

APSCC Monthly e-Newsletter

OCTOBER 2017

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News in this issue has been collected from September 1 to September 30.

INSIDE APSCC

APSCC 2017 Satellite Conference & Exhibition, 10-12 October, Tokyo, Japan

The APSCC Satellite Conference and Exhibition is Asia's must-attend executive conference for the satellite and space industry, where business leaders come together to gain market insight, strike partnerships and conclude major deals. Celebrating its 20th annual event APSCC 2017 #SATECHexplorer will incorporate industry veterans and new players through the 3-day of in-depth conference program to reach out to a broader audience. Join APSCC 2017 and expand your business network while hearing from a broad range of thought-provoking panels and speakers representing visionary ideas and years of business experience in the industry. For more information, please visit www.apsc2017.com

SATELLITE BUSINESS

Bluesky Cook Islands to Launch 4G+ Service via SES Networks

September 4, 2017 - Bluesky Cook Islands, the sole provider of fixed phone, mobile and broadband services to the Cook Islands, has increased the amount of satellite capacity it is using from SES Networks, in order to launch 4G+ service to Rarotonga and Aitutaki, the two key cities of the island nation. In the announcement made by SES, the increased capacity delivered on the low latency, high throughput O3b Medium Earth Orbit (MEO) fleet will also allow the extension of 4G/LTE mobile backhaul service to the country's outer islands, and faster and dedicated broadband service for the Cook Islands Ministry of Education. The Cook Islands was the first market to use SES Networks' innovative O3b MEO satellite system in 2014 to deliver 3G/ 4G services to the remote nation. The new agreement signed with SES Networks is part of Bluesky Cook Islands' substantial network upgrade. The launch of 4G+, currently the world's fastest commercial mobile network technology, demonstrates Bluesky's ongoing commitment to offer new and innovative products and services to its customers.

Royal Canadian Navy Deploys ViaSat's End-to-End Link 16 Communications System

September 5, 2017 - ViaSat Inc announced it has delivered an end-to-end Link 16 communications system to the Royal Canadian Navy (RCN) for its Halifax-class frigates. This state-of-the-art upgrade will enable the RCN to more effectively communicate with U.S., NATO and other Allied forces through Link 16 interoperability, and will serve as a bridge to the future fleet communications. To combat potential attacks at sea, the RCN executed a fleet-wide Halifax-class frigate communications upgrade using the Link 16 waveform. ViaSat's end-to-end Link 16 system supports a Canadian multilink capability using integrated shipboard racks outfitted with critical support equipment required to fully operate the Multifunctional Information Distribution System (MIDS) Low Volume Terminal (LVT) (4) technology. The MIDS LVT (4) terminal is an advanced, anti-jam data and voice communications system. The complete Link 16 system also includes specialized cabling to interface with Link 22 capabilities for future support and ViaSat's software diagnostic tools for terminal and network analytics.

Inmarsat Signs MoU with Samsung Heavy Industries to Deliver Applications for New Build Smart Ships

September 5, 2017 - Inmarsat has signed a ground-breaking Memorandum of Understanding (MoU) with Samsung Heavy Industries (SHI), establishing a relationship to leverage the 'smart ship' connectivity offered by Fleet Xpress at the vessel construction stage. The strategic agreement envisages the leading South Korean yard installing Inmarsat-approved terminal hardware and offering applications to cover remote machinery diagnostics and CCTV services, to leverage the satellite communications platform's capabilities from the moment the ship is delivered. The new service, which has been christened 'Smart Ship' by SHI, will allow owners to enhance

efficiency by harvesting data from hull-monitors and equipment sensors onboard in real-time, utilizing Inmarsat's dedicated bandwidth for Certified Application Providers (CAPs).

European Space Operations Centre (ESOC) Chooses Orbit's Satellite-Tracking Ground Station System

September 5, 2017 - Orbit Communications Systems Ltd. announced that its Gaia 100 satellite-tracking ground station system, customized with an S/X dual-band 3.7-meter antenna, will be integrated into the ground terminal of ESOC's Special Mission Infrastructure Lab Environment (SMILE). ESOC's SMILE facility, which hosts several projects, missions and systems, is a laboratory for prototype testing and validation of operations concepts and technologies. Orbit's Gaia 100 will provide the facility's ground terminal with enhanced satellite-tracking capabilities.

SpeedCast Launches Speedcast TV On Demand to Enhance Onboard Passenger and Crew Experience

September 6, 2017 - Speedcast International Limited has announced the release of its newest value added service for the Cruise, Ferry, Commercial Maritime and Energy industries, Speedcast TV On Demand™. The solution allows passengers and crew to access a wide range of entertainment and information onboard any commercial vessel, cruise ship, ferry or offshore rig, and promises a simple user interface, installation, and programming. Speedcast TV On Demand is comprised of a small set-top box that offers instant access to a large library of movies, TV shows, sports, news, games, music and informational content, and can be updated using a cloud-based login at any time. Speedcast TV On Demand also allows administrators to upload exclusive video content used for passenger and crew information, training, and safety. Speedcast TV On Demand is one component of the new Speedcast Media Network™, set to launch additional applications in coming months to enhance onboard entertainment and media content delivery and reliability.

Comtech Telecommunications Receives \$1.5 Million Contract for Transportable Troposcatter Systems

September 6, 2017 - Comtech Telecommunications has announced that during its fourth quarter of fiscal 2017, its Orlando, Florida-based subsidiary, Comtech Systems, Inc., which is part of Comtech's Government Solutions segment, has received an order totaling approximately \$1.5 million to provide additional tactical troposcatter equipment to an international prime contractor. This equipment adds increased capability to Comtech's existing Modular Transportable Transmission System (MTTS) troposcatter terminals as part of an upcoming expansion of a deployable communications network for an Asia Pacific military.

Timor Telecom Deploys New 4G/LTE Network with SES Networks Service Upgrade

September 6, 2017 - Timor Telecom (TT), the largest telecommunications operator in Timor-Leste, is expanding its service uptake with SES Networks by nearly 30% over the O3b Medium Earth Orbit (MEO) satellite fleet to roll out its new 4G/LTE network to customers across the country, SES announced. TT will use the service upgrade to deliver enhanced connectivity and higher-speed mobile broadband services to meet the exponential growth in demand coming from new subscribers. The network expansion will also enable TT to provide a superior customer experience to its mobile data subscribers. An early adopter of the MEO technology in 2014, TT has been using more than 1 Gbps of low latency bandwidth over the O3b MEO fleet for the past three years. The company has since upgraded service with SES Networks four times to keep up with rising demand from consumers. The company also benefits from site diversity with two SES Networks terminals deployed in Dili and Baucau, respectively, thereby achieving excellent service reliability and network availability far exceeding 99.9% with the SES MEO fleet.

EL AL Israel Airlines and ViaSat Bring In-flight Wi-Fi Innovation to New Boeing 787 Dreamliner Aircraft

September 6, 2017 - ViaSat Inc. announced long-time airline partner, EL AL Israel Airlines, has selected the ViaSat in-flight internet system to power the Airline's high-speed onboard Wi-Fi experience across all of its new Boeing 787 Dreamliner aircraft. EL AL Israel Airlines recently announced the purchase of 16 new Boeing 787 Dreamliner aircraft as part of its focus on customer service and innovation. The Airline is committed to provide its passengers with a high quality of service experience and a 'Home Away from Home' feeling. ViaSat's in-flight internet equipment is optimized to take full advantage of both satellite systems and is the only equipment today that can offer passengers the highest-speed Ka-band connections when flying on EL AL's TransAtlantic routes.

SpeedCast Introduces GO4SPEED to Provide a 4G/LTE Service for Maritime and Energy Customers

September 6, 2017 - Speedcast International Limited has introduced GO4SPEED™, a new global near-shore, data-only 4G/Long Term Evolution (LTE) solution for Maritime and Energy. GO4SPEED provides flexible usage packages, cost control and coverage protection, is easy to install and can be configured to compliment other communications services such as VSAT and MSS. GO4SPEED is ideal for any vessel or offshore rig and can

enhance the onboard internet with download speeds up to 100Mbps (4G/LTE carrier dependent). GO4SPEED can receive a signal up to 15km offshore depending upon the vessel's position, antenna and cellular tower location. If a 4G/LTE signal is not available, GO4SPEED automatically switches to 3G/HSPDA.

Air Astana Now Offering GX Aviation to Passengers through Inmarsat Partner Rockwell Collins

September 7, 2017 - Air Astana has become the first airline in the world to offer Inmarsat's GX Aviation to passengers onboard a widebody aircraft, after the service went live onboard the airline's initial Boeing 767. Air Astana selected the next generation inflight broadband solution through Inmarsat partner Rockwell Collins in a deal announced last year. GX Aviation, the world's first inflight broadband solution with reliable, seamless high-speed global coverage provided through a single operator, has already been installed on the first Air Astana Boeing 767. The service allows passengers to browse the internet, stream videos, check social media and more, with advanced connectivity on par with broadband on the ground. Air Astana passengers will be able to choose from three connectivity packages: The Light option will cover 15Mb, the Business option will cover 50Mb, and the Super option will cover 100Mb. All services are estimated to operate at an average speed of between 2-5Mbps. GX Aviation will eventually be available on all three of Air Astana's Boeing 767s, with system installation on its second aircraft planned to be completed in October 2017.

Skyline Opens New Office in Singapore for APAC Operation

September 7, 2017 - Skyline Communications, a global leader in end-to-end multi-vendor network management and OSS solutions for the broadcast, satellite, cable, telco and mobile industry, announced the opening of a new office in Singapore to further support the continuous growth in the APAC region. This new and strategic Skyline hub will spearhead all customer-facing services for the APAC region, from sales consultancy, across contract fulfillment, to operational support. The initiative underlines the long-term commitment from Skyline to build strong alliances with its customers, in order to enable them to further increase their quality of service and reduce their operational cost in an ever more complex broadcast and media technology landscape.

Iridium Exploring Advanced NewSpace Satellite IoT Opportunities

September 7, 2017 - Iridium Communications Inc. has signed a Memorandum of Understanding (MoU) with Magnitude Space, an emerging small satellite company. The signing of this MoU signals Iridium's interest in exploring collaborative partnerships with complementary NewSpace players, particularly those in the SmallSat low-power arena. As part of this MoU, the companies will begin discussions on how to collaboratively expand opportunities for space-based Internet of Things (IoT) services with the development of reliable, Low Power Global Area Network (LPGAN) technologies. Magnitude Space, headquartered in Amsterdam, is planning to build a network of 18-24 small satellites that will deliver LPGAN connectivity to remote areas of the world. From monitoring plantation soil moisture levels to tracking livestock, Magnitude Space's technology will be a cost-effective, reliable option for companies in need of very low-power, low-cost, monitoring and tracking options that require longer life battery and infrequent non-real-time messaging solutions.

SES Networks and Gilat Telecom Enables Satellite-enabled High-speed Connectivity in Congo

September 8, 2017 - SES Networks' longtime customer in the Democratic Republic of the Congo (DRC), Gilat Telecom, has expanded the satellite capacity under contract with SES Networks in the country, now topping more than 3.0 Gbps. Gilat has been providing Kinshasa, the capital and largest city in DRC, with expansive internet connectivity services for many years, and has seen unprecedented network reliability and resiliency from the SES Networks service. The company has now also launched service over SES's O3b Medium Earth Orbit (MEO) satellite fleet to a second DRC location, bringing fiber-equivalent internet to customers in Lubumbashi. Gilat, based in Israel, first deployed SES Networks' ultra-low latency, high throughput connectivity in 2014, following the launch of the first four satellites in the O3b Medium Earth Orbit (MEO) fleet becoming the first to use the new connectivity in Africa, and the second worldwide.

Globalstar Brings the Power of the Sun to IoT Asset Management with SmartOne Solar

September 8, 2017 - Globalstar Europe Satellite Services Ltd., a wholly owned subsidiary of Globalstar Inc., the leader in satellite messaging and emergency notification technologies, announced the launch of its newest M2M/IoT satellite device, the SmartOne Solar™. SmartOne Solar is a low maintenance and intelligent IoT device that provides remote monitoring and tracking over the Globalstar satellite network. Fixed and movable assets such as rail tank cars, containers, heavy equipment and vehicle fleets can be remotely monitored and tracked reliably, even when beyond the reach of other communications networks. Powered with solar-rechargeable batteries, SmartOne Solar can deliver over eight years of serviceable life and low maintenance. The device will operate continuously for many months while reporting twice a day without the need for exposure to sunlight.

SES Launches O3b mPOWER

September 11, 2017 - SES announced the launch of O3b mPOWER, a revolutionary and powerful networks system that will deliver efficient high-performance network communications to users all around the world. The rapidly expandable and highly scalable O3b mPOWER system will leverage innovative space and ground technologies, and enable SES Networks to deliver fully-managed services in the dynamic mobility, fixed data and government markets. O3b mPOWER is capable of delivering multiple terabits of throughput globally and is scheduled for launch starting in 2021. SES has contracted its first mPOWER technology partner, Boeing Satellite Systems, to build seven super-powered medium earth orbit (MEO) satellites. The constellation will have 30,000 fully-shapeable and steerable beams that can be shifted and switched in real time to align with customers' quickly changing growth opportunities, making it the most bandwidth-efficient system ever. SES already successfully operates the only non-geostationary broadband system through 12 MEO satellites which deliver high-throughput low latency connectivity, and will be launching another eight MEO satellites in 2018 and 2019. O3b mPOWER leverages the same building blocks with dramatically increased throughput, coverage and flexibility.

Globe Telecom Awards Gilat a Contract for Managed Service Satellite Backhaul for Cellular Services

September 11, 2017 - Gilat Satellite Networks Ltd., a worldwide leader in satellite networking technology, solutions and services, announced that Globe Telecom, Inc. has chosen Gilat for a five year multi-million dollar managed service contract, to enable accelerated deployment for the mobile operator's rapid network expansion throughout the Philippines. Gilat is to deliver its leading Satellite backhaul for Cellular Network as a managed service to provide data and voice services over 2G/3G/LTE to all regions requiring improved connectivity and broadband access, while maintaining a strict service level agreement (SLA). This service will enable Globe to provide voice and data coverage over satellite in the challenging terrain of the Philippines.

