



New Direct-to-Home satellite TV service in Australia

AUSTRALIA

Harmonic Inc. has announced that SELECTV has deployed Harmonic's industry-leading IP-based compression and multiplexing solutions for its direct-to-home (DTH) satellite pay TV service in Australia. The efficient DiviCom(R) Electra™ 1000 multi-channel MPEG-2 variable bit-rate (VBR) encoder is being used in combination with the DiviTrackIP™ distributed statistical multiplexing solution to allow SELECTV to more easily aggregate content while maximizing their service carrying capacity and providing superior video quality. Now fully operational, SELECTV offers programming packages that are not available from the local cable and satellite pay-TV providers.

SELECTV's DTH service, which is available throughout Australia, targets selected ethnic and cultural market segments and includes language-specific, community-oriented and other premium channels acquired from facilities in both Australia and the United States. The efficiencies and versatility of Harmonic's IP-based MPEG-2 solution allows new entrants

such as SELECTV to quickly and cost-effectively implement a compelling video service, greatly simplifying the introduction and ongoing management in comparison with other approaches. For many operators, like SELECTV, MPEG-2 video solutions continue to be a proven platform with outstanding VBR compression performance and superior video quality with the economics and end-to-end compatibility typical of an established technology.

"As a new video service provider in Australia, SELECTV recognized early on that it needed to do more than simply replicate what was already available in the market," said Andrew Robertson, Chief Technology Officer of SELECTV. "Focusing on underserved viewer segments and creating specific programming packages with content sourced from around the world provides a rich and differentiated television service, though several difficult technical challenges were generated, which Harmonic helped us overcome. Harmonic's IP-based architecture provides greater flexibility in ac-

quiring, delivering and managing our video services, and at the same time, offers an extensible foundation that can seamlessly grow with our business. The Electra encoders with DiviTrackIP statistical multiplexing eliminate complications associated with obtaining content from different countries. We receive superior quality video at low bit-rates for a higher channel density per leased satellite transponder, while minimizing the rack space and cost, which optimizes our return on investment."

"SELECTV is leading the way in a new category of service providers who are creating a place for themselves by focusing on a series of discrete market demographics," said Shahar Bar, Director of Satellite and Broadcast Solutions for Harmonic Inc. "This emerging business model requires a more extensive understanding of the viewer's interests and preferences as well as a versatile and scalable service infrastructure to enable it. Harmonic is likewise leading the way with IP-enabled systems that give SELECTV and

other operators a better way to implement and manage their video services. Our advanced MPEG-2 compression solutions, such as the DiviCom Electra 1000 and DiviTrackIP, provide a cost-effective and competitive foundation for satellite operators today and into the future."

The DiviCom Electra 1000 efficiently MPEG-2 encodes up to four channels in a compact one rack-unit package. As such, SELECTV is able to implement a 12 channel multiplex in a mere five rack units, significantly reducing space and power requirements. The award-winning DiviTrackIP solution, in use worldwide by leading operators, streamlines the aggregation of content and minimizes video bit-rates by dynamically interoperating with encoders over a LAN or WAN. Adding channels and reconfiguring a multiplex is simplified by the intuitive "point, click and provision" user interface of Harmonic's NMX Digital Service Manager, a service-oriented system that allows centralized monitoring and control of SELECTV's entire video infrastructure. ■

ORBCOMM signs agreements with Orbital Sciences and OHB-System A.G.

US

ORBCOMM, a global satellite data communications company, today announced that it has signed agreements for the manufacture and launch of at least six replenishment satellites. This phase of ORBCOMM's satellite replenishment program is being carried out by two firms; Orbital Sciences Corporation (NYSE:ORB) and OHB-System A.G.

Together, these two contracts will deliver complete satellites for launch currently planned for the latter half of 2007 as part of ORBCOMM's satellite

replenishment program, which will replace and enhance ORBCOMM's Low-Earth Orbit (LEO) satellite constellation to meet the needs of its growing customer base. The agreement with Orbital Sciences Corporation is for six satellite communications payloads and includes options for two additional payloads. The agreement with OHB-System A.G. includes six satellite buses, the services to integrate the buses with the Orbital Sciences payloads and launch of the satellites using a COSMOS 3M rocket.

