauling via VSAT project.

Majanusa, a managed solutions provider in Malaysia, entered into VSAT services with the build of a new Hughes HUB for an internet service provider located at the Technology Park Malaysia. This project’s objective was to support the PALAPA D Ku-transponder bandwidth, and was followed by another HUB built to operate and manage the MEASAT 5 Ku-transponder bandwidth.

In November 2012, Majanusa was awarded the third phase of the project by Malaysian Communications and Multimedia Commission (MCMC). It is deploying systems to provide 2G and 3G services at 138 remote sites spread across different rural parts of Malaysia. The project, which started at the end of last year, is scheduled to be completed by the end of July.

“As part of a government project, Majanusa is installing, commissioning and maintaining complete end-to-end GSM equipment together with backhaul for 138 GSM sites. We will offer managed services at these sites to all major mobile network operators (MNO) in Malaysia such as Celcom, Maxis, Digi and U Mobile,” says Shahruddin Salehuddin, Managing Director of Majanusa.

Challenges

Being a government project, which will provide access to the incumbent celcos, Majanusa expects no competition in these remote areas, says Salehuddin, adding that the project is not without challenges.

“One of the major challenges is geographical in nature, where the remote sites present difficulty in logistics when accessing them initially in the deployment stage, and subsequently during the operations and maintenance period.

“The overall architecture of the complete project is unique in its nature while the remoteness of these sites makes it difficult. Majanusa, however, undertook this challenge because, as a VSAT player, we understand such places well.”

Interference is a constant concern and overcoming it is another challenge.

“The project has to be planned well and involves coordination with multiple vendors and parties in order to avoid interferences. We have been working with all the relevant entities to avoid any such issues, in addition to conducting the transmission planning survey and pre-installation for GSM frequencies,” says Salehuddin, adding that interference caused by WiMax has been ruled out.

“Majanusa intends to use 850MHz spectrum for 3G services, whereas 2G will be...
3G sites. These include adaptive coding and modulation, adaptive inroute selection and on-demand streaming that enhances the overall performance of the system.”

Explaining why Majunusa was chosen for this, Salehuddin noted that the company has worked on several other projects with MCMC and managed to meet its expectations and deliver the services on time with high quality of service.

“Secondly, in the past Majunusa has been involved in code division multiple access deployment in Malaysia and holds the necessary expertise. Furthermore, our core capabilities in VSAT services allow us to offer viable solutions particularly for this project, which involves remote locations barely accessible by terrestrial backhauls.”

Majunusa has two VSAT HUBs in Malaysia and a team of experienced professionals manages these. The engineers are trained to handle different technologies such as Hughes’ and Huawei’s among others, says Salehuddin.

“Equipment is sized to offer 2Trx per sector for 2G and a 5MHz carrier for 3G in each sector. That allows around 20+Mbps bandwidth per site on 3G.”

Key equipment for this project includes antenna systems, a remote radio unit, a baseband unit at site, a base station controller and radio network controller from Huawei, Hughes HX 200, a 1.2m Prodelin antenna, and a 4W block upconverter from Hughes for VSAT backhaul.

Tentatively, the project is scheduled to go live on July 1, 2013. PRO
A
ward-winning freelance multimedia journalist Sebastian Meyer will not have to worry about the erratic electricity in Eribil, Iraq anymore. The correspondent will have continuous connectivity, enabling him to file content on time and stay in touch with colleagues, friends and family, thanks to a new IP+ terminal that was offered to him by Thuraya in partnership with the Rory Peck Trust. The new solution not only ensures continuous connectivity but also promises Meyer an added level of security.

The 32-year-old New York native has been based in Iraq since September, 2009. He received the terminal with airtime from Thuraya in April this year. From now until December 2013, Meyer will be using IP+ for his work in addition to providing Thuraya with on-site updates on the places and images of the stories that he will be working on during the course of the sponsorship.