European Aviation Satellite Confirmed Ready for Commercial Service

September 11, 2017 - Inmarsat confirmed that the European Aviation satellite has successfully completed its in-orbit tests and now stands ready to support inflight internet services when the European Aviation Network (EAN) goes 'live' later this year. The satellite, built by Thales Alenia Space, was launched by Arianespace in June this year. EAN is the world's first dedicated aviation connectivity solution to integrate space-based and ground-based networks to deliver a seamless WiFi experience for airline passengers throughout Europe. The successful completion of spacecraft and payload testing of the S-band satellite further underlines the momentum that Inmarsat is building in the high-speed broadband inflight connectivity (IFC) market, which the company entered in October 2016 with the commercial introduction of GX Aviation, a worldwide service powered by its Ka-band, Global Xpress (Ka-band) satellite constellation.

Tesat-Spacecom and BridgeSat Partners to Provide Optical Communications Solution for Commercial Satellite Operators

September 11, 2017 - Tesat-Spacecom GmbH & Co. KG (Tesat) and BridgeSat, Inc. (BridgeSat) announced an agreement to jointly develop a solution enabling interoperability between Tesat's heritage Laser Communications Terminals (LCT) and BridgeSat's global optical communications ground network. With flight heritage that extends back over 15 years, Tesat's advanced LCTs have successfully operated on numerous satellite missions, including NFIRE, Alphasat, Sentinel-1A, Sentinel-2A, Sentinel-1B, Sentinel-2B, and EDRS-A. Having launched numerous LCTs that deliver high data rate communications for GEO satellite and inter-satellite links, Tesat has developed a Laser Communication Terminal for Direct to Earth downlink applications, the LCT DTE, in collaboration with the Institute of Communications and Navigation (IKN) of the German Aerospace Center (DLR). BridgeSat is developing a global optical communications ground network to serve the commercial satellite community. This network will consist of multiple optical ground stations with sites already identified and in development, strategically located in areas that have low clouds, good access to terrestrial networks, and optimized to serve LEO, ISS, and GEO orbits.

Comtech Develops Search and Rescue Real-Time Aircraft Tracking Portal for Civil Air Patrol

September 12, 2017 - Comtech Telecommunications Corp. announced that its Enterprise Technologies group, which is a part of Comtech's Commercial Solutions segment, has developed a real-time location, web-based portal for tracking multiple search and rescue aircraft simultaneously for the Civil Air Patrol (CAP), a volunteer organization of citizen airmen and an Auxiliary of the United States Air Force (USAF). Developed using Comtech's Location Studio™ platform, CAP's search and rescue portal tracks the flight patterns and GPS locations of all CAP search and rescue planes, as well as their altitude and speed. This information is transmitted to the portal using Garmin GPS tracking devices placed on all CAP planes. CAP traffic control members can access this information using the portal's web-based user interface, selecting which plane(s) they want to track. CAP pilots

are also capable of communicating with other CAP pilots and traffic control through a messaging system built into the portal, allowing them to exchange vital information and better coordinate routes.

Supernet Selects LeoSat for High-Speed Data Network

September 12, 2017 - LeoSat Enterprises has entered into a strategic agreement with Supernet, Pakistan's leading satellite network service provider and systems integrator, specializing in end-to-end satellite based GSM backhaul and enterprise networks. Through this agreement, LeoSat will provide Supernet with over 3 Gbps of capacity on its unique low earth orbit (LEO) network infrastructure. LeoSat's network combines the speed of fiber with the ubiquity of satellite ideal for cellular and enterprise networks, enabling Supernet to offer a full portfolio of local to global integrated communications solutions to facilitate the key business processes of corporate, SME and individual customers. As cellular protocols become more and more sophisticated and cellular use accelerates, there is an ever-increasing need to transport cellular signals for long distances, at high speeds, in high volume and native form. For existing and emerging market telecom operators, LeoSat offers significant advantages as its latency, timing and transport are in compliance with the network standards of the newer 4G, 5G and LTE cellular systems.

ABS Expands VSAT Services Using Advanced Technology from UHP Networks

September 12, 2017 - UHP Networks Inc, a leading manufacturer of innovative VSAT equipment, announced that it has been selected by ABS, a leading satellite operator, to expand its VSAT technology. ABS has rolled out several UHP-based networks across Africa, Asia and the Pacific providing internet and VSAT connectivity and now plans to deploy new services in the Middle East. For the expansion of the ABS network, UHP Networks is supplying multiple high-density redundant UHP-HTS hubs and state-of-the-art UHP-100 remote routers. The UHP technology will provide a high-availability, bandwidth-efficient and cost-effective service to ABS customers.

Inmarsat Maritime Unveils 'Fleet Secure' a Managed Service to Power Cyber Resilience at Sea

September 13, 2017 - Inmarsat has showcased its new Fleet Secure service at London International Shipping Week. Fleet Secure is the maritime industry's first and only fully-managed service to detect vulnerabilities, respond to threats and protect ships from widespread cyberattack. Fleet Secure will be commercially launched as a standard option on Inmarsat's award-winning Fleet Xpress service. Fleet Secure is a Unified Threat Management (UTM) and monitoring service that will power cyber resilience at sea, offering vessel owners and managers continuous transparency on the status of their digital security and a 24/7 response to cybercrime. It detects external attacks via high-speed satellite broadband connectivity, while also protecting vessel networks from intrusion via infected USB sticks and crew devices connected to the onboard LAN. Fleet Secure will seamlessly integrate with Fleet Xpress for no additional outlay on hardware and no impact on the customer's contracted bandwidth.

Jeju Air is South Korea's First LCC to Adopt SITAONAIR FlightTracker

September 13, 2017 - Jeju Air has become South Korea's first low-cost carrier (LCC) to adopt SITAONAIR's AIRCOM® FlightTracker, equipping the carrier to meet the incoming International Civil Aviation Organization (ICAO) 2018 flight-tracking mandate. AIRCOM® FlightTracker has been deployed across Jeju Air's fleet of 29 B737s. SITAONAIR's market-leading solution meets the airline flight-tracking challenge by gathering data from multiple global sources, filling in any gaps between terrestrial tracking sources to help improve flight operations. AIRCOM® FlightTracker is unique in that it can deliver this service using equipment already present on most aircraft – without the need for modifications or additional avionics – making it the industry's cost effective, swift-to-deploy, flight-tracking solution.

Comtech Xicom Technology Expands GaN SSPA Product Line

September 14, 2017 - Comtech Telecommunications Corp.'s subsidiary, Comtech Xicom Technology, Inc. announced a series of high-power GaN SSPAs to fill out the top end of its industry-leading SSPA product line. The new compact and rugged amplifiers are significantly more efficient than competing SSPAs making them ideal for transportable and mobile applications where power draw matters. For Ku-band customers, the new XTLIN-200K covers 13.75 to 14.5 GHz Ku-band with a minimum of 200W of linear power. The unit is in a compact, low profile outdoor package that is ideally suited for transportable applications. The new XTLIN-100K also covers 13.75 to 14.5 GHz, with a minimum of 100W of linear power, and is in the same package size as its industry-leading 100W Linear X-band unit, allowing easy conversion from X-band to Ku-band. At X-band, the new XTLIN-200X further extends Comtech Xicom's tactical X-band product line, offering a minimum of 200W of linear power.

SES Backs Seraphim Space Fund Launch

September 14, 2017 - SES announced that it is investing in the Seraphim Space Fund in order to support innovation in the satellite industry and to encourage Research and Development (R&D) efforts across the markets served by satellite. The world-leading satellite operator will also participate in the fund's Advisory Board. Seraphim Space Fund is a new venture capital fund launched by Seraphim Capital. Its primary focus is to invest in projects that are commercializing data about the Earth, collected by either satellite or Remotely Piloted Aircraft Systems (RPAS). Seraphim also invests in the broader technology ecosystem which supports the satellite and RPAS infrastructures and applications across a broad range of vertical markets, including construction, logistics, agriculture, finance, with a key focus on the insurance market – using insights from airborne data to evaluate risk, monitor assets and assess claims.

ND SatCom's SKYWAN 5G Leads the Way with Bolivian National VSAT Network

September 15, 2017 - In another step toward expanding its presence in South America, ND SatCom won the opportunity to develop a telecom network for Sistema Integrado de Defensa Aérea y Control de Tráfico Aéreo (SIDACTA) to securely and reliably connect locations across Bolivia. This telecommunications network for integrated air defence and civil air traffic management (ATM) will rely on the SKYWAN 5G VSAT network as the primary network, with a secondary one from ENTEL providing terrestrial backup where feasible. The VSAT network uses C-band transponders as recommended by ICAO (International Civil Aviation Organisation). The SKYWAN 5G network will be used in a star topology. This VSAT network will interconnect eleven fixed radar sites and two GM 400 mobile radars to form the robust primary telecom network for both civil and military air traffic controls in Bolivia. Redundant master sites will ensure network availability and guarantee data security. The VSAT network will make use of fly-away terminals for mobile deployments. Since the network will cover high-altitude locations in Bolivia, operational capability at 5000 m above sea level is required.

Cobham SATCOM's Unique Stabilized Antenna System Coming for Global Xpress

September 15, 2017 - Cobham SATCOM has announced that an Inmarsat Global Xpress (GX) variant of its state-of-the-art EXPLORER 8100 Stabilized, Auto-Acquire, Drive-Away Antenna System will be available for broadcast users before the end of this year. The new EXPLORER 8100GX expands Cobham SATCOM's EXPLORER 8000 series, which already includes 1 and 1.2 metre antennas for global Ku-band satellite services and Eutelsat's Ka-band NewsSpotter solution. Currently undergoing Inmarsat Type Approval testing, EXPLORER 8100GX features unique Dynamic Pointing Correction technology, which enables a high degree of pointing accuracy. It can adjust in milliseconds to compensate for the vehicle it is installed on rocking on its suspension, giving broadcasters the ability to transmit live, high definition multimedia without interruption from anywhere in the world and in almost any weather conditions.

OneWeb Prepares for Australian Operations

September 17, 2017 - OneWeb, a proposed global constellation of around 700 satellites backed by some of the largest tech companies on the planet, is preparing for its entry into the Australian market. The company – whose initial investors include Airbus, Japan's Softbank, Qualcomm and Richard Branson's Virgin Group – has already applied to the Australian Communications and Media Authority for initial regulatory approvals, with a decision expected in the coming weeks. However its application has also attracted the attention of the Department of Defence, which wrote to the ACMA warning of the potential of the proposed system to interfere with existing satellites.

HISPASAT and hiSky Reach an Agreement to Offer Affordable Voice, Data and IoT Services

September 17, 2017 - HISPASAT and hiSky Ltd, a leader in affordable satellite-based voice and data communications, signed a cooperation agreement to provide affordable, low-capacity voice, data MSS and IoT (Internet of Things) services in Spain, Portugal, Latin America, and North Africa by using the Ka band of HISPASAT satellites and a new satellite terminal developed by hiSky. The operations will begin with a pilot phase in which both companies will test and evaluate the Smartellite™ terminal in combination with the HISPASAT Ka band satellites. After this first phase, HISPASAT and hiSky will together provide low bit rate services in remote areas and for various applications (the maritime sector, connected cars, trains, the energy sector or the agricultural sector), using the Smartellite™ solution, patented by hiSky, and its compact portable device for the IoT, based on phased-array technology.

Telesat Signs Long Term Contract with Bell Canada for Capacity on New Telstar 19 VANTAGE Satellite

September 17, 2017 - Telesat announced that Bell Canada has signed a 15-year contract for substantially all of the HTS spot beam capacity over northern Canada on Telesat's new Telstar 19 VANTAGE satellite. Bell Canada

subsidiary Northwestel will use the capacity to dramatically enhance broadband connectivity for communities in Nunavut, Canada's northernmost territory. Telstar 19 VANTAGE is currently being built by Space Systems Loral. The satellite is scheduled to launch in the second quarter of 2018 on a SpaceX Falcon 9 rocket and will be co-located with Telesat's Telstar 14R satellite at 63 degrees West, a prime orbital slot for coverage of the Americas. Once operational, Telstar 19 VANTAGE will have six distinct coverages over the Americas and North Atlantic and the most capacity in Gbps of any satellite in Telesat's fleet.

Global Satellite Operator Places Repeat Order for Orbit's Maritime Satcom Platform

September 17, 2017 - Orbit Communications Systems Ltd., a leading provider of precision tracking-based communications solutions and airborne communications management systems, announced that a global NGSO (Non-Geostationary Satellite Orbit) satellite operator placed a repeat order worth \$645,000 for Orbit's OceanTRx 7-500 Ka-band maritime satellite communications platform. Delivery of the system, which will provide continuous broadband connectivity via satellite aboard cruise ships, is expected in 2017. OceanTRx 7 is a maritime satcom platform supporting a variety of 2.2-meter stabilized antenna system configurations in C, Ku, X and Ka bands. Designed for quick and easy installation, upgrades and maintenance, OceanTRx 7 combines exceptional RF performance and system availability with an extraordinarily small footprint. The result is enhanced operational productivity and crew welfare, reduced expenses and increased profitability.

Northrop Grumman to Acquire Orbital ATK

September 18, 2017 - Northrop Grumman Corporation and Orbital ATK, Inc. have entered into a definitive agreement under which Northrop Grumman will acquire Orbital ATK for approximately \$7.8 billion in cash, plus the assumption of \$1.4 billion in net debt. Orbital ATK shareholders will receive all-cash consideration of \$134.50 per share. The agreement has been approved unanimously by the Boards of Directors of both companies. The transaction is expected to close in the first half of 2018 and is subject to customary closing conditions, including regulatory and Orbital ATK shareholder approval. Upon completion of the acquisition, Northrop Grumman plans to establish Orbital ATK as a new, fourth business sector to ensure a strong focus on operating performance and a smooth transition into Northrop Grumman. On a pro forma 2017 basis, Northrop Grumman expects to have sales in the range of \$29.5 to \$30 billion based on current guidance. Northrop Grumman expects the transaction to be accretive to earnings per share and free cash flow per share in the first full year after the transaction closes, and to generate estimated annual pre-tax cost savings of \$150 million by 2020.

Intelsat and Etisalat Expand Relationship, Creating Gateway to Intelsat Epic^{NG} for the Middle East

September 19, 2017 - Intelsat S.A. and Etisalat UAE, a leading telecommunications services provider in the Middle East & Africa, detailed their plan to expand the distribution of Intelsat Epic^{NG} services in the Middle East region. Under a multiyear expansion, Etisalat will upgrade its network to deliver higher performance to customers in the region using the Intelsat 33e high-throughput satellite. Concurrently, Intelsat will leverage Etisalat's teleport in Dubai as an expansion node of the IntelsatOne Flex service. The teleport acts as an extension to Etisalat's Smart Hub services. Equipped with the latest technologies and platforms, it serves as one of the globe's major satellite hubs, hosting more than 40 antennas. This will expand options in the region to benefit from award-winning Intelsat Epic^{NG} high-throughput services.