"This is the first phase of our plans to replenish our existing fleet of satellites," said John Stolte, ORBCOMM's Executive Vice President, Technology and Operations. "These satellites will add several improved features to our existing fleet of low-Earth orbit, or LEO satellites and are designed to provide our customers with improved service while maintaining full compatibility with existing subscriber equipment that is deployed today. These satellites will also add Automatic Identification System (AIS) receiving capability to our satellites

for the first time. They will also contain an additional set of receivers to increase the messaging capacity of each satellite."

The AIS system is designed to facilitate the efficient broadcast of navigational data from ships to meet the need for global maritime surveillance of shipping traffic. The ORBCOMM constellation will be the first commercial space-based detection system for AIS messages, greatly expanding the capabilities of the system over today's system of terrestrial radio towers. ■



Intersputnik Holding to build earth stations for Golden Telecom satellite network

RUSSIA

Intersputnik Holding, a subsidiary of the Intersputnik International Organization of Space Communications, won a tender to design, build and put into operation satellite earth stations for Golden Telecom satellite network in the territory of the Russian Federation.

According to the results of the tender Intersputnik Holding is entrusted with equipment supply, assembly, startup and commissioning, as well as technical maintenance of new satellite earth stations of the Golden Telecom network in the territory of Siberian, Far Eastern, Northwestern and Urals federal districts.

The above scope of work will be performed by ISATEL Plc, a

Russian operator being a member of Intersputnik Holding group of companies, in consortium with JSC Moscow Teleport and JSC Satis-TL-94.

Commenting on the tender results President of Intersputnik Holding Oleg Timoshenko said: "Partnership relations between Intersputnik and Golden Telecom in terms of satellite resource lease have existed for several years. For Intersputnik Holding the decision of Golden Telecom means an excellent opportunity to implement our potential as a provider of full-scale solutions."

At present Golden Telecom is one of the major lessees of Intersputnik satellite capacity. Recently the company signed an

agreement with Intersputnik on the lease of three transponders on Express-AM-series satellites in addition to the LMI-1 satellite resource leased earlier.

Considering the successful longstanding partnership and the tender results, Golden Telecom and Intersputnik signed an agreement on cooperation in providing satellite communica-

tion services using Intersputnik system capacities to third parties as well as in other projects related to the establishment and operation of fixed satellite service networks.

The agreement was signed by President of Golden Telecom Alexander Vinogradov and Director General of Intersputnik Vadim Belov. ■

"Partnership relations between Intersputnik and Golden Telecom in terms of satellite resource lease have existed for several years."

SingTel launches satellite-based broadband network services

SINGAPORE

Singapore Telecommunications Limited (SingTel) announced that it has launched a satellite-based broadband network to the resort islands in the Maldives. SingTel has partnered with Focus InfoCom, a leading Internet Service Provider in the Maldives, to support its Raajje Online, an 'always-on' broadband Internet service.

The partnership allows Focus InfoCom to offer broadband Internet service to any of the 1,200 islands there. Tourism is the biggest industry in the Maldives and new islands are being set aside for tourism.

Mr Titus Yong, SingTel's Head of Satellite, said: "We are pleased to collaborate with Focus InfoCom in the Maldives. The growth in the tourism industry is expected to drive the need for

better communications and connectivity – within and outside the Maldives.

"Through harnessing the possibilities brought about by the convergence of satellite and IP (Internet Protocol) technologies, SingTel can now offer broadband Internet connectivity to literally anywhere in the world, including the most remote regions."

Mr Sobah Rasheed, Focus InfoCom's Managing Director, said: "We chose SingTel to be our main partner to roll out broadband Internet service via satellite IP because SingTel has exceeded our expectations in meeting our service levels and requirements. SingTel is a formidable regional player and it has a good reputation for reliability.