Iraq is among the most dangerous places in the world for journalists, according to Committee to Protect Journalists (CPJ), a New York-based independent, non-profit organisation promoting freedom of press worldwide. Having failed to realise a single conviction in at least 93 unsolved journalist murders since 2003, Iraq has been ranked first on CPJ's Impunity Index in 2013, earning the country this spot for the fifth consecutive year. Having a sense of security while being based there is something valuable for journalists. The level of security IP+ provides, therefore, has a huge impact, explains Meyer. “I absolutely feel safer with it; in terms of safety it is hugely important. I can also send my GPS coordinates to the news desk or to my mother even. If something happens to me, I’m traceable – my last steps are available.”

Additionally, the terminal has significantly impacted the professional aspect of Meyer’s work, he says, as it provides a solution to some of the difficulties he faces. “In Iraq electricity is a problem more than lacking infrastructure and technology, for example. It is not something you can rely on. Suddenly it cuts and you can’t file a story or photographs or even call home. Unless you have a very large generator or something like that, you can be stranded. There have been times when I’ve tried to file work as I was on deadline, but suddenly the electricity went down, the internet went down, and I would have to jump in a taxi and race around to try and find a hotel or internet café that’s up and running. Situations like this have cost me jobs or sales because I just couldn’t get the work out on time.

“It’s amazing having this terminal – it opens up so many doors for me in terms of work and creativity that I couldn’t have even thought about before. I can now communicate easily with people outside of Iraq, or in other remote places within Iraq or the region. Having it is going to make a huge difference and I expect to have a lot of freelancers begging me to use it.”

Not only does the IP+ terminal help make part of Meyer’s job easier it is also easy to use, he claims. “I received some training but this terminal is so easy to use, I had it down in no time at all. It’s pretty much plug and play.”

Satellite communications have an important role to play in journalism and demand for devices is increasing, explains Meyer, adding “Satellite technology makes a world of difference. Previously, I’ve had to share satellite equipment with a lot of other journalists… The demand is high – everyone wants to use it.”

Armed with satcom devices, journalists in Iraq say they feel safer and can continue their work even when the oft-crashing electricity cuts off. Sebastian Meyer, a journalist using Thuraya’s IP+ terminal, shares his experiences with Adrienne Harebottle and discusses his needs, expectations and the impact the satellite industry has on his profession.
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Iraq-based multimedia journalist Sebastian Meyer is afforded a level of security and can stay connected at all times thanks to IP+, says T. Sanford Jewett, Vice-President of Marketing, Thuraya. The mobile satellite communications provider is sponsoring Meyer with its satellite-based communications platform until the end of the year.

“We’ve heard incredible stories on the risks that freelance journalists are taking to bring us the news and images from the frontlines of danger zones," says Jewett. “Late last year we were introduced to the Rory Peck Trust, a non-profit organisation that helps freelancers who do n’t have IT resources, equipment or the support of a large media organisation. We thought it was a great opportunity for Thuraya to give back to the media community by sponsoring Meyer’s work.”

Meyer is not alone in using the terminal, says Jewett. “Dozens of news media organisations rely on Thuraya’s IP and IP+ terminals to bring the news from across our footprint.”

Considered by watchdogs as one of the most dangerous places for journalists, Iraq comes with risks, including being stranded without electricity and a way to contact work or home. Thuraya provides an easy solution to this, says Jewett.

“IP+ provides journalists with a lightweight, fast and easy-to-use communications platform in countries or other remote locations that have unreliable services or are not covered by terrestrial networks. It allows journalists to provide their location updates, giving the broadcasters the reassurance that the journalist is safe.

“Meyer will have access to Thuraya’s customer care and support. Fortunately, IP+ is designed for rugged environments and the terminal is very easy to use.”
that many correspondents are keenly on the lookout for access to satellite devices

“Satellite technology makes a world of difference. Previously, I’ve had to share satellite equipment with a lot of other journalists – we’d all have to pool together and try to have a turn with someone’s terminal or device. The demand is high – everyone wants to use it as very few freelancers have their own equipment, so there is a large pool of journalists waiting to have their go.”