UHP Networks Unveils RUN, a Broadband, Functionality-as-a-Service Platform Powered by Intelsat Epic^{NG}

September 19, 2017 - Intelsat S.A. and UHP Networks announced a new service powered by Intelsat Epic^{NG}. UHP Networks is introducing RUN, a FaaS broadband data solution optimized to take advantage of the maximum efficiency provided by the award-winning Intelsat Epic^{NG} high-throughput fleet. RUN is an in-country VSAT service with a cloud-based network management system. Working together, UHP and Intelsat are uniquely positioned to deliver this high-efficiency solution to enterprises, telcos and government users that require a flexible, high-performance infrastructure. RUN uses UHP's low-capex, universal routers to provide an easy-to-operate platform that initially will be available in Africa, the Middle East, and Central and South Asia.

Gogo Business Aviation Goes Global with High-Speed Satellite Connectivity Service

September 19, 2017 - Gogo Business Aviation is expanding its reach to become a global provider with the announcement of a high throughput satellite service for business aviation. The new service will utilize Gogo's existing Ku-band satellite network, the same trusted high capacity satellite network that is currently providing bandwidth for more than 550 commercial aviation aircraft across 10 airlines globally. Gogo is currently bringing additional HTS (high throughput satellite) capacity online as part of its global satellite network, which will boost the performance of both its new business aviation Ku solution and its commercial aviation network solutions. Service is expected to be available in the second half of 2018.

Marlink Re-launches Sealink C-band VSAT Service for Multi-band Network Integration

September 19, 2017 - Marlink has re-launched its Sealink C-band VSAT service, introducing new price and service plans, enabling easier integration with existing and future Ka and Ku-band VSAT services. The upgrade gives Sealink C-band VSAT users more flexibility to add alternative VSAT frequencies to their network in order to ensure availability of high-speed critical business and operational applications globally. The new Sealink C-band provides customers with a transparent and cost-efficient way of integrating existing C-band services with flexible Ka and Ku-band VSAT. The result is a simple path to maximize Quality of Service and benefit from reliable, global and continuously available high-speed broadband connectivity. Marlink customers choosing to integrate Sealink C-band VSAT with Ka or Ku-band VSAT will enjoy high bandwidth availability regardless of which service is currently used, ensuring their IP connectivity meets the needs of their regional and globally operating vessels regardless of throughput required.

ST Engineering's Corporate Venture Capital Unit Invests in Cyber Security Business

September 19, 2017 - Singapore Technologies Engineering Ltd (ST Engineering) announced that its Corporate Venture Capital unit, ST Engineering Ventures Pte Ltd (ST Engineering Ventures) has made a Series B investment of US\$5.79m (about S\$7.8m) for a minority interest in Janus Technologies, Inc., an endpoint cyber security provider based in California, US. The Group has identified cyber security, along with robotics, autonomous technology, and data analytics as strategic capabilities that it will invest in to create long term value and growth. Through this investment, the Group's electronics arm, ST Electronics will be able to provide a unique hardware-based cyber security solution that delivers a customized and secure platform and network security capabilities to its customers.

Gogo Business Aviation Goes Global with High-Speed Satellite Connectivity Service

September 19, 2017 - Gogo Business Aviation, a provider of broadband connectivity products and services for business aviation in North America, is expanding its reach to become a global provider with the announcement of a high throughput satellite service for business aviation. The new service will utilize Gogo's existing Ku-band satellite network, the same trusted high capacity satellite network that is currently providing bandwidth for more than 550 commercial aviation aircraft across 10 airlines globally. Gogo is currently bringing additional HTS (high throughput satellite) capacity online as part of its global satellite network, which will boost the performance of both its new business aviation Ku solution and its commercial aviation network solutions. Service is expected to be available in the second half of 2018.

Talia Acquires Northport Teleport in Iraq

September 20, 2017 - Talia Limited, a leading communication provider serving the Middle East, Africa, Europe and the Americas, announces the acquisition of Northport, a licensed broadcast teleport operator in the Kurdistan region of Iraq. As Talia look to continue expansion within the country and support of existing broadcast customers, the acquisition of Northport represents a commitment to our ongoing presence within the region.

NSSLGlobal Launches All-in-One Cellular/VSAT Solution

September 21, 2017 - Independent satellite communications provider NSSLGlobal announced the launch of FusionIP, which combines VSAT and cellular connectivity within the same device. Within one single 60cm SAILOR dome, FusionIP integrates the best of two worlds; LTE and satellite broadband, allowing ships to automatically switch between 4G/3G and satellite networks to achieve optimum data speeds and cost efficiency. NSSLGlobal's new product presents a convenient, all-in-one, 'unified communications' solution that is easy to install and provides a global "one SIM, one contract" package with speeds up to 100Mbps. FusionIP represents a leap forward in terms of convenience. With one aesthetically pleasing antenna, a single system, and one point of contact for technical information, the new product/service is ideal for yachts, crew transfer vessels, offshore wind installation vessels, fishing vessels and coastal commercial vessels.

UltiSat Awarded CTC Task Order to Provide Commercial SATCOM Services for UAV Operations

September 25, 2017 - UltiSat, Inc., a leading provider of end-to-end managed satellite network solutions, announced that Defense Information Systems Agency (DISA) Defense Information Technology Contracting Organization (DITCO) recently awarded a COMSATCOM Transponded Capacity (CTC) task order for UltiSat to provide the United States Pacific Command (USPACOM) Air Combat Command (ACC) Ku satellite services support for Global Hawk (GH) Unmanned Air Vehicle operations. This task order falls under the Future COMSATCOM Services Acquisition (FCSA) Schedule 70 contract vehicle.

SITAONAIR Activates High-Speed Broadband on Singapore Airlines' 777-300ER

September 25, 2017 - SITAONAIR has activated Asia's first GX Aviation-enabled commercial aircraft, becoming the first Inmarsat valued-added reseller (VAR) to achieve it. GX Aviation's high-speed broadband connectivity is now available on one of Singapore Airlines' (SIA) Boeing 777-300ER aircraft, making SITAONAIR's complete, nose-to-tail, high-speed connectivity experience over GX Aviation available to passengers. SITAONAIR has equipped SIA with its full suite of high-speed connectivity-enabled services for cabin. These span everything from its custom-made high-speed inflight Wi-Fi hub Internet ONAIR and mobile data services (Mobile ONAIR), to digitized devices for cabin crew, to enhance the passenger experience and operational efficiencies.

Mitsubishi Electric Tests Autonomous Driving System Using CLAS from Quasi-Zenith Satellite System

September 26, 2017 - Mitsubishi Electric Corporation announced that it began field testing the world's first autonomous driving technology on highways to use a centimeter-level augmentation service (CLAS) broadcast from the Quasi-Zenith Satellite System (QZSS) on September 19. Driving tests will be conducted to verify the possibility of infrastructural driving, utilizing CLAS signals and high-precision 3D maps combined with Mitsubishi Electric's intelligent driving technology, including sensing technologies such as millimeter-wave radar and cameras. CLAS is a positioning-augmentation service for high-precision positioning, distributed free of charge in Japan from the QZSS, which operates under the auspices of the Cabinet Office. CLAS is scheduled to begin operating in April 2018 and is currently in the final stages of verification. It is expected to be used for practical applications such as safe-driving assistance and automated driving.

Datagroup Selects iDirect Platform and New iQ Series Remotes to Launch HTS Service in Ukraine

September 26, 2017 - VT iDirect, Inc. (iDirect), a world leader in satellite-based IP communications technology and a company of Vision Technologies Systems, Inc. (VT Systems), announced that Datagroup, the leading Very Small Aperture Terminal (VSAT) provider in Ukraine, has selected the iDirect platform and its new series of DVB-S2X remotes, the iQ Series, to offer new High Throughput Satellite (HTS) services to their substantial customer base. The company will leverage the iDirect network to offer high-speed connectivity to a wide range of enterprise markets, enabling cost-effective deployment of large-scale networks. Datagroup contracts INTELSAT operator for capacity on one of its effective satellites. Long-term plans call for Datagroup to license an additional transponder of HTS capacity to support networks that can scale up to 50,000 sites. iDirect's DVB-S2X technology delivers revolutionary gains in performance and efficiencies and will enable Datagroup to scale their network based on a significantly lower cost model. The iQ Series of remotes are designed to meet the needs of both fixed and mobility networks within a wide range of performance scenarios and software licensing features, based on a future-proof software-upgradeable design.

Inmarsat Launches New Pacific North West Pricing Plan for Fleet One

September 26, 2017 - Inmarsat Maritime has launched a new fishing pricing plan for the Pacific North West which will make it easier and more economical for regional Fleet One users to get live weather updates, track and trace fish, and send catch reports. The new single SIM subscription plan represents the latest Inmarsat initiative to enhance vessel performance for Pacific North West fishers, while also ensuring the safety of those at sea. The targeted offer covers the Gulf of Alaska, South East Alaska, and the North West Canadian and US coastal area (Washington, Oregon, and California), as well as parts of the Bering Sea. It delivers free Fleet One-to-Fleet One voice calls for up to 30 minutes, Pay-as-you-go IP data and the seasonal flexibility to suspend services during inactive periods.

Mitsubishi Electric, Nokia Bell Labs, UC San Diego Develop World's First Ultra-fast GaN Envelope-Tracking Power Amplifier for Next-generation Wireless Base Stations

September 26, 2017 - Mitsubishi Electric Corporation, Nokia Bell Labs and the Center for Wireless Communications at UC San Diego announced that their joint development of the world's first ultra-fast gallium nitride (GaN) envelope-tracking power amplifier, which supports modulation bandwidth up to 80MHz and is expected to reduce energy consumption in next-generation wireless base stations. To help meet the demand for increasing wireless capacity, mobile technologies are shifting to next-generation systems that use complex modulated signals with large peak-to-average power ratio (PAPR) and extra-wide modulation bandwidth. The newly developed ultra-fast GaN envelope-tracking power amplifier achieves state-of-art performance thanks in part to Mitsubishi Electric's high-frequency GaN transistor technology and design innovation for the GaN supply-modulator circuit. Using Nokia Bell Labs' real-time digital pre-distortion (DPD) system, the Bias-controlled power amplifier in next-generation wireless base stations power amplifier has demonstrated efficient operation even with 80MHz modulated LTE signals, the world's widest modulation bandwidth for this purpose as of May 19, 2017.

Inmarsat Supports the Philippines' National Simultaneous Earthquake Drill (NSED)

September 27, 2017 - Inmarsat and Télécoms Sans Frontières (TSF), a humanitarian NGO specialized in telecoms and technology, are supporting the Philippines' 3rd Quarter Nationwide Simultaneous Earthquake Drill (NSED) on 27 September 2017. Through Inmarsat's involvement with the UK Space Agency's International Partnership Programme, TSF and Inmarsat will be working with the Department of Social Welfare and Development's (DSWD) Disaster Response Assistance and Management Bureau (DReAMB) to put new emergency communications and information management protocols to the test during the NSED. The exercise will include the deployment of Inmarsat's Global Xpress (GX) service, the world's first, globally available high-speed broadband network delivered by a single operator. The nationwide exercise will also see 'out-of-the-box' Wi-Fi hotspots created for use by the emergency response teams, using Inmarsat's award-winning BGAN service. BGAN, which is used across the world for mission critical and emergency communications, has L-band network availability exceeding 99.9%, meaning that connectivity is assured wherever operations are based and in any conditions.

AirAsia Group Signs Contract to Offer Inmarsat's GX Aviation High-Speed Broadband on Aircraft

September 27, 2017 - Inmarsat announced that AirAsia Group has selected its next-generation GX Aviation inflight broadband solution for more than 120 Airbus aircraft. The landmark contract signed by Inmarsat and AirAsia Group, through its subsidiary ROKKI, covers all existing and future Airbus A320 and A330 aircraft operated across the AirAsia Group, including the long-haul operator AirAsia X. The agreement also has the scope to include any additional aircraft types due for delivery in the coming years, such as the Airbus A350. The first installations of GX Aviation onboard AirAsia Group aircraft, together with the launch of commercial service, are both scheduled to commence in the first half of 2018.

Panasonic and Dish Bring 15 Live TV Channels

September, 27 2017 - Panasonic Avionics Corporation (Panasonic), a world leader in inflight entertainment and connectivity (IFEC), announced that DISH Network L.L.C. (DISH) will deliver live television to select Southwest Airlines® flights over the United States. This channel line-up will include exciting programming from Bravo, CNBC, CNN, Discovery, Disney Channel, ESPN, ESPN 2, FOX News, FX, FOX (NY), HGTV, MSNBC, NBC (NY), NFL Network and USA. In all, the company has nine global channels and 23 channels offered regionally. Over 750 aircraft are using the company's service across 14 commercial partners, and the company has maintained a 39 percent year over year growth in the number of aircraft equipped with this unique service.

Tigerair Taps ViaSat for Wireless Inflight Entertainment Service Budget Airline Tigerair

September 29, 2017 - Australia plans to offer its customers wireless inflight entertainment from next month using equipment supplied by ViaSat and a content deal with Twentieth Century Fox Film and Fox Networks Group. While the airline is not providing direct connectivity via satellite at this stage, it will be the first low-cost carrier to provide the wireless entertainment service across its entire domestic fleet in Australia. As part of the proposed arrangement, recently released films and a range of current popular TV titles will be available to Tigerair customers using the Tigerair Australia app on their own personal mobile devices or through compatible laptop browsers. Under the plan, movie content will be updated regularly in line with TCFF release dates, which Tiger said would see movies and TV product on-board before its competitors.

SES Networks Powers Carnival Corporation's MedallionNet™ Connectivity Experience

September 29, 2017 - Carnival Corporation & plc, the world's largest leisure travel company, announced MedallionNet™, a game-changing connectivity service enabled by SES Networks. MedallionNet will provide guests with easy-to-access Wi-Fi that features exceptional speeds and bandwidth, pervasive stateroom signal strength and unprecedented service consistency. The connectivity service – to be delivered in connection with SES Networks, a business unit of SES – will collectively leverage the leading global satellite operator's geostationary earth orbit (GEO) and medium earth orbit (MEO) constellations, managed services, antenna and shipboard technology to significantly enhance the guest experience by providing high performance and reliable broadband connectivity at sea. This innovative service is also enabled by hardware and software shipboard technology advances associated with Carnival Corporation's proprietary O·C·E·A·N Experience Platform.