"With our partnership, I am confident that Focus InfoCom

Globecomm awarded \$1.6 million contract from DTH provider in Asia

Globecomm Systems Inc a global provider of end-to-end value-added satellite-based communications solutions, today announced that a direct-to-home provider in Asia has exercised a follow-on provision in their existing contract valued at \$1.6 million.

On January 20, 2005, Globecomm announced a letter of award and purchase order from a provider of direct-to-home video services in Asia. The contract included follow-on provisions, which the customer has now exercised.

Pursuant to the original contract, Globecomm designed and built a new direct-to-home uplink facility. The facility includes two thirteen-meter antennas with tracking and all the related sub-systems. Globecomm also built a program acquisition system with a multi-feed receive only antenna, multiple receive only C band antennas and all related subsystems.

Now that the customer's new facility has been completed, they have exercised the follow-on provision in the original contract to upgrade a previously existing facility.

David Hershberg, Chief Executive Officer and Chairman of Globecomm Systems Inc., said, "Globecomm has once again demonstrated its ability to design and build mission critical uplink facilities, which has resulted in this customer turning to the Company to upgrade existing infrastructure." ■

can now reach out to the untapped segment of Maldivians who have limited or no access to broadband Internet service. We will also be able to meet the communications needs of the over 700,000 tourists who visit

the Maldives." The partnership will also allow Focus InfoCom to meet the needs of businesses in the Maldives that require their networks to be highly secure and reliable as well as being scalable. ■



Sydney movemedia trial reveals strong consumer interest in Mobile TV

AUSTRALIA

Final results from the unique, high powered Sydney Mobile TV trial of 16 television services to mobile handsets, have revealed a high level of consumer interest in a commercial Mobile TV service in Australia reflected by a significant majority of trial participants expressing an interest in subscribing for such a commercial service.

80% of trialists liked the ability to watch TV anytime, anywhere - particularly when waiting, travelling, at home or commuting. Total TV viewing increased during week days as a result of the movemedia service, particularly in the mornings and at lunchtime.

Peak viewing times varied with traditional TV, peaking in the

mornings, lunch and evenings, with an afternoon peak on Sundays.

The trial was conducted with 375 trialists by partners Broadcast Australia Group and Telstra. It offered 10 Foxtel channels (Channel V, E!, Fox Football, Fox Sports News, Nickelodeon, Sky News, Sky News Business, The History Channel, The Lifestyle Channel and The Weather Channel), along with ABC2, SBS, Channel Nine, CNN, Sky Racing and Boomerang.

Australian usage behaviour showed very similar results to those obtained from overseas market research. The trialists representing a wide range of demographics chose to access TV on their Telstra mobiles for an

average of 25 minutes per viewing session, with 1 to 2 sessions per day. The more intensive users were non-Pay TV subscribers and commuters.

Sports channels were the most popular among viewers during their lunch breaks and sport was also popular on Saturday evenings.

Viewers could choose from a wide selection of content. Overall the most popular content was general entertainment, news and documentaries. The content provided met trialist expectations though in the future trialists also said they would like to be able to download and record programmes to watch later.

The trial commenced July 2005. TV channels available in

the trial included Channel V, E!, Fox Football, Fox Sports News, Nickelodeon, Sky News, Sky News Business, The History Channel, The Lifestyle Channel and The Weather Channel), Nine, ABC2, SBS, Sky Racing, Boomerang and CNN

The Technology

The service is being transmitted on channel 29 from BA's Gore Hill facility using DVB-H (digital video broadcasting - handheld) technology. Trialists received the service via a Nokia 7710 mobile 'phone handset, turning it into a portable television. The special handset receives 16 broadcast video streams while the telephone utilises the Telstra GSM and GPRS mobile networks. ■

Intelsat General Corporation signs long-term agreement

US

Intelsat General Corporation (IGC), a leading provider of broadband satellite solutions to the commercial and government markets, today announced that MilSat Services GmbH, a company set up by EADS Space Services and ND SatCom, signed a 10-year contract for leased satellite services.

