Products and Services Market*Place*

A guide to key products and services showcased at CommunicAsia 2013 in Singapore from June 18-21, 2013.

Advantech Wireless
Booth no. 1U1-07
www.advantechwireless.com

At CommunicAsia, **Advantech Wireless** will be showcasing its ew Sapphire Series of UltraLinear™ GaN based SSPAs and BUCs with *unmatched performance surpassing all technologies available on the market – the ultimate Solution for Direct to Home TV*. Featuring high power density in a compact, rugged and weatherproof package, the New Sapphire Class of UltraLinear™ GaN technology based solid state power amplifiers (SSPAs) and BUCs, exceed all barriers between Klystrons, TWTs and SSPAs.

•Low energy consumption, High Efficiency
•UltraLinear™ High Power
•High reliability
•Able to cover simultaneously all transponders of a specific satellite, regular or extended bands.

The considerable reduction in size, weight, and energy consumption achieved with the New UltraLinear™ GaN based SSPAs and BUCs from Advantech Wireless makes this new architecture the ultimate Solution for Direct to Home TV. Over the past 6 years, Advantech Wireless has developed a full line of GaN based SSPAs and BUCs/ SSPBs. The New Sapphire Series of UltraLinear™ GaN based amplifiers can cover multiple transponders, full DVB-S2 enabled and can save 8 to 15 dB power compared to indoor Klystrons or linearized TWTs. Combined with our high performance line of Satcom Antennas, these new systems are the only worldwide solution able to offer the maximum use of satellite bandwidth and power.

Amos Spacecom
Booth no. 1V3-01/ 1E2-01
www.amos-spacecom.com

Scheduled for launch in the second half of 2013, **Spacecom's AMOS-4** satellite will establish a new orbital position at 65° E, providing a full range of satellite services for Asia, Russia, the Middle East and other additional service areas. **AMOS-4's** multiple Ku and Ka transponders create a powerful platform, enabling a wide range of cross-band, cross-beam connectivity options. For their customers, this means extensive broadcast and broadband reach into the vast urban and rural areas of these regions. Available satellite services for customers include Direct-To-Home (DTH), video distribution, VSAT communications and broadband Internet.

With its new orbital slot, additional capacity, expanded coverage areas and cross-region connectivity, **AMOS-4** positions **Spacecom** at the forefront of international satellite operators delivering comprehensive satellite solutions.

The **AMOS-6** satellite is planned for launch in 2015, to be co-located at the 4° W orbital position with **AMOS-3**, replacing **AMOS-2**. It will provide steerable Ku-band beams with Pan-European and Middle East coverage, and a Ka-band beam for broadband services with coverage in Africa and Europe.

With the launch of **AMOS-4** and **AMOS-6** satellites, **Spacecom** will expand its reach to serve additional markets, including Asia and Russia, strengthening its position as an international satellite operator.

APT Satellite Company Ltd
Booth no. 1N2-01
www.apstar.com

APT Satellite (listed company in The Stock Exchange of Hong Kong Limited, Stock Code: 1045) was founded and commenced its operation in 1992. APT Satellite currently owns and operates APSTAR in-orbit satellites covering regions in Asia, Australia, Europe, Africa and the Pacific—accounting for 75% of the world's population, and provides excellent quality "one-stop-shop" transponder, satellite telecommunications and satellite TV broadcasting and transmission services to broadcasting and telecommunication customers.

Asia Broadcast Satellite
Booth no. 1R3-01
www.absatellite.com

Asia Broadcast Satellite is one of the fastest growing premium satellite operators in the world. ABS operates 4 satellites (ABS-1, ABS-1A, ABS-3 and ABS-7) from 3 premium

locations at 3°W, 75°E and 116° E. The fifth satellite, ABS-2 is scheduled to launch in 2H 2013, will be fitted with up to 89 active C, Ku and Ka-band transponders. ABS has also ordered two new Boeing 702SP satellites planned for launch in 2015 with the options to add more satellites over the next 2-3 years to ABS' growing satellite fleet.

ABS offers a complete range of tailored solutions including broadcasting, data and telecommunication services to enterprises and government organizations. Through its teleports and alliances with world-class partners including Bahrain and Tel Aviv, ABS offers SCPC, MCPC, Playout, Encryption, Turnaround, Uplink, Co-location, IP backbone and VSAT services. ABS also provides full satellite operations, payload and client monitoring, tracking, telemetry and control services, and a full Network Operations Center (NOC) managed 24/7 by highly trained professionals.