BROADCASTING

Intelsat Delivers Media Distribution Services for Indian Teleport Operator LAMHAS

September 3, 2017 - Intelsat S.A. and LAMHAS, one of the fastest growing teleport operators in India, announced a multi-year agreement for satellite services supporting media distribution in India via the Intelsat 20 satellite. LAMHAS is using a C-band Multiple Channels per Carrier broadcast platform on Intelsat 20, located at 68.5° East, to deliver broadcast services to new and emerging TV channels in the devotional, spiritual and patriotic genres as well as regional news programming. Under the previously announced agreement, LAMHAS increased its services commitment on Intelsat 20, while also renewing its previous agreement for an extended term. Intelsat 20 provides high power distribution of video, voice and broadband services in Asia, Africa, Europe, the Middle East and Russia. The Intelsat 20 C-band video neighborhood provides premium programming that is carried by the top Indian cable multi-system and direct-to-home operators, reaching more than 100 million pay-tv subscribers across India. Intelsat's video distribution service delivers programming to homes in India and across the Indian sub-continent, extending across Asia and Africa. Intelsat 20 and Intelsat 17 combined, delivers content from more than 400 TV channels.

Tata Sky Deploys DataMiner to Have End-to-end Visibility of its Services

September 4, 2017 - Skyline Communications has announced that Tata Sky, India's leading content distribution platform providing Pay TV and OTT services, has deployed the DataMiner NMS/OSS to manage its Direct-to-Home (DTH) operations. Tata Sky is headquartered in Mumbai, India, with the objective of connecting to the best content in the world on any budget, any screen, anytime and anywhere. Tata Sky was the first to launch multiple products and services that redefined the subscribers' viewing experience in India. Satellite direct-to-home distribution is the preferred technology to broadcast services to a vast and geographically distributed audience. Not only does this technology facilitate fast service deployment at an attractive price point, more importantly, it also offers a high degree of service availability. The service quality and availability largely depend on the quality and availability of the uplink.

ABS Network Gives SIS LIVE the Winning Edge in Sports Coverage across the Middle East

September 5, 2017 - Revealing the driving force behind its successful coverage of major sporting events across the Middle East over the last two years, critical connectivity specialists SIS LIVE has highlighted its partnership with ABS Network, one of the largest broadcast services companies in the Middle East and North Africa. Through this partnership, SIS LIVE has been able to circumvent the budget and logistics challenges associated with setting up equipment and crews overseas, while ensuring that the high quality of production for which it is renowned is maintained. As part of the mutually-beneficial agreement, ABS purchase satellite capacity from SIS LIVE across their multiple lease capacity.

Cyfrowy Polsat Scales up at Eutelsat's HOTBIRD Position

September 6, 2017 - Cyfrowy Polsat Group, Poland's leading media and telecommunications group, signed a long-term contract with Eutelsat Communications for the lease of multiple transponders. The agreement covers the extension of existing capacity and expansion at the HOTBIRD video position. This new contract for capacity at Poland's most popular video neighbourhood consolidates a collaboration that began in 1992 with the launch of Polsat, Poland's first commercial channel, on a Eutelsat satellite. The new contract adds 33 MHz to the capacity already used at the HOTBIRD position by Cyfrowy Polsat, Poland's largest satellite platform and pay-TV operator and TV Polsat, the leading commercial broadcaster in Poland. The capacity will support the continued expansion of digital entertainment services and raise the bar for enhanced image quality. TV Polsat provides 24 popular channels under its brand and Cyfrowy Polsat offers approximately 180 channels, including over 80 in HD, in 4.8 million pay-TV subscriptions.

Eutelsat and V-Nova Partner on Unique HD Studio-Quality Video Contribution Solution

September 11, 2017 - Eutelsat Communications and V-Nova Ltd. unveil a new satellite-delivered studio-quality HD contribution solution that for the first time offers broadcasters and video service providers a true alternative or back-up to fiber in terms of quality and bandwidth-efficiency. The new solution leverages V-Nova's PERSEUS™ Pro technology in order to replicate typical fiber-based video contribution links, including full color resolution and individual frame compression, and combines them with satellite delivery that adds the benefits of ubiquity and flexibility. This allows broadcasters to contribute studio-quality feeds, essential to maintain pristine quality, and also to benefit from editing capabilities from any location. These features are combined with compression that enables 80 Mbps of HD 4:2:2 10 bit video feeds to be uplinked by off-the-shelf flyaway antennas and routed through a standard 36 MHz transponder on Eutelsat's global satellite fleet.

NovelSat Introduces ProtCASTER, a Secure Solution for Satellite Broadcast

September 11, 2017 - NovelSat, a leader in satellite transmission technology, announced that its distribution and content protection technologies play a significant role in the full upgrade recently performed by a Europe-based broadcaster in their global satellite content distribution network. The NovelSat customer has already successfully used NovelSat NS4 and NovelSat ProtCASTER for highly efficient and secure satellite transmission of major broadcasting events. They plan to secure and protect all of their future broadcasting events using ProtCASTER. NovelSat NS4 satellite transmission technology was selected for the network upgrade as it outperformed all other transmission standards and enabled an additional gain of 15% compared with the previously deployed NovelSat NS3-based systems. Further, the broadcaster chose ProtCASTER, the new DRM platform from NovelSat. ProtCASTER is the only satellite broadcast DRM platform that is based on AES 256-bit encryption, delivering the highest level of satellite content security with easy-to-use tools for scheduling and content entitlement. These and other features are requirements for managing a huge global network of thousands of satellite receivers.

SKY News International Continues Pan-European Distribution with SES Video

September 12, 2017 - European viewers will be able to continue to follow the news on SKY News International at the prime orbital position of 19.2 degrees East following an extension agreement announced by SES. Under the agreement, SKY News International will utilize SES's capacity on ASTRA 1N and related uplink services to broadcast its content to consumer and business premises across Europe. The prime orbital position of 19.2 degrees East is a key location for video distribution across Europe. With four satellites at this orbital slot, SES Video broadcasts more than 900 channels to 116 million TV households.

DVB Forms Liaison with SAT>IP Alliance

September 12, 2017 - DVB and the SAT>IP Alliance have entered into a formal liaison agreement on the future development of the SAT>IP specification. The agreement also states that future promotion of the technology will be conducted jointly. This positive development will allow the overall DVB community to contribute to next generation SAT>IP features and services. SAT>IP technology can be used to deliver live DVB broadcasts onto IP networks in a cost efficient manner. The technology is supported by numerous manufacturers and has been widely deployed in several markets. The SAT>IP protocol is standardized as CENELEC EN50585, and is the predominant solution for indoor distribution of broadcast services over domestic IP networks in Europe. It informs a hand-held device about available services and allows the user to request a specific service from the broadcast receiver. Any IP device (smartphone, tablet, PC, game console, etc.) with the SAT>IP software installed can become a broadcast TV viewing client. Despite its name, SAT>IP technology also supports all other broadcast delivery mechanisms such as cable, terrestrial and managed IPTV transmissions. It can retransmit from DVB-S2, DVB-C2 and DVB-T2 to IP, in other words: DVB over IP.

AsiaSat and Arqiva Extend Lease for C and Ku-band Capacity for Content Delivery in Asia Pacific

September 13, 2017 - Arqiva, the UK's leading communications infrastructure and media services company, has extended its lease for C and Ku-band capacity with Asia Satellite Telecommunications Company Limited (AsiaSat). The agreement will see Arqiva's continued use of AsiaSat 5 to deliver a broad range of sporting events to Asian viewers, from football and cricket, to volleyball and tennis. The new agreement also provides Arqiva the option of using Ku-band capacity on AsiaSat 7, allowing additional flexibility in the deployment of smaller antennas for occasional use and live events. Arqiva's expanded collaboration with AsiaSat demonstrates AsiaSat's capability in presenting a wide range of satellite capacity of the quality and penetration that meets clients' distribution needs. AsiaSat's ubiquitous coverage now plays an essential role in Arqiva's global content delivery network.

Newtec Dialog® to Power BBC News

September 13, 2017 - Newtec, a specialist in designing, developing and manufacturing equipment and technologies for satellite communications, announced its Newtec Dialog® multiservice platform is being used by BBC News for its provision of IP connectivity over satellite. Newtec Dialog will allow the BBC's news team to deploy mobile solutions capable of transmitting video, voice, files and general broadband services. A single multiservice communication link will be deployed, leveraging the power of All-IP. The Newtec Dialog platform provided features the award-winning return link technology Mx-DMA®, which delivers the efficiency of SCPC with the dynamic bandwidth allocation of MF-TDMA. This allows BBC News to flexibly and seamlessly manage bandwidth, while avoiding the fragmentation of space segment. Newtec Dialog's multilevel Quality of Service (QoS) model allows the user to manage QoS in the VSAT forward and return links with the same flexibility as it can with terrestrial networks and provide service level agreement guarantees across the population for different services, in difficult weather and operational conditions. The remote terminals will be equipped with the MDM3300

Satellite Modem, providing a lightweight, compact and cost-effective solution which also allows integration into ruggedized enclosures, with bitrates in the return link that can reach 21 Mbps multicast.

JOYNE Deploys Pay-TV Operations in the Cloud with Conax, Eutelsat Solutions and SmarDTV

September 13, 2017 - Conax, a Kudelski Group company and a leader in total service protection for pay-TV and digital entertainment services worldwide, and conditional access module provider SmarDTV, announce a collaboration with JOYNE, the newest Dutch multi-channel pay-TV operator. JOYNE selected Conax 'Contego-as-a-Service', cloud-based content protection security hub and Conax Cardless CAM developed by SmarDTV with pre-integrated security client Conax Core Access to handle all its content security needs. The new JOYNE service includes multi-year, multi-transponder contract with Eutelsat for uplink services and content distribution. The pay-TV platform has launched providing a colourful bouquet of channels including premium sports offerings – featuring over 50 well-known Dutch and international channel brands, including Fox Sports HD channels and Discovery Networks Benelux. Using the powerful pan-European beam on EUTELSAT 9B viewers will be able to receive the DTH service with dishes starting from 45cm.

Viasat Ukraine Subscribers to Get Best-in-class TV Reception in Ukraine

September 13, 2017 - Viasat Ukraine (Vision TV LLC), the largest DTH operator in Ukraine, will be providing top-quality TV reception to its subscribers using SES Video's reliable services on ASTRA 4A. Under the multi-year agreement with SES, Vision TV will be broadcasting approximately 40 pay-TV channels, out of which 13 are in high-definition (HD), and about 60 free-to-air channels at 5 degrees East. SES serves close to 13 million TV homes in Ukraine from this key orbital position, of which 4.5 million are DTH homes.

France Télévisions Selected Arkena

September 13, 2017 - Thanks to its expertise in the development of OTT solutions, Arkena has been trusted by France Télévisions to deliver its new project of video-on-demand by subscription (SVOD). This service, dedicated to paid content, will be integrated into the new france.tv platform, which will allow the majority of the group's content to be reviewed on all screens. Based on Arkena's Cloud4TV service, the platform will be able to handle large volumes of content for a multi-screen broadcast with a weekly renewal of the offer. With its simple and intuitive back-office, the solution will help to define the marketing offers and to monitor their performance, while subscriber management and financial reporting tools will be provided by Cleeng, a specialist in SVOD platforms and e-commerce videos. Arkena will also provide the integration layer necessary to the unified management of the SVOD within the france.tv platform, which includes several technical partners.

TV5MONDE and SES Video Expands its Distribution in Sub-Saharan Africa

September 13, 2017 - TV5MONDE, one of the world's leading television networks, has recently signed a long-term distribution contract with SES to broadcast three major free-to-air channels to the French-speaking and Francophile public in sub-Saharan Africa. As part of the agreement, TV5MONDE will use the SES-5 satellite to broadcast three channels: its main channel TV5MONDE Afrique, as well as two themed channels, the youth channel TiVi5MONDE and the lifestyle channel TV5MONDE Style HD. The three signals will be relayed to the satellite by the SES Video team. Located at 5 degrees East, SES-5 provides optimal coverage for sub-Saharan countries. The video position 5 degrees East is a fast growing neighbourhood, made up of renowned TV platforms and more than 500 local and international channels, including 65 French-language channels.

Grupo Televisa Extends Partnership to Leverage Intelsat's High-Performance Galaxy Satellites

September 14, 2017 - Intelsat S.A. announced that leading Mexican multimedia company, Grupo Televisa, will distribute its premium, over-the-air television networks via Intelsat's Galaxy satellites to Digital Terrestrial Television stations, reaching many homes throughout Mexico. Under a new, multi-year and multi-transponder agreement, Televisa will use C-band services on Intelsat's Galaxy 16 and Galaxy 19 satellites to deliver program distribution, contribution and affiliate connectivity in Mexico. Galaxy 16, located at 99° West, and Galaxy 19, located at 97° West, are part of Intelsat's leading Galaxy satellite neighborhood, delivering broadcast network distribution services across North America.

Eutelsat and Globecast Renew Partnership to Further Drive HDTV Growth at HOTBIRD Neighbourhood

September 14, 2017 - Eutelsat Communications and Globecast, the global solutions provider for media, have renewed capacity on a multi-year basis at the HOTBIRD video position. Building on the longstanding relationship between the two companies, the agreement will stimulate growth at the leading pole for satellite TV in Europe, Western Russia and the Middle East. Furthermore, it will accelerate the transition to High Definition for channels broadcasting within the extensive footprint of Eutelsat's unique video hub. Within the framework of the agreement,

Globecast has signed a first contract for HD delivery of Turkish TRT World from the HOTBIRD neighbourhood. TRT World belongs to TRT Group, Turkey's national public broadcaster. Launched in November 2016 and featuring an exclusively English-speaking line-up, the international news channel is leveraging HOTBIRD's distribution capabilities to reach millions of satellite homes in Europe, Western Russia and the Middle East. Its launch underlines the HD dynamic, particularly at the HOTBIRD neighbourhood where one channel in four (275 channels) is now in High Definition and where HD has grown by 30% over 12 months.

Al Rayyan Media Expands Services on Es'hail-1

September 14, 2017 - Es'hailSat has announced the signing of an agreement with Al Rayyan Media to expand their service offering on Es'hail-1 located at 25.5°E broadcast hotspot. Al Rayyan HD, Al Rayyan SD, Sout Al Rayyan (Radio) and Sout Al-Islam (Radio) joins Al Rayyan 2 HD, which is already available on Es'hail-1, for distribution across the Middle East and North Africa (MENA) region. With the vision to improve the society by highlighting and promoting local identity, heritage, tradition and culture, Al Rayyan Media focuses on building communications and entertainment bridges for the public. The company also contributes towards the effective achievement of Qatar National Vision 2030 and is seen as a guardian of Qatari culture.