MilSat Services GmbH, a Bremen, Germany based company, was established to provide the satellite communication system for the German Armed Forces' SatcomBw Step 2 program.

Under the 10-year agreement, Intelsat General Corporation will supply C- and Ku-band leased services over several Intelsat satellites providing coverage ranging from Eastern Asia to the Americas.

"It is a privilege to support acknowledged European lead-

ers in the defense marketplace such as EADS Space Services and ND SatCom, in their efforts to supply secure military infrastructure and services to deployed forces operating anywhere in the world," said John Klingelhoefter, Acting President, Intelsat General Corporation.

Intelsat General Corporation, a subsidiary of Intelsat, Ltd., offers a range of cost-effective, secure communications infrastructure and solutions including satellite bandwidth on Intelsat or

Thaicom 5 fully tested - now commencing commercial service

Shin Satellite has announced that its new satellite, Thaicom 5, has now been fully tested in orbit following its launch on 27 May (28 May in Bangkok) 2006. All systems are now operating normally.

Following completion of in-orbit testing, the Company successfully transferred all the customers on its Thaicom 3 satellite to the new Thaicom 5 satellite on July 13.

With the transfer of customers completed successfully, the satellite is now in commercial service. Shin Satellite, through Thaicom 5, will offer conventional broadcasting and telecommunications services, and introduce technology for broadcasting high definition television to the market for the first time in the Indochina region. Thaicom 5 is a Spacebus 3000A model by Alcatel Alenia Space of France and has a footprint covering four continents. ■

other satellite systems, managed networks services leveraging numerous broadband platforms, mobile satellite serv-

ices, teleport and fiber backhaul services as well as a range of remote terminal and customer premise equipment. ■

"It is a privilege to support acknowledged European leaders in the defense marketplace such as EADS Space Services and ND SatCom, in their efforts to supply secure military infrastructure and services to deployed forces operating anywhere in the world"



Lockheed Martin completes 5th modernized GPS satellite

US

Lockheed Martin has announced that it has completed the fifth in a series of eight modernized Global Positioning System (GPS) IIR satellites that the company is developing for the US Air Force. The spacecraft are the most technologically advanced GPS satellites ever developed and will provide significantly improved navigation performance for U.S. military and civilian users worldwide.

The modernized program, known as GPS IIR-M, is being performed at Lockheed Martin's facilities in Valley Forge, Pa., and ITT Industries in Clifton, N.J. The spacecraft offer a variety of enhanced features for GPS users, such as two new signals and enhanced encryption and anti-jamming capabilities for the military, as well as a second civil signal, thus providing military and civilian users with greatly improved navigation capabilities.

"We're proud to have com-

pleted work on the fifth GPS IIR-M spacecraft," said Don DeGryse, Lockheed Martin's vice president of Navigation Systems. "The success of this modernization program is direct testimony to the strong partnership forged between Lockheed Martin and the Air Force to tackle the important objective of providing state-of-the-art navigation services for the US military and civilian users across the globe."

Completed satellites are delivered to storage and become available for launch when requested by the Air Force. The team is now preparing for the second IIR-M mission scheduled for launch on Sept. 14, 2006 from Cape Canaveral Air Force Station, Fla. Designated GPS IIR-15(M) the satellite will join the first modernized IIR satellite declared operational for GPS users last year and 12 other operational Block IIR satellites currently on-orbit within the overall

29-spacecraft constellation.

GPS provides such essential services as situational awareness and precision weapon guidance for the military. It is also an information resource supporting a wide range of civil, scientific and commercial functions – from air traffic control to the Internet – with precision location and timing information.

Air Force Space Command's 2nd Space Operations Squadron (2SOPS), based at Schriever Air Force Base, Colo., manages and operates the GPS constellation for both civil and military

users. Lockheed Martin is also leading a team competing to build the next-generation Global Positioning System, known as GPS Block III.