Other challenges remain, though, with Meyer explaining that free press still has a way to go in Iraq.

“It’s a difficult place to work because of the history of suspicion of journalism, which spread under Saddam Hussein. Iraqis are finding it hard to throw this off. Journalism is thriving there but politicians and people in power have a hard time with it. So getting permission to shoot, dealing with people who aren’t comfortable giving information or who don’t really believe in the freedom of press, that’s the hardest part.”

Meyer became interested in photography when he was 21 while studying in France. Inspired by a compatriot photographer there, Meyer began to consider taking up the subject professionally. After beginning to work as a photographer in 2004, he became involved with newspapers, which were interested in buying his photos. This was his introduction to journalism, something that saw him naturally evolve into a photojournalist. In addition to reporting, Meyer is setting up Metrography, Iraq’s first and only photography agency.

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“Giving back to the media community”

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PART I

SPACE TOURISM: ARE YOU READY?

As an expert on the risk and insurance issues related to sub-orbital human space flights, Rob Frize addresses the subject and shares his insight with SatellitePro ME.

By Torsten Kriening
TK: How close are we to sub-orbital flights being available to everyone?

RF: To date, travel into space has been the purview of selected government, scientific and ultra-wealthy individuals. However, much activity is now taking place around the development of a sub-orbital space tourism market, with three operators actively soliciting passengers for their sub-orbital space tourism vehicles. It is predicted to become a USD 500 million revenue industry within 10 years.

Currently, what are the risks involved?

The market is in its infancy in terms of operators, regulation and the implications for passengers participating in this inherently risky activity. There is little data available on the physical risks that space flight participants will be exposed to during training and flight. In addition, the current US regulations for Reusable Launch Vehicles have been optimised to help operators develop the industry and limit their, and the US Government’s, liability. This potentially exposes the space flight participants to large and uncertain third-party liability risks.

Who can afford space tourism?

Current ticket prices for sub-orbital space tourism indicate that customers are likely to be high or ultra-high net worth individuals, who usually have extensive and sophisticated insurance cover in place, including for tax planning or business purposes. If the industry is to grow, it is vital that participants can enjoy a similar level of risk management and mitigation as is enjoyed in other adventure activities, leading to the eventual integration of space travel insurance cover in the same manner as the mature air travel industry.

While ticket prices exclude the majority of us, is there a real market with existing competition?

Two significant market studies have investigated the potential size of the sub-
“If the industry is to grow, it is vital that participants can enjoy a similar level of risk management and mitigation as is enjoyed in other adventure activities, leading to the eventual integration of space travel insurance cover in the same manner as the mature air travel industry.”

Orbital space tourism market. The Futron Corporation published an updated report in 2006, which put the size of the market at more than USD 500 million in annual revenue after ten years. The Tauri Group 2012 estimated a lower amount of USD 50-150 million in 2012. As at July 2012, the combined total business disclosed across the sub-orbital space tourism operators is more than 900 reservations and about USD 80 million in deposits or fares. This indicates that the Futron estimates may be close to the initial size of the sub-orbital space tourism market. Although, this does not indicate a particularly large market, the Tauri study does identify potential future developments that could significantly increase the market size, namely rapid courier services and point-to-point passenger services. Target markets for sub-orbital space tourism operators will also include accompanied science experiments and training flights for possible deep space tourists and explorers.

Who are the current players in the market?

Virgin Galactic and XCOR Aerospace are two of the most mature operators in terms of their efforts to develop sub-orbital space tourism. Virgin Galactic, founded by Sir Richard Branson, has been in development since 2004 and has made significant progress. Their WhiteKnightTwo/SpaceShipTwo vehicle is designed to carry passengers to an altitude of 60 miles above sea level, just below the boundary of space. XCOR Aerospace, on the other hand, has been working on their rocket system since 2007 and is developing their Lynx spacecraft, which aims to transport passengers to lower altitudes for a shorter duration in space.