Globecast Expands Cable Content Distribution in the US with SES Video at Centre of the Arc

September 15, 2017 - Globecast has doubled its SES satellite capacity at the heart of North America's leading cable neighbourhood to expand content distribution services to dozens of US cable networks. As part of the new agreement announced by SES, Globecast will be utilizing two additional full transponders aboard the SES-1 satellite to deliver packaged programming from content providers to cable systems across the continental US. Globecast already relies on a third transponder on SES-1 to meet the growing demand among dozens of cable networks and broadcasters for content distribution throughout the region. In a separate agreement, Globecast has renewed a 36 MHz transponder on the SES-3 satellite, its fourth transponder on the Centre of the Arc cable distribution platform, home to major media and entertainment leaders such as Discovery, Scripps Networks Interactive, HSN, and Viacom. SES-1 and SES-3, together with SES's AMC-18 satellite, form what has fast become the sweet spot for regional content delivery and the backbone for much of Globecast's media delivery solution.

APT Satellite and Telekom Austria Group to Promote 4K TV on APSTAR-7 Satellite

September 15, 2017 - APT Satellite Company Limited (APT Satellite) and Telekom Austria Group inked a satellite capacity agreement to broadcast channels from the APSTAR-7 satellite at 76.5E. After a couple of months test run on APSTAR-7 satellite, a bouquet of 13 channels including a 4K channel using HEVC encoding started broadcasting on APSTAR-7, being uplinked by Telekom Austria Group's own earth station Aflenz in the Styrian Alps. The TV platform is available throughout Asia Pacific region, South Asia, Middle East, most part of Europe and Africa by its operation on APSTAR-7 satellite.

Uzbekistan Lays Groundwork for Move to Digital Television with SES Video

September 15, 2017 - State Unitary Enterprise "Centre of Radio Communication, Broadcasting and Television" (SUE CRRT) of the Republic of Uzbekistan will rely on SES Video for the upcoming launch of its first DTT (Digital Terrestrial Television) multiplex, using NSS-12 at 57 degrees East to transmit TV signals to all head-ends of its DTT network. Under the multi-year agreement announced by SES, SUE CRRT, which is Uzbekistan's sole operator of analogue and terrestrial TV distribution, has contracted satellite capacity to deliver a minimum of 12 free-to-air TV channels in standard definition and four radio channels from the Tashkent, the capital of Uzbekistan to all DTT head-ends throughout the country.

Talia to Provide Arabsat with 10-Channel Video Uplink and Monitoring Service on Badr-7 Ku Band

September 15, 2017 - Talia Limited, a leading communication provider serving the Middle East, Africa, Europe and the Americas, announces the partnership with Arabsat of a new 10-channel video uplink to the Arabsat Badr-7 satellite located at 26°E. The service will offer both SD and HD channel uplinks and will form the basis of a new high-power Ku-band neighbourhood over Iraq. Content will be up-linked from the Talia Teleport in Raisting, Germany and monitored for quality in the Talia NOC in Erbil on the Badr-7 located at 26E. With many content creators looking to new audiences, the neighbourhood of channels will provide a voice and original Iraqi-themed programming to millions of currently underserved and underrepresented citizens. Following scheduled meetings at IBC in September, we expect the number of to increase further. With Talia's strong regional presence in Iraq and well-established customer base, Talia are ideally placed to serve the region.

Advantech Wireless Accomplishes Demonstration of DVB-S2X over a HTS's Spot Beams

September 15, 2017 - Advantech Wireless, a global leader for Satellite broadband communications solutions, announced the successful implementation of DVB-S2X, with its ASAT-II™ System, over the recently launched IS-29e High-Throughput Satellite's (HTS) southern hemisphere spot beams. In presence of representatives from a major global satellite operator, while during a live installation and demonstration in Latin America, a national TV broadcaster and a system integrator were able to achieve the highest bandwidth efficiency over the IS-29e HTS's southern hemisphere spot beams for the first time ever. Utilizing the high MODCOD (32APSK, rate 3/4 with a 5% Roll-off) of the latest DVB-S2 standard, which is unmatched and significantly outstanding compared to a 20% Roll-off previously seen. Video, data and VoIP with high quality, encouragingly exhibited by an extremely high compression ratio applied on typical traffic, managed to achieve the highest seen efficiency after compression and acceleration.

Eutelsat's Sat.tv app Now Available on Connected TVs

September 16, 2017 - Eutelsat Communications announced that its Sat.tv app, the smart program guide available through tablets and smartphones, is now running on connected TVs using the HbbTV standard. Available for free channels broadcasting from Eutelsat's HOTBIRD and 7/8° West video neighbourhoods, Sat.tv helps viewers browse through hundreds of free channels and track their favorite programs. The extension to connected TVs starts at the HOTBIRD neighbourhood and will be expanded in the coming months to Eutelsat's 7/8° west neighbourhood. Launched in April 2016, the application which is free to download on the App Store and Google Play Store, is designed for the millions of viewers in Europe, North Africa and the Middle East receiving over 400 free-to-air channels broadcast from Eutelsat's two leading hubs, at 13° East (HOTBIRD) and 7/8° West. It has achieved a record number of downloads, reaching 1.2 million this month.

MX1 Becomes Full Service Provider for eoTV

September 16, 2017 - MX1, a global media services company that transforms content into the ultimate viewer experience, announced that it has been chosen by German TV station eoTV to handle all content management, playout, uplink, and distribution services via satellite for free-to-air TV. MX1 is also managing the broadcaster's signal supply for HbbTV applications and to livestream online platforms such as freenet TV connect and Zattoo. Additionally, by using the MX1 360 end-to-end media services platform, eoTV can more efficiently manage, deliver, and market its content. The 24/7 broadcaster specializes in European TV shows and broadcasts via Astra 19.2 degrees East.

VIVACOM Picks EUTELSAT 8 West B Satellite for Broadcast Clients in Africa

September 17, 2017 - VIVACOM, the leading provider of telecom services in Bulgaria, announced the signature of a multi-year contract with Eutelsat for C-band capacity on the EUTELSAT 8 West B satellite in order to expand its video business in Africa. VIVACOM's ambition is to provide contribution services for international channels seeking carriage by major African pay-TV operators. The first six channels are already being uplinked to EUTELSAT 8 West B from Bulgaria, using VIVACOM's Plana teleport which is also one of Eutelsat's partner teleports, certified under the World Teleport Association's Teleport Certification Program.

Arabsat Announces the Broadcast of France 24 Arabic HD and France 24 English HD on Arabsat Badr4.

September 17, 2017 - In addition to France 24 SD channels (in French, English and Arabic) and the radios RFI and Monte Carlo Doualiya, France 24 has just started broadcasting two HD channels: France 24 HD in English and France 24 HD in Arabic, this latter being exclusively on Arabsat Badr 4. France 24 HD French will follow next year. By choosing Badr4, France 24 will enrich an attractive ultra-clear content to audience covering most of Europe, Africa, and the Middle East. Arabsat is committed to continue its efforts to attract premium broadcasters to provide to Arab communities in Europe with crystal clear picture quality and sound.

HISPASAT and Media Broadcast Satellite Launch a New 4K Content Distribution Platform

September 17, 2017 - Spanish satellite and telecommunications operator HISPASAT and Media Broadcast Satellite have reached an agreement to provide 4K content distribution services in Europe, North Africa and the Middle East (EMEA). Thanks to this agreement, both companies extend their powerful commercial offer for the audiovisual market with a platform aimed at achieving maximum flexibility for 4K content providers who wish to provide their signal to these regions in a quick and simple way. The new platform combines the capacities of Media Broadcast Satellite's teleport in Usingen (Germany) with the high output of the HISPASAT satellites in the 30°W position, with high quality coverage over Europe and North Africa specifically designed for the distribution of audiovisual content in the region. The technological solution is based on a shared digital platform that facilitates

the transmission of individual audiovisual channels within digital multiplexes, sharing the carrier with other 4K channels.

Turkish Channel NATURAL TV Reaches West-African Audience with SES Video

September 18, 2017 - NATURAL TV, a Turkish channel featuring health, agriculture, music and cultural content, is extending its reach to the West-African audience thanks to SES Video's broadcasting services. Under the new agreement announced by SES, NATURAL TV will use capacity on SES's satellite ASTRA 2G as well as uplink services from its teleport in Betzdorf, Luxembourg. With a potential audience of five million TV homes in West Africa, the free-to-air channel, broadcast in English, aims at bringing original content from Turkey and increasing cultural awareness in the region. SES has established a strong presence in West Africa, predominantly in Ghana and Nigeria, where it reaches two million and 2.81 million TV homes respectively. ASTRA 2G, launched in 2014, is one of SES's satellites covering the region from the prime orbital location of 28.2 degrees East.

SIS LIVE and ABS Launch a Dedicated Platform for OU Services across the European Region

September 25, 2017 - Broadcast connectivity expert SIS LIVE and leading satellite operator ABS have launched a new SIS LIVE Gateway Service solution for ABS Occasional Use services. The SIS LIVE Gateway Service offers broadcasters and service providers a flexible and reliable Occasional Use platform at competitive rates. The SIS LIVE Gateway Service provides Occasional Use booking services and satellite line-up support for the Ku-band European beam capacity of the ABS-3A satellite. ABS-3 is located at 3°W, which connects the Americas, Europe, Africa, and the Middle East. The service is managed in collaboration with ABS technical and operational staff through SIS LIVE's highly experienced OU booking desk and MCR technical staff utilizing SIS LIVE's teleports and connectivity infrastructure. The gateway service serves ABS customers, providing an effective and competitive platform to deliver video and data feeds to the widest broadcasters' community in Europe.

VNPTi Chooses ATEME to Cover APEC 2017 Event in Vietnam

September 26, 2017 - ATEME announced that VNPTi (a subsidiary of Vietnam Posts and Telecommunications), the biggest satellite transmission service provider in Vietnam, has deployed its Kyrion encoders and decoders to cover the APEC (Asia-Pacific Economic Cooperation) 2017 event in Da Nang in November this year. By choosing ATEME's solution, VNPTi is able to benefit from the most efficient video compression technology and unequalled bandwidth efficiency, while also maintaining the best video quality for viewers. ATEME's encoders/decoders were already adopted by VNPTi for their DSNGs in the past, and this previous successful experience led VNPTi to use ATEME's contribution technology to transmit their full package of bandwidth and uplink services to both Vietnamese and international broadcasters. Based on the ATEME's fifth generation STREAM compression engine, the Kyrion encoder/decoder provides the best baseband video quality at minimum bitrates. This solution has been designed for contribution over satellite and IP networks, with added value features such as ultra-fast-boot, ultra-low latency, and ABR output. The ATEME Kyrion offers a software-upgradable HEVC encoding option to support UHD video streaming as well as legacy MPEG2 to H264 compressions.

AsiaSat and MMB Deliver Sophia TV Asia to Asia-Pacific on AsiaSat

September 27, 2017 - Asia Satellite Telecommunications Company Limited (AsiaSat) has been selected by global satellite service provider Milano Media Broadcast (MMB) and its client 'Sophia TV Asia' to broadcast into the Asia-Pacific region on AsiaSat 5. 'Sophia TV Asia' is a new, independent, non-profit radio and television station that has enjoyed great popularity in Europe, Africa and South America. With its service commencing free to air on AsiaSat 5 in C-band, 'Sophia TV Asia' has gained access to a massive audience of more than 800 million households via terrestrial networks, pay TV platforms or direct home reception in Asia and Australasia. MMB is supported by AsiaSat's satellite capacity and distribution, enabling audiences in the AsiaPacific to enjoy 'Sophia TV Asia', which features ethically-oriented roundtable discussions and talks, vegetarian cooking classes, children's programs, nature documentaries, as well as readings, meditation, relaxation music and classical concerts.

Travelxp 4K Announces Commercial Launch at Eutelsat's HOTBIRD Neighbourhood

September 28, 2017 - Eutelsat Communications announced the commercial launch in Europe on 1 October of Travelxp 4K at its popular HOTBIRD video neighbourhood. Travelxp 4K, the world's first 4K HDR channel, will leverage HOTBIRD's market-leading penetration into cable and IPTV networks across Europe, the Middle East and North Africa. Travelxp 4K will be available in English, Spanish Polish, Serbian, Croatian and Dutch in the coming months. Localisation in other languages will shortly be announced. The channel will initially feature 100 hours of world class travel programmes filmed across the world with multicultural hosts. The 4K version of the

Travelxp brand follows the success of Travelxp HD that offers 100% of originally-produced premium travel and lifestyle programming distributed to over 50 million homes globally.

SES Video Concludes Comprehensive Agreement with Sky Deutschland

September 29, 2017 - German pay-TV platform Sky Deutschland subscribers will continue to enjoy an immersive TV viewing experience via SES satellites following a multi-year capacity extension deal. Under the agreement announced by SES, Sky Deutschland has renewed seven transponders at the prime orbital position of 19.2 degrees East to deliver its video content to millions of households and subscribers. The orbital position of 19.2 degrees East is Europe's most important video neighborhood, home to over 450 German-speaking channels with a direct-to-home reach of 17.5 million TV homes across Germany. The number of channels at this prime position has seen continuous growth and has increased by over 25 per cent since the end of 2012. In addition, as high picture quality has become increasingly important to viewers, the number of HD channels on ASTRA has more than doubled in the same period, with over 160 HD channels and six Ultra HD channels on 19.2 degrees East.

LAUNCH / SPACE

GomSpace Partners with Airbus Defence and Space to Enhance Space-based Aircraft Surveillance

September 1, 2017 - GomSpace A/S (GomSpace), a subsidiary of GomSpace Group AB, has entered a non-binding Memorandum of Understanding (MoU) with Airbus Defence and Space. Under the MoU, Airbus and GomSpace will explore and initiate activities to allow GomSpace's unique experience and technology with nanosatellite based flight tracking to be utilized to contribute to the new Airbus Eco-System. GomSpace is a pioneer in space-based aircraft tracking with the first successful demonstration performed in 2013 and currently has an active portfolio of R&D projects and projects with its customers advancing this capability. The cooperation will build on already completed and on-going activities between the partners, e.g. the successful joint live atlantic flight tracking demonstration of the GOMX-3 mission in 2016.

