APSCC Monthly e-Newsletter
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News in this issue has been collected from October 1 to October 31.

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SATELLITE BUSINESS

Hispasat Secures Capacity on EUTELSAT KONNECT for Broadband Services in Spain and Portugal
October 28, 2021 - Eutelsat Communications and Hispasat, the satellite telecommunications operator of the Red Eléctrica Group, have entered into a multi-year strategic agreement for wholesale capacity on the EUTELSAT KONNECT satellite with the objective of supporting ubiquitous access to high-speed fixed broadband in Spain and Portugal. The capacity will serve to promote initiatives to bridge the digital divide in Spain and Portugal Hispasat has already implemented. Under the agreement, Hispasat will complement its current capacities with those of the EUTELSAT KONNECT satellite over the two countries, thereby operating in collaboration with Eutelsat and marketing high-quality broadband connectivity services at 100Mbps to telecommunications operators and Internet service providers. Under the agreement, which is effective immediately, Hispasat has committed to the Iberian capacity on EUTELSAT KONNECT becoming the exclusive operator and distributor of the capacity in Spain and Portugal. The agreement represents a high-single digit million euro annual revenue stream at full speed. At a later stage, the agreement could be extended to future capacity. It follows wholesale contracts with Orange in France and TIM in Italy for capacity covering their respective markets, and the recent distribution agreement with Deutsche Telekom for Germany, further underlining the role of satellite as a cost-effective, off-the-shelf and reliable infrastructure to extend coverage beyond the reach of terrestrial networks. In service since November 2020, EUTELSAT KONNECT has a total capacity of 75Gbps, offering speeds of up to 100Mbps to both companies and individuals in the digital divide at competitive monthly rates.

YahClick Signs Strategic Pan-African Partnership with iSat Africa
October 28, 2021 - Al Yah Satellite Communications Company PJSC, the UAE's flagship satellite solutions provider, has announced that its Data Solutions subsidiary, YahClick, has signed a partnership with iSat Africa Ltd FZC to expand its enterprise solutions business in Nigeria, Zambia, the DRC and East Africa. The new partnership will support iSAT Africa, a Pan-African network operator present in 12 markets, to deliver connectivity solutions for Mobile Cellular Backhaul (CBH) services, business applications, supervisory control and data acquisition (SCADA) systems, as well as provide connectivity to remote sites, including mines. The connectivity solutions will be provided over YahClick's high-throughput satellite (HTS) Ka-band capacity to deliver high-speed broadband solutions, with service plans of up to 100 megabits per second (Mbps), reaching and serving remote locations. Spanning several key African markets, this partnership further highlights Yahsat's commitment to offering rich solutions where capacity and connectivity is a key enabler. Revenues from fixed satellite data services in Africa are expected to grow at an average rate of 15.8 percent per year between 2020 and 2029. Linking with iSat Africa also spotlights the massive opportunity the growth of HTS capacity will have on the Sub-Saharan African market, especially when it comes to unlocking high demand flexibility in applications like backhaul or community WiFi.

OneWeb and Tampnet Sign Agreement to Develop Next Generation of Offshore Connectivity
October 27, 2021 - OneWeb, the global communications network powered from space, and Tampnet, the largest offshore high capacity, low-latency, communication network in the world, have signed a MoU to outline a distribution agreement and a series of technology trials. he arrangement will enable OneWeb to further develop its low latency, high-speed connectivity capabilities and expand its customer base in the offshore sector. In addition to providing access to its unrivalled distribution network, Tampnet will also be a pivotal partner in collaborating with OneWeb on a series of trials to test and evaluate network capabilities in the offshore energy environment. The trials will initially focus on delivering services to offshore wind farms, rigs and platforms in the North Sea from Q1/2022 and in the Gulf of Mexico, later in 2022. Once the service is fully online in 2023, Tampnet's customers will benefit from OneWeb's high speed, low-latency and flexible services that have the potential to continue transforming the efficiency of data use in offshore operations. While historically basing its infrastructure and services solely on subsea fibre, microwave and long-term evolution (LTE), the high-speed and low-latency attributes of the low Earth orbit (LEO) technology and OneWeb's service offering complements Tampnet's business offerings.

Intellian's C700 Iridium Certus™ Terminal Gains approval for Use in Japan
October 27, 2021 - Intellian is pleased to announce that its innovative C700 Iridium Certus terminal has been approved for use in Japan. The C700 is the first Iridium Certus terminal to be approved for the Japanese maritime market. This is seen as a significant achievement particularly for the Japanese shipping sector, which was ranked the largest in the world by fleet value in 2020. Since its launch in late 2020, Intellian's C700 Iridium Certus terminal has achieved excellent sales and received positive feedback from customers in multiple markets. An ideal VSAT companion for commercial vessels, the C700 delivers out-of-the-box uplink speeds of 352kbps and downlink speeds of 704kbps, with equally impressive low-elevation-angle RF efficiency thanks to its unique 12-patch phased array antenna technology. It will support three high-quality, low-latency phone lines simultaneously; and as a solid-state antenna with no moving parts inside, the C700 is especially robust, requiring no scheduled maintenance over its lifetime. Intellian's C700 terminal is the most powerful, feature-rich L-band solution on the market. Light enough to be carried on board and installed by a single engineer, the system incorporates key features which include a firewall, IP PBX, WAN port and built-in Wi-Fi. Its stability and reliable connectivity also make it an ideal platform for future safety services, including the Global Maritime Distress and Safety System (GMDSS).