Forecasts and reservations

Uncertainties remain in predicting demand for the sub-orbital space tourism market. Future demand will depend on:

- Capacities and capabilities of systems. The space industry has a history of enthusiastically predicting short turnaround times and high utility of reusable vehicles.

- Consumer behaviour and the probability of repeat flights.

- Development of other markets including government, commercial and research use.
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of test and deployment activity, keenly targeting the space tourism market with reusable launch vehicles.

Virgin’s proposition involves spending about five minutes in free float microgravity during the flight, shared in a cabin with five other space flight participants and two crewmembers. The configuration of its system design, involving proven aircraft-like systems, a high-altitude rocket launch using non-volatile fuel and a low-temperature descent, seems to have a relatively high level of safety within the context of sub-orbital space tourism.

XCOR’s Lynx vehicle is at an earlier stage of development and is intended to be a multipurpose vehicle for tourism but also for scientific and engineering flights. Four to six minutes of microgravity will be provided in a more compact cabin than Virgin’s, with just one space flight participant and one crewmember.

Lynx’s configuration, involving quantities of volatile materials, a rocket-powered ascent from ground level and a high-heat re-entry profile implies a level of risk over and above both normal aircraft travel and, arguably, Virgin Galactic’s mission profile. However, Lynx’s target market is subtly different to Virgin’s – the former is appealing to the sort of person who might also purchase a flight in a jet fighter aircraft.”

On the legal side, are sub-orbital space flight tickets comparable with purchasing a ticket on an aircraft?

There is on-going debate about whether sub-orbital space tourism flights fall under space or aerospace law, and this landscape is likely to continue to evolve over a number of years. Part of the debate is about whether the sub-orbital space tourism operators’ aerospace vehicles are covered by air law, particularly whilst they are in space. Questions remain over how parts of this body of law, such as the Chicago Convention, its Annexes and regulations developed by the International Civil Aviation Organisation might be extended to apply to reusable launch vehicles. Current outer space law, as laid out in the five International Treaties, does not provide a comprehensive body of regulation for sub-orbital space tourism.

So how would you characterise the current state of the market?

In summary, the current sub-orbital space tourism market has a number of different competing systems, many vehicle concepts are untested and there is a lack of operational experience and data. Although the current regulatory framework has its drawbacks, moving from an experimental license to a complete type-certification regime would be likely to stifle the development and growth of the industry. However, the current framework can only be a temporary one on the way to a fully regulated industry. “Questions remain over the feasibility of the informed consent or reciprocal waiver approach, and whether it would withstand a complete legal test. Also, as the industry
regulations developed by the International
Chicago Convention, its Annexes and
parts of this body of law, such as
they are in space. Questions remain over
are covered by air law, particularly whilst
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Moving Forward
SatellitePro  |  June 2013
“As the industry develops towards a mass market, neither customers nor insurers will accept the current frontier approach to regulation and safety.”

If individuals should book space flights, what are the implication regarding their insurance?

In general, an insurance applicant has a duty to disclose all material facts at the time of application for a policy. However, there is no duty to disclose if, for example, they are not considering sub-orbital space tourism at the time that the policy was underwritten.

For life insurance, unless the policy has an unusual but not unique exclusion for non-commercial flight, a claim arising from a sub-orbital space tourism flight would be paid. Other covers such as critical illness or disability often have aviation exclusions, which are likely to be interpreted as applying to sub-orbital space tourism, notwithstanding some regulatory confusion between air law and space law for winged reusable launch vehicles. Finally, for non-life insurance such as travel, sub-orbital space tourism is certain to be treated as a hazardous activity due to the current licensing regime. Thus some parts of cover such as liability are likely to be excluded.

A number of underwriters claim that they can offer space tourism insurance, including Torus Insurance and Atrium, a Lloyds syndicate. Aon ISB has also arranged personal accident cover for a number of orbital space tourists, covering accidental death, injury and disability. Cover was provided through a standard Lloyds policy for a sum insured of USD 1-2 million.