Second Lockheed Martin GPS III Satellite Successfully Completes Test

September 5, 2017 - Lockheed Martin's second fully-assembled GPS III space vehicle (SV) completed a realistic simulation of its future launch experience and passed this critical acoustic environmental test with flying colors. During acoustic testing, the GPS III SV02 satellite was continuously blasted with deafening sound reaching 140 decibels in a specialized test chamber equipped with high-powered horns. For comparison, that is about as loud as an aircraft carrier deck and human hearing starts to be damaged back at about 85 decibels. The test uses sound loud enough to literally shake loose anything not properly attached. The GPS III SV02 satellite is part of the U.S. Air Force's next generation of GPS satellites and will bring critical new capabilities to the warfighter. GPS III will have three times better accuracy and up to eight times improved anti-jamming capabilities. Spacecraft life will extend to 15 years, 25 percent longer than the newest GPS satellites on-orbit today. GPS III's new L1C civil signal also will make it the first GPS satellite to be interoperable with other international global navigation satellite systems. GPS III SV02 is Lockheed Martin's second GPS III satellite to successfully complete acoustic testing. The company's first satellite, GPS III SV01 – which is in storage awaiting its expected 2018 launch – completed acoustic testing in 2015.

Kacific Selects SpaceX to Provide Launch Service

September 5, 2017 - Kacific Broadband Satellites Group (Kacific) has selected SpaceX as the launch provider for its Kacific-1 satellite, which is being built by The Boeing Company. Kacific-1 will be launched on a SpaceX Falcon 9, a two-stage orbit-class rocket designed from the ground-up for maximum reliability and reusability. In February 2017 Kacific placed an order with The Boeing Company for the Kacific-1 satellite. Based on the reliable 702 satellite platform, Kacific-1 is designed to deliver high speed broadband via 56 narrow Ka-band beams, with the most powerful signal level ever achieved in a commercial satellite in the South East Asia and Pacific regions.

Six Planet Satellites - California Owned, California Built, California Launched

September 6, 2017 - In a first for the industry, six satellites, built in California, to be launched in California, for a California company have arrived at the Vandenberg Air Force Base, where they are scheduled to be launched on a Minotaur rocket in October. Space Systems Loral (SSL) built the six high-resolution small satellites for Planet for its SkySat Earth observation constellation – a fleet Planet gained through the acquisition of the Terra Bella business from Google, Inc. in April 2017. The satellites will double Planet's high resolution imaging capabilities and help deliver information to users about our physical world that impacts decision making. The satellites, called SkySat 8 through 13, are each about 60 x 60 x 95 centimeters, weigh about 100 kilograms, and capture sub-

meter color imagery and up to 90-second clips of HD video with 30 frames per second. Working together with the seven SkySats already on orbit, the satellites will dramatically increase Planet's high resolution imaging capabilities, enabling multiple imaging passes in a single day. These capabilities, combined with Planet's over 170 Dove satellites and their advanced software analytics platform, make it possible to derive timely insights from any location in the world. The Planet constellation provides a broad range of data, tools, and analytical services that help leaders in business and humanitarian sectors solve complex problems.

EchoStar III Satellite Recovered and Retired

September 6, 2017 - EchoStar Corporation and Lockheed Martin announced that the EchoStar III satellite has been successfully recovered following an anomaly that occurred in late July and retired per the FCC regulations. EchoStar III, a Ku-band BSS satellite that provided coverage over the U.S., was a fully depreciated, non-revenue generating asset owned by EchoStar. Manufactured by Lockheed Martin and launched in 1997, EchoStar III exceeded its 15 year design life.

MDA Signs Contract to Provide Communications Subsystem for AMOS-17 Satellite

September 7, 2017 - MacDonald, Dettwiler and Associates Ltd. (MDA), a global communications and information company, announced that it has signed a multi-million dollar contract with Boeing Satellite Systems, Inc. to supply a communication antenna subsystem for the AMOS-17 satellite. Scheduled for launch in 2019, AMOS-17 will expand and strengthen Spacecom's coverage of the growing satellite service markets in Africa, the Middle East and Europe. MDA's antenna solutions cover a wide range of requirements to address single and multi-satellite programs in commercial, space, military and airborne markets.

AZUR SPACE SOLAR POWER Selected for Solar Cell Long Term Purchase Agreement by SSL

September 7, 2017 - AZUR SPACE SOLAR POWER GmbH has been awarded a Multi-Year, Long-Term Purchase Agreement (LTPA) for high-efficiency, multi-junction space solar cells by Space Systems Loral (SSL) to support SSL's next generation solar arrays. In the future, many of SSL's solar arrays will be powered by AZUR SPACE's industry-best 3G30C-Advanced solar cell, the most radiation-hardened cell available today, providing outstanding End of Life (EOL) performance. The period of performance for the LTPA contract is from 2017 through 2020 with options for additional years. The 3G30C-Advanced solar cells will be produced at AZUR SPACE's state-of-the-art manufacturing facilities located in Heilbronn, Germany.

NASA Awards SSL Next Phase Funding for Dragonfly On-orbit Assembly Program

September 11, 2017 - SSL announced that NASA has awarded the next phase of funding for its ground-breaking Dragonfly on-orbit satellite assembly program. The contract modification to move forward with the detailed design of a semi-autonomous robotic system for in-space satellite assembly confirms NASA's confidence in SSL and the success of this "Tipping Point" public private partnership, which is enabling the development of new technology that benefits both government and commercial space endeavors. SSL and its partners, which include MDA, NASA, and Tethers Unlimited, recently successfully completed a ground demonstration of the Dragonfly developments to date. The demonstration included an ultra-light robotic system and advanced command and control software that is designed to make use of existing spacecraft equipment and capabilities, including a standard geostationary (GEO) spacecraft platform and processor. It proved SSL's concept of highly dexterous on-orbit operations that are expected to drive next generation satellite architectures.

Arianespace and EUMETSAT Sign Launch Contract for the First Two Metop-SG Satellites

September 11, 2017 - Arianespace and EUMETSAT announce the signature of a contract entrusting Arianespace with the launch of the first two Metop-SG satellites of the EUMETSAT Polar System of Second Generation (EPS-SG), plus an option for the launch of a third satellite, to be performed from the Guiana Space Center – Europe's Spaceport in Kourou, French Guiana. The launches are scheduled in the 2021-2023 timeframe for METOP-SG A1 and METOP-SG B1 – with these missions using the same Soyuz STB launcher configuration as for EUMETSAT's Metop-C (the third and last Metop first-generation satellite, which is manifested for launch in autumn 2018). METOP-SG A1 and METOP-SG B1 will be built by Airbus Defence and Space, based on the AstroBus platform. Each satellite will have a four-ton mass and will be placed into a sun-Synchronous orbit at an altitude of approximately 800 km. The contract includes an option for a Soyuz launch with a third Metop-SG satellite, for which EUMETSAT is also offered the possibility to use Ariane 62, a version of Europe's next generation Ariane 6 launch system, expected to be available in this timeframe. The EUMETSAT Polar System of Second Generation will replace the first-generation EUMETSAT Polar System in the 2021-2023 timeframe and deliver more, and even better, observations than the current Metop satellites. With three successive pairs of Metop-SG A and Metop-SG B satellites carrying two different sets of innovative instruments and flying in the same mid-morning polar orbit, EPS-SG is expected to be utilized for at least 21 years by EUMETSAT.

Boeing to Design and Build Seven Medium Earth Orbit Satellites for SES

September 11, 2017 - Boeing will design and build seven super-powered medium earth orbit (MEO) satellites for SES, delivering efficient high-performance data communications services to users around the world. The O3b mPOWER satellites will include Boeing's most-advanced digital payload technology and will be built using electronics from the flight-proven 702 satellite platform customized to support the unique MEO environment. The satellites are designed to be launched up to four at a time in a stacked configuration, depending on the selected launch vehicle. Starting in the 1990s, Boeing has built 12 satellites for SES. The latest, SES-15, was launched earlier this year.

Airbus Prepares the Future European Governmental Satellite Communications Programme

September 11, 2017 - Airbus has been contracted by the European Space Agency (ESA) to produce a demonstrator for the future European Governmental Satellite Communications (GOVSATCOM) program. Supported by the European Commission, the European Defence Agency (EDA) and ESA, GOVSATCOM aims to provide key European countries, organizations and operators with secured satellite communication services. The program should be launched by 2020 and follows in the footsteps of major European programs such as Copernicus, Galileo and EDRS-SpaceDataHighway. The demonstrator contract is to last two years and comprises two parts. The first part involves producing a system of dynamic sharing of satellite capabilities. The core of the ground system is based on the Newtec Dialog technology developed by the Belgian company Newtec and will be installed at the Airbus site in Toulouse. It will be operated by various European governmental entities and employed particularly in overseas theatres of operations. An end-to-end service demonstrator will illustrate the attractiveness, flexibility and simplicity of the proposed services.

Orbital ATK Begins Assembly of Industry's First Commercial In-Space Satellite Servicing System

September 11, 2017 - Orbital ATK announced significant progress on the industry's first commercial in-space satellite servicing system. The Mission Extension Vehicle-1 (MEV-1) spacecraft successfully completed its critical design review earlier this year and is now in production with about 75% of the platform and payload components already delivered to the company's Satellite Manufacturing Facility in Virginia. The spacecraft will begin system-level testing in spring 2018 with launch planned late next year. MEV-1 will provide satellite life extension services to its anchor customer, Intelsat S.A., beginning in early 2019. Through its wholly-owned subsidiary Space Logistics LLC, Orbital ATK will introduce in-orbit commercial satellite servicing with MEV-1 which is based on the company's GEOStar™ spacecraft platform. Controlled by the company's satellite operations team, the MEV-1 uses a reliable, low-risk docking system that attaches to existing features on a customer's satellite. The MEV-1 provides life-extending services by taking over the orbit maintenance and attitude control functions of the client's spacecraft. The vehicle has a 15 year design life with the ability to perform numerous dockings and repositionings during its life span. MEV-1 will launch as a co-passenger with the Eutelsat 5WB satellite, also built by Orbital ATK.

SES Selects Arianespace for Launch of SES-17

September 12, 2017 - SES has selected Arianespace to launch its high-power, high-throughput satellite SES-17 on an Ariane 5 in 2021 from the Guiana Space Center in Kourou, French Guiana. SES-17 is a powerful satellite delivering high-speed inflight connectivity and high-powered data services over the Americas and the Atlantic Ocean. SES-17 is the 53rd satellite entrusted to Arianespace for launch by SES. Weighing more than six metric tons at launch, SES-17 will be among the 10 largest telecom satellites launched by Arianespace since the company's founding. SES-17 is the third all-electric satellite for which SES has chosen an Arianespace launch. The satellite built by Thales Alenia Space is fitted with an electric propulsion system for orbital positioning and station-keeping; its payload comprises 200 Ka-band spotbeams; the orbital position of the spacecraft has not yet been disclosed.

MHI Selected by Inmarsat to Launch its First Inmarsat-6 Satellite

September 12, 2017 - Inmarsat announced that Mitsubishi Heavy Industries, Ltd. (MHI) has been selected as the launch provider for the first satellite in the Inmarsat-6 fleet (Inmarsat-6 F1). The satellite, which is under construction by Airbus Defence and Space, is scheduled for launch in 2020 using MHI's H-IIA launch vehicle. Inmarsat's sixth-generation (I-6) fleet will be the first to feature dual-payload satellites; each supporting L-band and Ka-band (Global Xpress) services. The I-6 satellites represent a step change in the capacity of Inmarsat's L-band services and will support a new generation of L-band capabilities, from advanced global safety services and very low cost mobile services, to Internet of Things (IoT) applications. The Ka-band payload will add further depth to Inmarsat's Global Xpress (GX) constellation, which began offering high-throughput broadband services worldwide in 2015. Through the I-6's Ka-band payload, Inmarsat will augment its global coverage with greater depth of capacity in regions of greatest demand.

Myriota to Get its Own Satellite as Defence Comes on Board

September 12, 2017 - Adelaide-based satellite and Internet of Things startup Myriota has teamed up with US satellite manufacturer SpaceQuest to launch the first of an expected constellation of small satellites. The new satellite will provide services to its remote IoT network as well as a new Defence contract announced this week. The satellite will be the first new generation satellite Myriota has access to and it will support all of its proposed applications including defence but also agriculture, logistics, utilities monitoring and maritime. Myriota currently uses satellites from Canadian provider ExactEarth, an early seed investor in the company. However, the move to launch its own satellites has been in the planning stages for some time, as first reported in CommsDay in June. Myriota has already deployed a range of water monitoring devices at key pastoral properties around the country to prove its satellite-based model for IoT connectivity. Myriota has developed its own low-cost monitoring devices as part of a project co-funded by the Australian and New Zealand CRC for Spatial Information. The units contain transmitters that allow for information to be transferred directly to low-earth orbit satellites.

ILS Successfully Launches Amazonas 5

September 12, 2017 - International Launch Services (ILS) successfully delivered the Amazonas 5 satellite into orbit on an ILS Proton for HISPASAT. It was the second HISPASAT satellite launched on ILS Proton. The Amazonas 5 satellite, built by SSL, has a high throughput Ka-band payload with 34 Ka-band spot beams which will be used for broadband service in South America, Central America and Mexico. It also has a Ku-band payload with 24 transponders for fixed satellite services for television, corporate networks and other telecommunications applications in South America and Central America. Amazonas 5, the 30th SSL satellite launched by ILS Proton, will be located at 61 degrees west and is built on the highly reliable SSL 1300 platform. This was the 415th launch for Proton since the inaugural flight in July 1965, and the 95th ILS Proton launch executed. The Proton Breeze M launch vehicle was developed and built by Khronichev Space Center of Moscow.

SES Selects Arianespace and Soyuz for its Fifth MEO Launch

September 12, 2017 - SES has selected Arianespace for its fifth launch of four O3b satellites joining its O3b Medium Earth Orbit (MEO) fleet. The mission on a Soyuz rocket will be conducted from the Guiana Space Center in Kourou, French Guiana, in 2019. The 12 satellites of the existing O3b fleet were orbited by Arianespace in 2013 and 2014; the next four satellites (13th to 16th) will be launched by Arianespace next year. The O3b fleet delivers low-latency data services provided by SES Networks, a business unit of SES. The 20 O3b satellites that SES Networks positions and operates in MEO, nearly 8,000 kilometers above the Earth, form the first strong building block of a unique high-power, high-throughput fleet. They are built by Thales Alenia Space, have a mass of approximately 700 kilogram at lift-off and provide each a capacity of more than 10 Gigabits per second.