The new program will address the challenging military transformational and civil needs across the globe, including advanced anti-jam capabilities, improved system security and accuracy, and reliability.

GPS Block III will enhance space-based navigation and performance and set a new world standard for positioning and timing services. ■

"GPS Block III will enhance space-based navigation and performance and set a new world standard for positioning and timing services."

VTV affirms quality of MEASAT satellite service

MEASAT Satellite System Sdn. Bhd. has announced that Vietnam Television ("VTV"), the national broadcaster of the Socialist Republic of Vietnam, has renewed its agreement to lease MEASAT-2 Ku-band capacity for the countries Direct to Home (DTH) Pay-TV service.

"VTV is Vietnam's leading Pay-TV operator, supporting a large and rapidly expanding customer base" said Diego Sutchan, MEASAT's Vice President, Sales and Marketing. "We have had the privilege of providing VTV with satellite capacity for their DTH operations since its launch and are delighted to be able to announce the continuation of this partnership."

Quality of Service

According to senior managers of VTV, including Mr. Nguyen Quoc Viet, Director General, VTV's DTH Service, "VTV subscribers have been pleased with the quality of the service received via MEASAT-2". They also added, "VTV looks forward to continuing providing high-quality broadcast with the renewal of the MEASAT-2 Ku-band transponder service."

VTV's DTH service, which was launched in 2004, offers up to 20 domestic and international channels.

Vietnam Television is planning to further increase the number of channels offered to its subscribers in the coming months. ■

In brief

JAPAN

Japan's JCSAT-10 has arrived at the Spaceport for its August 11 launch.

Both payloads for Arianespace's August 11 mission with Ariane 5 ECA are now at the Spaceport Guiana following this week's arrival of JCSAT-10 in French Guiana.

To be operated by Japan's JSAT Corporation, JCSAT-10 will provide and supply fixed satellite services (FSS) for Japan, the Asia-Pacific region and Hawaii. It will join the French Syracuse 3B military telecommunications spacecraft on the heavy-lift Ariane 5 ECA's dual-passenger flight.

INDIA

The launch of India's heaviest communication satellite Insat-4C has failed says The Times of India, dealing a blow to the coun-

try's DTH ambitions. "There seems to be a mishap in the first stage separation. Things have gone wrong," project Chairman G Madhavan Nair said. He said the lift-off was normal, but in a few seconds the vehicle was found to be off trajectory and in 60 seconds, some parts had broken up

US

Comtech Telecommunications Corp has announced that its Maryland-based subsidiary, Comtech Mobile Datacom Corporation, received a \$2.4 million order for its mobile satellite data communications transceivers.

The order is for the supply of Comtech's Model 2011E mobile satellite data transceivers. The transceivers are integral to the Force XXI Battle Command Tracking (FBCB2-BFT) program, a battle command real-time situational awareness and control system. ■



Verso announces strategic partnership with Alcatel

International

Verso Technologies, Inc. (Nasdaq: VRSO), a global provider of next generation network solutions, has announced a strategic partnership agreement with Alcatel Alenia Space, a global leader in satellite systems and orbital infrastructures.

The partnership creates a global distribution channel for the Verso NetPerformer IP GSM Backhaul Solution, a specific evolution for Alcatel Alenia Space of the existing Verso NetPerformer series compatible with the Alcatel Wireless Access Backhaul via Satellite solution marketed under the brand name A9760 WBS

Alcatel Alenia Space focuses on the design, development, and manufacture of space systems, satellites, payloads, orbital infrastructures and space transportation, instruments and associated ground systems for civilian and military applications. The operational headquarters of Alcatel Alenia Space are located

in Cannes, France, with plants in France, Italy, Belgium and Spain. It is the European leader in satellite systems with sales of approximately 1.8 billion euros (2004) and approximately 7,200 employees.