Aon has made the interesting point that it may be in the best interests of an operator to provide personal accident insurance to space flight participants. As a quid pro quo, the space flight participant would then agree to waive the right to claim against the operator above this level of insurance. Aon also believes that, in the event of an incident, despite the presence of waivers between space flight participants and operators or governments, it would be difficult to prevent a claim for compensation being lodged with any of the responsible parties involved.
System Integrators and Ground Operators
Regional Resellers and Authorized Distributors
Installation, Maintenance, Training and Turnkey
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i. System integration where we design and provide solutions over satellite

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iii. Ground operations which includes installation, technical support, maintenance repairs, etc.

iv. Training and consulting such as the GVF HOST.

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i. Earth station antennae (3.5 meter to 9.4 meter) from ASC Signal

ii. VSAT antennae (75 cm to 2.4 meter) form Skyware Global

iii. Mobile satcom (on the move and on the pause) from Cobham

iv. Outdoor electronics: TWTs, BUCs, LNBs, Feeds, etc from Xicom/Comtech, NJR, Anacom, Codan/CPI, SMW, etc

v. Indoor electronics: broadcast encoders, decoders, multiplexers, video servers, power supplies, combiners, splitters, routers, satellite modems, redundancy controllers etc from Thomson, Paradise/Teledyne, iDirect hubs/modems and others.

vi. Installation, maintenance, support, logistics and training (GVF) and turnkey solutions involving system integration of all activities and product lines to provide customers with a complete end-to-end product. The objective is simple: meets customer needs with the latest technologies at the best price/quality mix delivered through experience.

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SatTechnology: Product Reviews

iDirect’s Evolution X7

The Evolution X7 remote can reach up to 100Mbps of combined inbound and outbound throughput, with more than 20Mbps on the return channel alone. It features dual DVB-S2 demodulators with fully independent RF chains. It is uniquely suited for a wide-ranging portfolio of enterprise voice and data services, while simultaneously receiving 12 shared, high definition multicast channels over the same or a second transponder or satellite – even combining spot-beam HTS, Ku- and C-band capacity.

The remote will also have an embedded eight-port switch that, when conjoined with the iDirect Platform’s Group Quality of Service technology and Network Management System, provides flexibility for physically segregating multiple end-user traffic groups based on VLAN tags.

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Norsat’s BDC1000X-AIR and dual/triple Ka-band 9000 series

Norsat International, a provider of innovative communication solutions that enable the transmission of data, audio and video, has introduced its new Commercial-Off-The-Shelf and custom microwave products for airborne and Ka multi-band applications. Its airborne portfolio is led with the launch of a BDC1000X-AIR, which has been lab and field tested for ruggedness and durability in airborne applications.

Norsat has also introduced a line of multi-band LNBS, including the dual and triple Ka-band 9000 series.

www.procomm222.com

Pro-Comm’s new RF amplifier

Pro-Comm has a new addition to its Solid State RF Amplifier Series. The PC1300-3C is a three-channel Solid State RF Amplifier with independent channels, each providing 1,000 watts Peak RF power.

The RF amplifier is driven by a single customer supplied RF input signal. Power and phasing are manually adjusted via front panel control as well as via dB-25 coupled remote control. The unit is ferrite isolator protected at the RF input and each of the three RF outputs. The power of each channel is adjustable from max to -10 dB completely self-contained with all power supplies and internal cooling.

The new amplifier is also offered in complete stand-alone packaging including internal source with customer requirement of input trigger and AC voltage only; no RF signal required.

www.norsat.com

Maxim’s bipolar SAR ADC

Maxim Integrated Products has announced that it is now shipping the MAX11156, a 12-pin, 18-bit successive approximation register (SAR) analog-to-digital converter (ADC). Available in a tiny 3x3 mm TDFN package, the MAX11156 integrates an internal reference and reference buffer, saving at least 70% board space over competing solutions.