Airbus to Reshape Earth Observation Market with its Pléiades Neo Constellation

September 12, 2017 - The production of Airbus' four new very high resolution satellites, which together will form the Pléiades Neo constellation, is well on schedule for launch in 2020. They will offer enhanced performance and the highest reactivity in the market thanks to their direct access to the data relay communication system, known as the SpaceDataHighway. This first batch of four optical and very agile satellites will double the number of visits per day anywhere on Earth and offer a re-tasking rate which is five times higher than previous constellations. Each satellite will be adding half a million km² per day at 30cm resolution to Airbus' offering. These images will be streamed into the OneAtlas on-line platform, allowing customers to have immediate data access, analytics and correlation with Airbus' unique archive of optical and radar data. Pléiades Neo will utilize the SpaceDataHighway to ensure the highest system reactivity, lowest latency and high volume data transfer. Thanks to the very high communication bandwidth possible with lasers of up to 1.8 Gbit/s and the geostationary orbit positioning of the relay satellites, up to 40 terabytes per day can be transmitted securely in quasi-real-time to Earth, as opposed to the delay of several hours sometimes experienced today. The four satellites will be equipped with reactive Ka-band terminals that will allow last minute tasking updates, even if the satellites are beyond their ground stations' line-of-sight. This is an important asset for customers, when it comes to the assessment of natural disasters and first line response for civil and military applications.

ASTROSCALE and JAXA Conclude Joint Research Agreement

September 12, 2017 - ASTROSCALE Japan Inc. and the Japan Aerospace Exploration Agency (JAXA) signed a joint research agreement regarding the removal of space debris. Under the terms of the agreement, ASTROSCALE will have access to JAXA's technologies that examine the methods to approach and capture space debris. The technologies will facilitate ASTROSCALE's development of ELSA-d, a technology demonstration satellite scheduled to be launched in the first half of 2019. ASTROSCALE and JAXA will also work together to validate the imagery of simulated debris obtained through the ELSA-d on-orbit mission. JAXA will not

take direct part in the development, launch, or operation of ELSA-d, but will be involved in the research and development of relevant component technologies. It is estimated that more than 750,000 pieces of space debris over a centimeter in size are currently in orbit, some of which are the result of breakups and collisions of spacecraft. As the continuously rising debris population poses an immediate threat to the orbital environment, taking countermeasures is urgently needed. JAXA, in cooperation with universities and the private sector, will further establish the technology to eliminate space debris.

Cloud Constellation Corporation Selects Virgin Orbit for “SpaceBelt” Initial Constellation Deployment

September 12, 2017 - Virgin Orbit announced that commercial satellite developer Cloud Constellation Corporation has selected the LauncherOne service for deployment of the SpaceBelt™ constellation of space-based cloud storage data centers. In an agreement signed by executives from the two firms, Cloud Constellation selected Virgin Orbit as its launch partner for a dozen satellites that will become the communications backbone of the SpaceBelt system. SpaceBelt will provide a truly secure and global data storage network based in space. Users of the system will be able to transport and/or store large blocks of data quickly and securely without exposure to any terrestrial communications infrastructure, protecting their critical data from unauthorized access while supporting global communications at reduced latency of today’s multi-hop networks. The initial deployment of the SpaceBelt network will be powered by a dozen ~400 kilogram satellites placed into low inclination orbits. Taking full advantage of LauncherOne as a dedicated launch service for small satellites and as a uniquely flexible service enabled by air-launch, the SpaceBelt constellation will be deployed using single-manifested launches occurring in rapid sequence. The initial launch is expected to occur as early as 2019.

OHB Developing Microsatellites for New Space Market

September 12, 2017 - Space technology company OHB SE is widening its range of products with the addition of a new platform for microsatellites. Accordingly, LuxSpace Sarl, OHB’s Luxembourg-based subsidiary, has entered into a contract with the European Space Agency ESA. LuxSpace will develop an entirely new, cost-effective and versatile microsatellite platform to be known as “Triton-X”. Triton-X will be opening up new perspectives for the OHB Group in the “new space market” and generating scope for commercial applications. The microsatellites will have a mass of around 80 kilos and transport a payload of up to 30 kilos to a low orbit around the Earth (altitude of 250-700 kilometers). The Triton-X microsatellite platform is highly cost-competitive, available quickly and versatile. It can be used for commercial applications in the new space market such as satellite communications, Earth observation and the testing of new technologies in space.

Airstar Aerospace and Altave Join Forces for the European Launch of the White Hawk

September 12, 2017 - Airstar Aerospace, leading French designer and manufacturer of tethered balloon platforms and major player in the Stratobus™ project, and Altave, a Brazilian leader in aerostat-based solutions for surveillance and telecommunications, have chosen for the European launch of their new product, the White Hawk. A result of the partnership between Airstar Aerospace and Altave, the White Hawk is a compact elliptic-shaped tethered balloon for low and medium altitudes. Requiring only three operators for deployment and fold up within 30 minutes, the solution fits in a 14m³ vehicle. It offers a payload of up to 35kg and can operate with winds of up to 60 km/h. The White Hawk offers 360° surveillance and is capable of operating continuously over five days without any intervention while transmitting high resolution footage, making it an extremely cost effective and enduring solution.

ArianeGroup to Provide Future Boeing Satellites with New Generation of Electric Propulsion

September 13, 2017 - Boeing and the Orbital Propulsion section of ArianeGroup are jointly developing a next-generation ion propulsion system based on the dual-mode Radio Frequency Ion Thruster (RIT) 2X subsystem. Germany via DLR’s Space Administration and Spain via CDTI (Spanish Centre for the Development of Industrial Technology) are supporting the development through their respective contributions to the European Space Agency (ESA) “ARTES” (Advanced Research in Telecommunications Systems) program as well as the German national space program. The joint activity is combining Boeing’s long-lasting operational heritage and ArianeGroup’s expertise in RIT thruster technology design and development. Thanks to its high-thrust mode for orbit-raising operations, the RIT thruster system will enable Boeing to increase payload mass while reducing time-to-orbit on its satellites. Boeing is using its experience in on-orbit electric propulsion operations to update its satellite architectures for integration of the advanced RIT propulsion system. The RIT 2X subsystem comprises the thruster itself, a high-power processing unit and a radio frequency generator. The subsystem successfully passed its preliminary design review milestone in mid-2016 and is moving towards a critical design review.

Arianespace to Orbit Four Galileo Satellites on Two Ariane 62 Launches

September 14, 2017 - Arianespace will launch four new satellites for the Galileo constellation, using two Ariane 62 versions of the next-generation Ariane 6 rocket from the Guiana Space Center in French Guiana. The contract will be conducted by the European Space Agency (ESA) on behalf of the European Commission (DG Growth) and the European Union. These launches are planned between the end of 2020 and mid-2021, using two Ariane 62 launchers – the configuration of Europe's new-generation launch vehicle that is best suited for the targeted orbit. The contract also provides for the possibility of using the Soyuz launch vehicle from the Guiana Space Center, if needed. Both missions will carry a pair of Galileo spacecraft to continue the constellation deployment for Europe's satellite-based navigation system. The satellites, each weighing approximately 750 kg., will be placed in medium earth orbit (MEO) at an altitude of 23,222 kilometers and be part of the Galileo satellite navigation constellation.

MDA to Provide Communication Subsystems for Korean Lunar Exploration Program

September 15, 2017 - MacDonald, Dettwiler and Associates Ltd. (MDA), a global communications and information company, signed a contract valued in excess of CA\$7 million with the Korea Aerospace Research Institute (KARI), a national aerospace research institution. MDA will provide a communication subsystem to support the Korean Lunar Exploration Program, a project to develop the first lunar probe in Korea and secure the necessary technology for lunar exploration, such as an orbiter, a landing module, science payload, and deep space communication. MDA's communication subsystem will provide relay information between the Lunar Orbiter and the ground station on Earth. MDA's antenna solutions cover a wide range of requirements to address single and multi-satellite programs in commercial, space, military and airborne markets.

SSL Selected to Help U.S. Air Force Test and Validate Scenarios for Hosting Payloads

September 19, 2017 - SSL, a leading provider of innovative satellites and spacecraft systems, announced it was selected by Innoflight, Inc., a veteran-owned business specializing in electronics systems for Defense & Aerospace, to provide a high fidelity simulation environment for testing the security of hosted payloads on commercial satellites. The capability, which is being developed for the U.S. Air Force Space and Missile Systems Center (SMC) as part of its Secure IP Payload Accommodation Demonstration Project, will enable SMC to demonstrate cybersecure payload hosting scenarios, concepts of operation, and cybersecurity controls. The capability will also demonstrate advanced, secure internet protocol connections between a government payload operations center and the hosted payload using the existing satellite operator's networking infrastructure, eliminating the high cost of specialized space to ground communication systems. The hosted payload interface is expected to play a key role in enabling resilient, next-generation space architectures.

Lockheed Martin Introduces New Satellite Lineup

September 19, 2017 - Lockheed Martin introduced a new family of satellite buses that form the core of nearly every space mission. From nanosats to high-powered satellites, the versatile lineup incorporates dozens of major enhancements and hundreds of common components that speed production and reduce cost. The company announced the lineup at the Air Force Association Air, Space & Cyber Conference. Lockheed Martin's family of solutions – all now featuring common components – include four series of satellites from nanosatellites to powerful geostationary platforms. For the first time, all of Lockheed Martin's satellites will share common components, and more than 280 have been identified. The multi-year effort to identify common systems aims to reduce cost, shorten design time and increase reliability with trusted components. Lockheed Martin's software support systems also enhance flexibility and make each bus rapidly reconfigurable. While configurations may vary in each series, the core elements of each bus will retain commonality with other satellites, including missions in military, civil and commercial markets.

CNES and ArianeGroup Step up Cooperation in the Launch Vehicles Sector

September 20, 2017 - On 15 September, CNES and ArianeGroup, the lead contractor for the Ariane family of launch vehicles, signed an agreement to step up their cooperation, innovate more closely together and pave the way for the launchers of the future. These two major players in Europe's launch vehicles sector share a long history of cooperation that has underpinned the success of the Ariane family. Today, CNES's Launch Vehicles Directorate (DLA) and ArianeGroup are fully committed to the successful development and marketing of the new Ariane 6 launch system, in their respective roles with ESA. The purpose of the cooperation agreement is to pursue close cooperation under the roadmap designed to shape the long-term evolution of the Ariane launcher family, including the Prometheus project, in order to continue working together to invent the new solutions that will enable Europe to maintain its global leadership in the launcher sector.

ViaSat and Boeing Proceeding with Full Construction on the First Two ViaSat-3 Satellites

September 25, 2017 - ViaSat Inc. has completed the Critical Design Review (CDR) milestones for the ViaSat-3 class spacecraft. The payload CDR was successfully completed last week, and when combined with the successful bus CDR, conducted with Boeing in mid-August, ViaSat and Boeing are now moving forward with building, integrating and testing the first two satellites. The ViaSat-3 class of Ka-band satellites is expected to provide unprecedented capabilities in terms of service speed and flexibility. The first two satellites will focus on the Americas and on Europe, Middle East and Africa (EMEA), respectively, with a third satellite planned for the Asia Pacific region, completing ViaSat's global service coverage. Each ViaSat-3 class satellite is expected to deliver more than 1-Terabit per second of network capacity, and to leverage high levels of flexibility to dynamically direct capacity to where customers are located.

Thales Alenia Space Signs a Contract with the ESA for the Design Definition of SMILE Payload Module

September 25, 2017 - Thales Alenia Space has recently been awarded one of three competitive studies funded by the European Space Agency (ESA) to lead the design definition of the Payload Module (PLM) for SMILE (Solar Wind Magnetospheric Ionospheric Link Explorer). SMILE is a joint science mission between ESA and the Chinese Academy of Sciences, which aims to investigate the interaction between Earth's protective shield – the magnetosphere – and the supersonic solar wind. The SMILE satellite consists of a platform, provided by the Chinese Academy of Sciences, and a fully independent Payload Module, provided by ESA. The PLM hosts the four customer furnished science instruments* from Canada, the UK and China, the PLM Control and Mass Memory Unit, the PLM Power Distribution Unit and the X-band communication system used to downlink all science data. During the study phase, Thales Alenia Space in the UK will work with the ESA team to define and optimize the Payload Module, including the structural and thermal solution, definition of the supporting PLM equipment, accommodation of the four science instruments and the delivery of all science data to the ground. With a planned launch in 2021 from French Guiana the two tonne satellite will enter a Highly Elliptic Orbit (HEO) with an apogee of around 120,000 Km over the Earth's North Pole.

mu Space Partners with Blue Origin to Launch Geostationary Satellite

September 26, 2017 - mu Space Corp announced that they have entered into an agreement with Blue Origin to partner on a future launch of a geostationary satellite aboard their New Glenn orbital rocket. The launch is set to happen early in the next decade. In September last year, Blue Origin announced publicly the plan to build New Glenn, its orbital launch vehicle that will carry people and payloads to low-Earth orbit destinations and beyond. Named after the first American astronaut to orbit the Earth, John Glenn, the launch vehicle is designed to be reusable which enables lower cost access to space for Blue Origin's customers. The company is working to support the growing demand in Asia-Pacific for broadband, mobile, broadcasting and smart city services using space based solutions. According to mu Space's long term plan, the company will launch its own geostationary orbit satellite in 2021. It also plans to become the first company to offer space tourism in Asia. The agreement marks the first-time Blue Origin has partnered with an Asian launch customer.

SSTL Announces NovaSAR-S Data Deal with Australia's CSIRO

September 26, 2017 - Surrey Satellite Technology Limited (SSTL) signed an agreement to provide Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO) a 10% share of the tasking and data acquisition capabilities from NovaSAR-S, a first-in-class small radar satellite due for launch later this year. NovaSAR-S is a technology demonstration mission designed to complement much larger, complex radar satellites with a smaller, lighter and more cost effective platform that delivers Earth observation Synthetic Aperture Radar imagery day and night, and through cloud cover. Managing the energy use on board the small SAR platform has been made possible by using a new, highly efficient S-band solid-state amplifier technology and flying an innovative S-band SAR payload developed by Airbus UK in Portsmouth. The agreement gives CSIRO tasking priorities and the ability to access the raw data directly from the satellite, and a license to use and share the data with other Australian companies and organizations over an initial 7 year period.

Arianespace to Launch COSMO-SkyMed Second-Generation Satellite Built by Thales Alenia Space

September 28, 2017 - Thales Alenia Space, joint-venture between Thales and Leonardo, and Arianespace signed a launch contract for two COSMO-SkyMed Second-Generation (CSG) satellites manufactured for the Italian Space Agency (ASI) and the Italian Ministry of Defense. The COSMO-SkyMed Second-Generation satellites are Earth observation spacecraft featuring state-of-the-art technologies and engineering solutions, further bolstering Italian leadership in this sector. They also will foster the expansion of international strategic partnerships, such as those already set up in France and Poland. The two satellites will be launched as from 2018 by Soyuz and Vega C launchers from the Guiana Space Center in French Guiana.