AVL Technologies
Booth no. 1N1-01
www.avltech.com

AvL Technologies designs and manufacturers mobile, motorized antenna systems and positioners featuring high performance carbon fiber reflectors, auto-acquisition controllers, and the unique AvL cable drive system. Ideal for small aperture antennae, it boasts zero backlash, high stiffness, light weight ruggedness, reliability, and cost effectiveness.

AvL has designed and developed SNG antennae for 1.0M, 1.2M, 1.4M, 1.6M, 2.0M and 2.4M apertures and a diverse product line of rugged motorized FlyAway packages, many available in backpack configurations, some as small as to meet airline requirements for cabin baggage. AvL, now recognized as the leading producer of SNG antenna systems in the USA and fast becoming known worldwide, developed in the first motorized, auto-acquisition Mobile VSAT antenna system designed specifically for IP broadcast. AvL has more than 18,000 high-quality antennae for C-band, X-band, Ku-band, DBS-band and Ka-band in service throughout the world for SNG, military, emergency communications, disaster management, mobile medicine and other specialty applications.

C-COM Satellite Systems Inc.
Booth no. 1V3-07
www.c-comsat.com

C-COM Satellite Systems Inc. is a leader in the development and deployment of commercial grade mobile satellite-based systems for the delivery of two-way high-speed Internet, VoIP, Video and WAN services into remote locations, either fixed or mobile. Operating in Ottawa since 1997, C-COM has sold thousands of antenna systems to resellers across the globe.

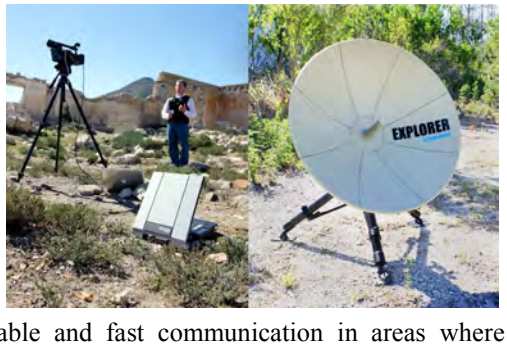
It has been a busy start to the year for C-COM's design and engineering teams. A new Ka-Band Flyaway antenna has been designed for a market we expect to be substantial. This unit has been designed around the existing 75cm, one piece reflector from ViaSat and supports the ViaSat Exede Nomadic Transceiver and modem. This compact, fully motorized, auto-acquire flyaway antenna unit will provide operators looking for a truly mobile and easily transportable Ka platform with amazing speeds in a very tiny package. It is expected to be available shortly.

More good news, C-COM has recently received type approval for its next generation iNetVu® 1201 Ku antenna system from Eutelsat, the leading European satellite operator. This vehicle mounted auto-pointing antenna is now officially approved to operate on Eutelsat's Satellites constellation. It's one of the few 1.2m drive-away systems which have met all the auto-pointing characterization tests per the latest Eutelsat ESOG Module 260 requirements.

Cobham SATCOM Land
Booth no. 1N2-07
www.cobham.com/satcom

Cobham SATCOM Land offers the most comprehensive range of land-mobile satellite communication terminals in the market covering both BGAN and VSAT. The EXPLORER family fulfills critical communications needs and reduces system configuration requirements for end users through highly reliable and easy-to-use solutions.

EXPLORER BGAN is a series of L-Band terminals utilizing the BGAN network from Inmarsat. BGAN is the chosen data and voice service when the requirement is quick deploy, ultra-portable, reliable and fast communication in areas where terrestrial telecoms aren't available. We offer two types of



BGAN terminals. Four ultra-portable terminals (no bigger than a laptop) and two vehicular terminals with satellite tracking antennas, making it possible to stay connected, even on-the-move.

EXPLORER VSAT terminals offer back-pack antenna systems that are portable, lightweight solutions for use anywhere in the world. With solutions that include ancillary equipment for VoIP, RoIP, Fax, Video and Data, systems are customized to individual requirements. The ACU, antenna control unit, from Cobham SATCOM is now the standard of measure for auto-acquire and auto-deploy antenna systems throughout the world. From a wide array of Fly-Away antennas to a broad selection of Vehicle Mount antennas including Comm-On-The-Move, the EXPLORER VSAT Product line offers the ultimate in dependability.