Additionally, it features an 18-bit resolution, Beyond-the-Rails technology, which supports a ±5 V input from a single positive 5V input rail, a 500ksps sampling rate and applicability in automatic test equipment, industrial control systems, medical instrumentation and robotics.

www.maximintegrated.com
IBC Conference

Stimulating debate and sharpening strategy, the IBC Conference attracts the industry’s most influential and authoritative speakers to discuss the future of electronic media and entertainment.

The conference is designed to:
• deliver innovative and thought-provoking content over 6 days
• enable you to gain crucial insight into the converging world of electronic media and broadcasting
• give you access to over 300 influential industry pioneers

IBC2012 Speakers included:
• Miles Young, CEO, Ogilvy & Mather Worldwide
• David Eun, Executive Vice President Global Media & CEO Advisor, Samsung Electronics
• will.i.am, International Recording Artist, Technologist, Entrepreneur and Intel’s Director of Creative Innovation Intel Corporation

For more information please visit: www.ibc.org/conference

IBC Exhibition

Each year, 50,000+ attendees from over 160 countries come to IBC. They are able to browse fourteen themed halls housing the latest innovations from more than 1,400 leading brands. In addition there is a wealth of free to attend feature areas including:

IBC Connected World
a special area of IBC which encapsulates the very latest developments in mobile TV, 3G and 4G services

IBC Production Insight
centred around a professional standard studio set, attendees have a host of the latest technology to get their hands on

IBC Workflow Solutions
dedicated to file-based technologies and provides attendees with the opportunity to track the creation management journey

IBC Big Screen
providing the perfect platform for manufacturer demonstrations and ground breaking screenings

Future Zone
a tantalising glimpse into the future of tomorrow’s electronic media

IBC Awards
celebrating the personalities and the organisations best demonstrating creativity, innovation and collaboration in our industry

For more information please visit: www.ibc.org/exhibition

www.ibc.org
Artel Video Systems’ DLM205 and DLC205

Artel Video Systems, a major global provider of broadcast-quality video transport solutions, has announced that its DLM205 and DLC205 nine-port ethernet aggregators and optical transceivers are now shipping. Integrating seamlessly within the company’s DigiLink video transport platform, both single-slot modules are the ideal solution for broadcasters, CATV operators, telco operators and video service providers looking to aggregate ethernet traffic across a single optical or electrical connection.

The versatile DLM205 and DLC205 feature innovative designs for aggregating up to nine channels of 10/100/1000 ethernet traffic for transport across electrical or optical networks. Nonblocking and supporting a total capacity of 18 gigabits of ethernet traffic, the modules combine three electrical and two multipurpose SFP cages with four internal ports supporting traffic from other modules in a chassis, plus chassis management into a single ethernet connection. The DLM205 features integrated DLM4000 chassis in-band management.

Avago Technologies’ new optocoupler

Avago Technologies has announced a new dual-channel, bi-directional 25MBd digital optocoupler device, the ACSL-7210. The high-speed device is optimised for bi-directional industrial communication networks and boasts features including Avago’s proprietary IC and patented packaging technologies, a signal isolation of 3,750VRMS, a low profile SO-8 package and data rates up to 25MBd.

Newtec’s MDM6100 broadcast satellite modem

Newtec has launched a new professional broadcast satellite modem and demodulator, which improves transmission performance, lowers operational costs and delivers the highest uptime for vital links.

The MDM6100 is capable of increasing broadcast efficiency by up to 60% compared to DVB-S2, equipping broadcasters and satellite service providers with all of the latest modulation, multistream transmission and wideband transponder support.

The MDM6100 can act as a modem, modulator or demodulator, and can be used in conjunction with set-top boxes, professional Integrated Receiver Decoders and satellite demodulators.

Advantech Wireless’ 1,250W Ku-band SSPA/BUC

Wireless solutions provider Advantech Wireless is launching its new Sapphire Series 1,250W Ku-band UltraLinear GaN SSPA/BUC. The latest class of this technology is designed for Multi Carrier operations, with power expandable to 3KW by phase combining and being redundant ready. The considerable reduction in size, weight and energy consumption achieved make this new architecture the ultimate solution for direct to home TV, according to Advantech Wireless.
Satellite connectivity continues to reign in today’s communications landscape. **CommunicAsia2013**, Asia’s largest integrated info-communication technology event, is instrumental in connecting the ICT industry. **SatComm2013**, a part of CommunicAsia, is the strategic platform in Asia for the satellite communication industry.