Arianespace Signs Contract with ELV/AVIO for 10 Vega and Vega C Launchers

September 28, 2017 - Arianespace and ELV/AVIO announced the signature of a contract for Arianespace to order 10 Vega and Vega C launchers from the Italian manufacturer. These 10 additional Vega and Vega C launchers will enter service starting in 2019, from the Guiana Space Center, Europe's Spaceport in French Guiana (South America). ELV, a public-private joint venture owned by Avio (70%) and the Italian space agency (30%) based in Colferfero Italy, is the industrial prime contractor for Vega. The company is now responsible for all launcher preparations up to liftoff. Vega C will be operated under the same arrangements for its planned service entry in 2019. Arianespace retains full responsibilities for customer relations, as well as for the final countdown operations and the launch decision.

GomSpace and AISTECH Sign Agreement for the Supply of 100 Nanosatellite Platforms

September 28, 2017 - GomSpace A/S and the Spanish company AISTECH have signed a Framework Delivery Agreement for the supply of up to 100 Nanosatellite platforms for a value of up to 12.500.000 EUR. Under this Agreement, AISTECH plans to procure standard platforms of different sizes that will be used to build their upcoming multipurpose constellation by 2022. The Agreement will be executed in the form of batch orders with delivery of several platforms at a time. AISTECH committed to the first of these orders today for a value of 500.000 EUR, with an expected delivery in the first quarter of 2018. AISTECH contracted their first spacecraft platform with GomSpace in October 2016, which is at present fully integrated and ready to undergo final functional and environmental testing. The launch service of this first satellite is already contracted and has an expected date in the first quarter of 2018.

Australian-built Defence Small Satellites to Takeoff Next Year

September 29, 2017 - Federal minister for defence industry Christopher Pyne announced a \$9.96 million contract for three Cubesat satellites to be launched into low-earth orbit starting next year. The satellites will be developed by UNSW Canberra for the Royal Australian Air Force and will be used for maritime surveillance. UNSW Canberra will design and build the three spacecraft for two missions: the first to lift-off in early 2018 and a second in 2019. Director of UNSW Canberra Space Russell Boyce said the spacecraft will be capable of gathering remote sensing information and can serve many ground-based needs.

Successful Lift-off of AsiaSat 9

September 29, 2017 - Asia Satellite Telecommunications Company Limited announced successful lift-off of AsiaSat 9, the company's most powerful and advanced communications satellite on 29 September at Baikonur time 00:52 a.m. (02:52 a.m. Hong Kong Time). AsiaSat 9, based on the SSL 1300 platform, is designed to replace AsiaSat 4 and to provide multiple C, Ku and Ka-Band payloads for direct-to-home (DTH) television broadcast, video distribution, VSAT broadband networks and mobility services at 122 degrees East longitude. With innovative and cutting-edge features such as Asia's highest powered 110 watts C-band TWTA, special filter design, star tracker and hall effect thrusters, AsiaSat 9 is able to deliver enhanced performance, higher efficiency and operational stability. AsiaSat 9 will also offer brand new coverage for high growth markets in Asia, including the world's first dedicated Ku-band Myanmar beam, high-power Ku-band beams for Indonesia and Mongolia, in addition to two enhanced Ku-band beams serving Australasia and East Asia, and a wide C-band footprint that offers significantly improved power over Asia, Australasia and the Pacific region.

Intelsat 37e Launches, Bringing Services to Africa, Europe and the Americas

September 29, 2017 - Intelsat S.A. announced the successful launch of the Intelsat 37e satellite aboard an Ariane 5 launch vehicle from the Guiana Space Center in Kourou, French Guiana. The all-digital Intelsat 37e is the first satellite to offer full, high-resolution interconnectivity between C-, Ku- and Ka-bands for use in wireless backhaul, enterprise VSAT, government and mobility networks. The C-band payload presents a comprehensive mix of high-power spot and wide beams, designed to deliver additional services and improved throughput. The Ku- and Ka-band steerable beams, which can be positioned as needed, have been added to increase network access and support high-demand areas for government and commercial mobility applications. They will complement the extensive Ku-band multi-spot beam coverage. In addition, Intelsat 37e improves the resiliency of the IntelsatOne Flex managed platform, bringing additional throughput to support enterprise, broadband, government and mobility applications in the Americas, Africa and Europe.

EXECUTIVE MOVES

ND SatCom Appoints Alexander Müller-Gastell as New CEO

September 1, 2017 - Alexander Müller-Gastell has been appointed the new CEO of ND SatCom GmbH (ND SatCom), effective September 1st, 2017. This strategic move is in line with the shareholder vision to further grow the market share of ND SatCom since its acquisition from AIRBUS in 2015. ND SatCom's advanced technology of reliable meshed VSAT networks form the basis for commercial and military networks. Alexander Müller-Gastell has extensive experience in the satellite service provider sector, including more than 4 years at Signalhorn where he first served as CFO and then moved on to be President & COO responsible for managing the operational business of the company with a strong focus on expansion through organic and acquisition growth. This experience is well fitted with ND SatCom's development objectives of expanding the global reach of its three business units: VSAT networks with SKYWAN technology, governmental and military satellite ground networks, and broadcast solutions.

Christopher Slaughter to Step Down as CASBAA CEO

September 5, 2017 - CASBAA has announced that following five years' service as the Association's Chief Executive Officer, Christopher Slaughter is to step down, effective December 31. Slaughter will continue as CEO through the remainder of the year while a search is carried out for his successor. Slaughter was appointed CEO of CASBAA in October 2012, and had previously served as Convention Director in 2004. Before joining CASBAA, Slaughter held leadership roles in global and regional production, research, and news organisations: APV, The Yankee Group, CNBC, & Asia Business News.

Terrasat Appoints Bob Hansen to Head Global Sales and Marketing Team

September 6, 2017 - Terrasat, a leading innovator of RF solutions for satellite communications systems, has appointed industry veteran, Bob Hansen to the post of Vice President of Global Sales and Marketing. Hansen's experience in the satellite communications industry spans over 20 years, most of it spent with Comtech EF Data as Senior Vice President of Global Sales and Marketing. Hansen joins the Terrasat team at a point where the company is responding to increased demand for its products and the satellite industry is striving to provide higher throughput to meet rising user requirements.

Boeing Names Phil Musser to Top Communications Post

September 7, 2017 - Boeing named Phil Musser as the company's next senior vice president of communications, succeeding Tom Downey, who has announced plans to step down from the role late this month and retire from the company early next year. Musser, 45, has more than 20 years of strategic communications and public relations experience, including 10 years as a consultant to Boeing. He is the chairman and chief executive officer of IMGE, an Alexandria, Virginia-based digital communications firm he co-founded in 2013. He will join Boeing Sept. 25, reporting to Chairman, President and CEO Dennis Muilenburg and will move into Downey's place on the company's executive council. He will be based in Chicago.

LeoSat Appoints Peter Schrickel as Chief Financial Officer

September 11, 2017 - LeoSat Enterprises, which is launching a constellation of up to 108 low-earth-orbit communications satellites that will provide the fastest, most secure and widest coverage data network in the world, announced that Peter Schrickel, previously Treasurer of leading satellite company SES, joins LeoSat as Chief Financial Officer. In this role, Peter will be spearhead finance for the company including securing funding, managing financial planning and coordinating investor relations. Peter has more than 20 years of experience in the finance sector. Prior to serving at SES, where as SVP & Group Treasurer, he was globally responsible for enhancing SES's capital structure, diversifying funding, and implementing a treasury roadmap, Schrickel worked for Volkswagen AG where he oversaw the financing of VW's activities worldwide and ensured the capital structure and financing of new projects.

Saphina Ho Joins AsiaSat as New General Counsel

September 21, 2017 - Asia Satellite Telecommunications Company Limited (AsiaSat) announced the appointment of its new General Counsel, Saphina Ho. Succeeding Catherine Chang, Saphina Ho will be a member of the management team, overseeing all legal affairs of the company. Saphina Ho has more than 20 years of experience in the telecommunications industry, specializing in regional and corporate legal matters. Prior to joining AsiaSat, she was the Assistant General Counsel of Pacnet Global, and also worked for New World Mobility and Global One as in-house lawyer.

REPORTS

NSR Releases the Emerging Space Market Opportunity Report

September 5, 2017 - NSR's newest report The Emerging Space Market Opportunity finds that nearly 400 emerging space companies have been founded since 2000, all seeking to deliver new applications or pursue new approaches to operating in space. Supported by \$10 billion in investment, these start-ups set the stage for an increase in the number and diversity of satellite services, new launch solutions and manufacturing practices, as well as innovative ways of operating in space that provide both near- and long-term revenue opportunities.

Transitional FSS Industry Adapting, Innovating to Spur Recovery

September 7, 2017 - According to the 24th edition of Euroconsult's report, Satellite Communications & Broadcasting Markets Survey, due to be published later in September, the FSS industry is in the midst of unprecedented change, with the dramatic downsizing of traditional pricing leading to decreasing revenues for many in the sector and the possibility of major restructuring or consolidation on the horizon. Within the context of this very competitive and turbulent landscape, the satellite communications sector must embrace innovation as a means to recover and thrive over the coming decade. Despite a decline of over \$2 billion in annual regular capacity revenues, Euroconsult forecasts the total market to grow to \$15.3 billion in 2026. Revenue growth is to be largely carried by HTS systems that are better positioned to address the growing demand of data-centric applications.

A Critical Time for Philippines' Pay TV Regulators and Political Leadership to Act

September 7, 2017 - The Philippines pay TV and broadband markets have enjoyed significant growth over the past two years (delivering US \$1.17 billion in 2016 revenue), according to regional industry body, CASBAA, in the latest of its regular "Philippines in View" (PiV) market overview reports. The 2017 report paints a promising picture, identifying the market as buoyant, innovative and hungry. "The fast-evolving business environment for pay TV and broadband video is not being driven by "standalone" pay TV services", said Virat Patel of Pioneer Consulting, who authored the new CASBAA report. According to the report, some 75% of new video connections within the Philippines are for broadband alone, or broadband bundled with pay TV, with room for growth as traditional pay TV services retain a penetration rate of just 14% of all TV households.

Maritime Satcom: Grow or Eat the Pie?

September 13, 2017 - As NSR's Maritime Satcom Markets, 5th Edition projects, the market for Non-GEO HTS connectivity in terms of In-service Units pales in comparison to GEO FSS and HTS. With over 48,000 In-service GEO VSAT terminals expected by 2026 in the maritime SATCOM markets, compared with less than 200 sites for Non-GEO plays, it is easy to see why SES aims to expand the marketability of an O3b-based solution. With vessels requiring more connectivity each year, creating scalable products and services to match end-user demand against their pricing constraints will be key for the industry to grow the market pie, instead of eating into what is already a small pie.

L-Band Satellite Operators Need to Reposition

September 29, 2017 - According to Euroconsult's latest report, Prospects for L-Band, IoT & M2M Markets, the Mobile Satellite Services (MSS) market will grow from 4.3 million terminals in 2016 to more than 12 million terminals by 2026. M2M/IoT (machine-to-machine, Internet of Things) devices will have a significant share in this subscriber growth, while their contribution to operators' revenues should be more limited. MSS wholesale revenues are expected to grow at a CAGR of 2.2% between 2016 and 2026, driven by MSS aero broadband demand, M2M/IoT applications and other services increasingly addressing lower-end segments and emerging regions, such as the promising small boats segment.

UPCOMING EVENTS

APSCC 2017 Satellite Conference & Exhibition, 10-12 October 2017, Tokyo, Japan, www.apsc2017.com

SCAT India 2017, 12-14 October 2017, Mumbai, India, www.scatmag.com/scatindia

China Satellite 2017, 25-27 October 2017, Beijing, China, www.china-satellite.org

Communic Indonesia 2017, 25-27 October 2017, Jakarta, Indonesia, www.communicindonesia.com

SATCOMRUS 2017, 1 November 2017, Moscow, Russia, http://satcomrus.ru/page41/register_2017_eng/

CASBAA Convention 2017, 6-8 November 2017, Macau, www.casbaaconvention.com

Global MilSatCom 2017, 7-9 November 2017, London, U.K., www.globalmilsatcom.com/APSCC
Described as "the best networking event" by its audience, SMI's 19th Global MilSatCom Conference and Exhibition will yet again raise the bar with an agenda featuring a line-up of high-level speakers and unmissable interactive opportunities offered during four days of conference sessions, workshops and networking receptions. Europe's leading military event for satellite professionals returns to London this November, gathering 500 international senior military and key industry representatives to network, benchmark, and learn about the latest developments in SatCom technology, discuss strategies to fulfill capability gaps, and address critical military and government requirements. View full agenda and register now at www.globalmilsatcom.com/APSCC.

The 3rd Global SatShow, 8-9 November 2017, Istanbul, Turkey, www.globalsatshow.com

VSAT Congress, 14-15 November 2017, Washington, D.C., USA, www.vsatcongress.com

CABSAT 2018, 14-16 January 2018, Dubai, UAE, www.cabsat.com

Asia-Pacific Regional Space Agency Forum (APRSF-24), 14-17 November 2017, Bengaluru, India, www.aprsaf.org

PTC'18, 21-24 January 2018, Honolulu, Hawaii, USA, <http://ptc.org/ptc18>

Global Space & Technology Convention 2018 (GSTC 2018), 1-2 February 2018, Singapore, www.space.org.sg

ABU Digital Broadcasting Symposium 2018, 5-8 March 2018, Kuala Lumpur, Malaysia, www.abu.org.my/dbsymposium

Convergence India 2018, 7-9 March 2018, New Delhi, India, www.convergenceindia.org

Satellite 2018, 12-15 March 2018, Washington DC, USA, www.satshow.com

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About APSCC

APSCC is a non-profit, international organization representing all sectors of satellite and space-related industries. The aim of the organization is to exchange views and ideas on satellite technologies, systems, policies and outer space activities in general along with satellite communications including broadcasting for the betterment of the Asia-Pacific region. Conferences, forums, workshops, and exhibitions are organized through regional coordination with its members in order to promote new services and businesses via satellite as well as outer space activities. APSCC membership is open to any government body, public or private organization, association, or corporation that is involved in satellite services, risk management or associate fields such as data-casting, informatics, multi-media, telecommunications and other outer-space related activities with interests in the Asia-Pacific region. More information is available at www.apscc.or.kr.