Comtech Xicom Technology
Booth no. 1T2-07
www.xicomtech.com

Comtech Xicom Technology, Inc., located in the heart of Silicon Valley, is the world's leading SATCOM power amplifier supplier, offering the broadest product line in the industry. For more than 20 years, our focus on customers, innovation and quality has created a tremendous breadth of products and created a company with a reputation for excellence.

At CommunicAsia, Xicom will be showcasing its new generation of XTCT rack-mount controllers provide an easy to use, intuitive touch screen interface for monitoring and controlling outdoor amplifiers (ODUs). The new touch screen front panel displays the HPA's operational status, including power output and temperature, graphical displays of parameter trend analysis, and event logs. Local and remote diagnostics can also be easily performed via an Ethernet interface. This new display eliminates the need for a separate external controller to control multiple HPAs for common architectures (TWTAs or SSPAs). All operational data is saved within the amplifier's non-volatile memory, providing a complete history of the HPAin the event that the unit needs service or repair.

Gazprom Space Systems
Booth no. 1Y1-07
www.gazprom-spacesystems.ru

Gazprom Space Systems (GSS) is a Russian non-governmental satellite operator. GSS operates four Yamal satellites. Yamal-201 (90°E) serving Russia, Yamal-202 (49°E) aimed at international market and successfully launched at the end of 2012 two new satellites: Yamal-300K (90°E) serving Russia and Australia (Steerable beam) and Yamal-402 (55°E) aimed at international market. Yamal-401 (90°E) is under construction to be launched next year. Main business directions of GSS are providing satellite capacity, telecommunications services and system integration.

In the international market GSS is positioned as a Fixed Satellite Service Operator, while within Russia the company is also a Services Provider (satellite communication links, satellite broadcasting services, satellite Internet access, aerospace monitoring services) and a System Integrator (development of space and ground communication systems).

GlobeCast
Hospitality suite HELICONIA 3410B
www.globecast.com

A subsidiary of Orange, **GlobeCast** is a leading provider of media management and global content delivery services for broadcasters and content creators. With a secure fiber and satellite network connected to dozens of teleports, technical operations centers, and points-of-presence worldwide, GlobeCast manages and transports millions of hours of video and other rich media each year. An integrator of audiovisual technology and a full-service provider, GlobeCast works with all the actors in the audiovisual chain from production companies to broadcasters, retail organizations, cinema chains, and more.

The company provides on-site service from major news and sporting events for coverage in SD, HD, or even 3D. Present in Europe, the Americas, the Middle East, Asia, Africa, and Australia, GlobeCast is also an expert in international television markets, and works with new and established broadcasters to reach and secure distribution with leading pay-TV operators around the world.

Globecomm Systems
Booth no. 1N-07
www.globecomm.com

Globecomm is a leading global provider of managed network communication solutions. Employing our expertise in emerging communication technologies we are able to offer a comprehensive suite of system integration, system products, and network services enabling a complete end-to-end solution for our customers. We believe our integrated approach of in-house design and engineering expertise combined with a world-class global network and our 24 by 7 network operating centers provides us a unique competitive advantage. We are now taking this value proposition to selective vertical markets, including government, wireless, media, enterprise, and maritime. As a

network solution provider we leverage our global network to provide customers managed access services to the United States Internet backbone, video content, the public switched telephone network or their corporate headquarters, or government offices. We currently have customers for which we are providing such services in the United States, Europe, South America, Africa, the Middle East, and Asia.

O3b Networks
Hospitality suite ANGSANA 3D
www.o3bnetworks.com

O3b Networks is a Global Satellite Service Provider, deploying a next generation satellite network. O3b will combine the coverage of satellite with the speed of fiber, offering a round trip latency of less than 150 milliseconds. O3b's first four satellites will launch on June 24, 2013.

O3b*Energy* offers the performance of fiber with the flexibility of satellite delivered cost effectively and reliably. O3b*Energy* is the first satellite solution that matches your IT investments with a transport technology designed to meet the performance needs of your network now and in the future. We offer unlimited scalable bandwidth whilst reducing network latency to one quarter of that for existing geostationary satellites.