Network with companies such as APT Satellite, Asia Broadcast Satellite (ABS), AsiaSat, China Satcom, Cobham Satcom, Comtech, Eutelsat, iDirect, Inmarsat, Intelsat, MEASAT Global, Newtec, Novelsat, SES, SkyPerfect JSAT, Singapore Technologies, THAICOM and many others who will be providing turnkey solutions that address critical issues surrounding Asia’s ICT ecosystem. Look out for interesting demonstrations and applications via satellite communication.

Hear from experts such as Deepak Mathur, Senior Vice President, Commercial, Asia-Pacific and the Middle East, SES and Imran Malik, Vice President, Asia-Pacific, O3b Networks at **CommunicAsia 2013 Summit**.

Register your visit online before 7 June to enjoy exclusive privileges!

**www.CommunicAsia.com/pre-registration**

**BroadcastAsia2013**, located at Level 4 & 5 of Marina Bay Sands, will showcase the latest technologies such as Future TV, OTT, Digital Media Asset Management and Storage, Connected / Digital / Smart TV and more to the professionals in the broadcasting industry. **www.Broadcast-Asia.com**
A MILSATCOM MIDDLE EAST AND THE GLOBAL SPACE & SATELLITE FORUM WRAP-UP

From making new contacts and engaging debate to getting enthused, attendees at this year’s event share their highlights.

“The menace of interference, intentional or not, has been clearly demonstrated and is now well understood by end users and satellite providers. While ‘soft’ solutions were shown such as the DVB Carrier ID, there are already existing solutions that are used to face ‘hard’ interferences, such as jamming, through satellite and modem solutions. I had the pleasure to present Thales’ solutions.”


“Milsatcom Middle East was an outstanding event with excellent opportunities to meet the right people in the region. It was a good platform to present our new technologies and solutions for SatCom on the Move. Also the sessions and discussions were very inspiring and enabled a new view to several topics.”

- Frank E. Woetzel, Managing Director, SPUTNIK 24 Communication Systems.

“I found the event interesting, well organised and with relevant speakers discussing valued topics for both the type of market and the region. Particularly interesting was the session on cyber security not only for professional reasons, but also for the pertinence of the speakers and the debate that followed the session.”

- Guido Baraglia, Director, Sales and Marketing, EMEA, Sat Corporation.

“The GSSF and Milsatcom Middle East conferences were both worthwhile and unique events. If you’re in the satellite business looking to either grow your market share in the Mena region, or establish yourself here, then these are the only places to be.”

- John B. Sheldon, Principal and Senior Consultant, The Torridon Group.

“Space launch without space policy was one of the most interesting topics, knowing the high ambition and prospects of satellite and space areas in the region. In my opinion, The GCC States and all developing countries need to decide and act on their future role in satellite and space technology. It is not a luxury for developing countries; their future is in optimising usage of their natural resources and preserving their own environment against resources deterioration, climate change, and natural disasters.”

- Khaled Mokhtar, Director, MEA, Access Partnership.

Disruptive new business models are emblematic of our generation, yet they remain poorly understood even as they transform competitive landscapes across industries. Satellite-related companies cannot afford to stand still; a great strategic plan is useless if the business model is weak. The importance of developing effective space policies is clearly an area of concern.”

- Ed Capaldi, Strategic Advisor and Coach to CEOs.

“Our morale is boosted after talking to experts, who fully supported our vision and mission. Dubai Astronomy Group has just opened a new section of space exploration and ArduSat, our first project, will provide us firsthand experience in mission designing and satellite technology. This event has given us a very clear road map of space and satellite technology.”

- Hasan Ahmad Al Hariri, CEO, Dubai Astronomy Group.
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