The partnership provides Alcatel Alenia Space with Verso's IP GSM Backhaul solution, a unique leading technology in this sector. The joint solution of Verso and Alcatel Alenia Space is a very cost effective offer for the backhaul via satellite of BTS (Base Transceiver Stations) from their Mobile Core Network. GSM, GPRS or EDGE traffic are compressed and optimized in order to require the smallest satellite bandwidth and reduce operating expenses (OPEX). In addition Alcatel Alenia Space experience and patents in Satcom technologies and on-demand bandwidth allocation (DAMA) enable efficient concentrated transmission systems for the GSM circuits switching.

Industry data indicates that satellite GSM backhaul technology has matured to be recognized as the most efficient means to deliver GSM services in geographically challenged areas, or in areas where conventional terrestrial transmission is not available, as well as a highly cost effective and very light solution to back-up Base Transceiver Stations (BTS) in case of terrestrial network failure. However, industry estimates place satellite transmission backhaul costs at approximately 40 percent of the total OPEX related to a BTS deployment.

"Given the wide scale acceptance and maturity of the technology combined with the associated historical cost implications, operators are carefully selecting partners when designing and deploying satellite net-

work solutions because these partners have a direct impact on the viability and profitability of the project deployed," said Yves Desmet, Senior Vice President, worldwide sales, Verso Technologies. "Alcatel recognized the key value proposition offered by our backhaul solution and will leverage the solution to ensure viability, reliability and profitability on their global GSM deployments."

"This partnership opens a global distribution network for our IP GSM Backhaul Solution via the leading satellite equipment vendor in the world," said Monty Bannerman, Chief Executive officer, Verso Technologies. "The fact that Alcatel has selected Verso as their strategic partner for this market sector shows the obvious value proposition of our technology." ■

Lockheed Martin-built satellite fleet achieves 150 years in orbit

The Lockheed Martin (NYSE:LMT) A2100 communications satellite fleet recently achieved a major milestone by accumulating 150 years of successful in-orbit operations. The A2100 satellite series, designed and manufactured at Lockheed Martin Commercial Space Systems (LMCSS), currently consists of 29 satellites featuring 1156 transponders with an accumulated lifetime of over 6,000 years of successful operations in orbit. The first A2100 satellite, AMC-1, was launched Sept. 8, 1996.

Throughout its 45-year history, LMCSS has launched 88 commercial communications geostationary earth orbit satellites, all of which have achieved a total of 714 in-orbit years. This year, LMCSS delivered the 27th, 28th, and 29th A2100 spacecraft to satellite operators around the world: EchoStar X, launched Feb. 15 aboard Sea Launch; JCSAT-9, lifted into orbit April 12 also by Sea Launch; and ASTRA 1KR, launched April 20 aboard Lockheed Martin's Atlas V.

"LMCSS' world-class technical capabilities, design and engineering, manufacturing and operations are all key factors that contribute to the success of the industry's best, most reliable spacecraft, the A2100," said LMCSS President Ted Gavriilis. "Along with the LMCSS Customer Services organization's excellent support of the A2100 fleet, we are confident that the A2100 will continue to achieve significant operational milestones and build on its already outstanding heritage." ■

AAE Systems opens new regional office

Singapore

AAE Systems is pleased to announce the opening of a new regional office in Singapore to expand its sales channels throughout the Asia and Pacific market. This new location is in addition to the company's first regional office in the Middle East. AAE has been actively working to find effective ways to service its existing clients and increase its presence in the Asia and Pacific. This new regional office will allow AAE to provide superior

and faster service, as well as offer its highly advanced Eclipse MF-TDMA DAMA VSAT communications solution to the world market using a more effective approach.

Elsewhere, the company has finalized a contract to supply its Eclipse system to an oil company in Oman. The system will be deployed in full-Mesh topology supporting voice and data connectivity for a corporate network. ■

Peter Stier named VP, Marketing and Sales of Sea Launch

US

The Sea Launch Company has named Peter Stier to be Vice President, Marketing and Sales, effective immediately. He re-

places Rob Peckham, who became President and General Manager of the company in June. ■