Our Mobile Backhaul product, O3b*Cell* allows mobile operators to reach more subscribers economically, significantly improving voice quality while supporting data rates unachievable using conventional satellite solutions.

ND Satcom
Booth no. 1T4-08
www.ndsatcom.com

ND SatCom's SKYWAN modem is a versatile, flexible satellite communication platform for customer centric networks.

The platform enables Star, Mesh, Multi-Star or Hybrid topologies allowing service providers to seamlessly adapt network connectivity requirements to customer application needs. SKYWAN unlocks new business opportunities with improved total cost of ownership for service providers that need to leverage multiple hub or hubless network configurations not easily achievable by other vendor platforms. The latest SKYWAN release now incorporates COTM capabilities thus further increasing the scope of applications that are supported by the modem.

Enter a new generation of flexible satellite communication networks with SKYWAN by ND SatCom.

Newtec
Booth no. 1P2-01
www.newtec.eu

Newtec will be highlighting the most efficient broadcast equipment for video contribution and distribution at CommunicAsia including the award winning MDM6100 Broadcast Satellite Modem and the M6100 Broadcast Satellite Modulator.

Features include:

- Seamless migration to Multistream and S2 Extensions
- Re-use of existing infrastructure
- Reduction of satellite interference through DVB CID
- Ready for HEVC and UHDTV

Thuraya Telecommunications Company
Booth no. 1T1-01
www.thuraya.com

When you need superior mobility with zero compromise on connectivity, there can only be one choice: **Thuraya IP+.** The high-speed IP capabilities of Thuraya IP+ enable users to access corporate networks, browse the Internet, connect with colleagues, family and friends via email and social media, and hold video conferences or chat over VoIP solutions - wherever and whenever they need it. Delivering the highest throughput in its size class, Thuraya IP+ can be easily deployed from backpack to broadband in a matter of seconds - allowing you to take advantage of reliable broadband access from locations covered by Thuraya's congestion-free satellite network.

Offering portability and 'always-on' mobile broadband access, Thuraya IP+ is the preferred satellite broadband solution for a wide range of mission-critical operations such as broadcast media, defense, telemedicine and disaster response, especially for deployment in areas that are inadequately served by terrestrial networks. With Thuraya IP+, broadcasters are also equipped with high-speed streaming connections to ensure that their

video feeds can be transmitted back to their studios in the most optimized manner.

Work Microwave
Booth no. 1V2-07
www.work-microwave.de

At CommunicAsia2013, **WORK Microwave** will showcase a wide range of innovative satellite communications technologies spanning various applications within the broadcast, satellite, and telco markets.

For the first time in the Asia-Pacific market, WORK Microwave will unveil a powerful new DVB-S2 multistream feature for its demodulator product line. Other key highlights include advanced demonstrations of the company's DVB-S2 Modem SK-DV, DVB-S2 IP-Modem SK-IP, and Fifth-Generation Frequency Converter Series.

New DVB-S2 Multistream Feature For SDD-TS and SDD-DV Demodulators

At CommunicAsia2013, attendees will get a first look at the DVB-S2 multistream functionality being integrated into WORK Microwave's complete line of demodulator solutions, including the company's popular SDD-TS and SDD-DV products. Utilizing this powerful new technology, users can seamlessly deaggregate up to six transport streams and IP data from a single carrier, thereby optimizing efficiencies while reducing the amount of equipment required for uplink and downlink operations. Ideal for local cable distribution and satellite newsgathering applications, the technology simultaneously supports IPv4 and IPv6 outputs, as well as full integration of DVB-S2 multistream, including null-packet reinsertion and output realignment, decreasing CAPEX and OPEX for cable and satellite providers.

Xiplink Inc.
Booth no. 1W2-05
www.xiplink.com

Delivering the most advanced optimization solutions, **XipLink** provides more value per invested capital than any other product. XipLink utilizes advanced TCP acceleration techniques, UDP/VoIP optimizations, stream-based data compression, byte caching and internet (web) acceleration capability. These are further enhanced with class-based Quality of Service shaping and link management tools such as TCP session balancing, link bonding and intelligent link path selection. Based on IETF standards in combination with the Space Communications Protocol Standards (SCPS), XipLink provides a standards-based interoperable solution ensuring government and military organizations multi-vendor interoperability. XipLink solutions are transparent to users, requiring no pre-configuration, operating over any IP topology including TDMA, SCPC and Mesh.