FMC GlobalSat to Acquire Santander Teleport
October 27, 2021 - FMC GlobalSat, a global provider of best-in-class satellite and wireless connectivity solutions, today announced that it has entered into a definitive agreement with the ERZIA Group to acquire 100 percent of Santander Teleport 'ST.' Originally established as a joint venture of ERZIA and MTN Satellite Communications (now the Anuvu maritime division), ST has been ranked by the World Teleport Association (WTA) as one of the top ten teleport operators in the world since inception, and in 2019 it was awarded the internationally prestigious 'Independent Teleport of the Year' title. The acquisition will solidify FMC's industry leading position providing customers connectivity solutions and its engineering support while increasing its presence in Europe, Africa and Middle East.

Kymeta's Successful Test Demonstrates the Potential to Deliver Private LTE or 5GNR into a Smartphone via Broadband Satellite
October 26, 2021 - Kymeta announced today the successful testing of private Long Term Evolution (LTE) small cell on Citizens Broadband Radio Service (CBRS), demonstrating a complete connectivity solution that provides users with more reliable and robust connectivity directly to their smartphone and CBRS capable devices. The trial was performed at Kymeta headquarters with a Kymeta™ u8 terminal, an off-the-shelf core running on an ARM single board compute (SBC), and an Accelleran small cell. The system delivers a turnkey solution to enhance the user experience by combining a private LTE network with the Kymeta terminal for broadband backhaul. CBRS enables a private intranet for communications to users like first responder teams and features video, push-to-talk, voice, and messaging apps within the CBRS coverage area while reserving the backhaul capacity for internet communications. In addition to backhaul, the system includes a core at the edge, allowing users' devices to be bridged together locally without routing traffic back to the network core. CBRS is a publicly available spectrum in the 3550-3700 MHz band (3.5 GHz band) designated by the Federal Communications Commission (FCC) in 2015 as a frequency for shared wireless, private broadband. It is divided among users into three tiers of authorization, including Incumbent Access users, Priority Access Licenses (PAL), and General Authorized Access (GAA). The project's success in demonstrating private LTE small cell on CBRS to a standard smartphone, from a system integrated with the Kymeta u8 terminal, is a notable achievement in helping chart a path for future

user connectivity strategies and further validates Kymeta's ability to develop future-proof solutions that satisfy the overwhelming demand for resilient mobile connectivity and improved user access.

ST Engineering iDirect Partners with XipLink to Implement Advanced Security Feature for 4G LTE
October 26, 2021 - ST Engineering iDirect has collaborated with technology provider XipLink to implement a security feature required for 4G backhaul services. The feature will support IP security (IPsec) encryption with CMPv2 digital certificate management, building upon the existing high levels of security already offered by ST Engineering iDirect whilst maintaining satellite traffic optimization and acceleration. The new functionality has been tested and certified by satellite operator Turksat. CMPv2 is a feature-rich and flexible certification exchange protocol standard which supports any type of cryptography. It is a standard requirement for mobile operators that ensures secure functionality and is essential to enable the optimization and acceleration of 3G, 4G and 5G backhaul services. The three companies have invested time, equipment and expertise in the development and testing of the additional security feature in XipLink's software, which forms an integral part of the ST Engineering iDirect SatHaul-XE solution. Turksat will benefit from the ability to securely extend its mobile services throughout the Middle East region, providing a seamless customer experience. Leveraging Turksat's HTS architecture coupled with next-generation satellite ground infrastructure, will result in lower bandwidth costs, improved throughput levels, increased network efficiency and the best end-user experience. With the anticipated launch of the Turksat 5B satellite later this year which will expand the operator's coverage across Europe and Africa, Turksat will leverage the solution to provide 4G cellular backhaul coverage to 100 rural sites. Live tests of the feature have achieved 200 Mbps on satellite links without compromising acceleration or optimization.

INTEGRASYS and Capanet Communications Official Partnership
October 26, 2021 - INTEGRASYS and Capanet Communications sign a distribution agreement for enabling their customers to have a complete suite of SaaS technologies. The partnership's primary goal is to offer the customer suitable technologies to enable complete network automation, from the design through BeamBudget, Orchestration by the Capanet Ops Suite (powered by G&S SatCom), deployment with Satmotion, maintenance with Alusat, monitoring with Controlsat, and interference mitigation with Vectorsat. The market benefits from standardization and interconnection between technology vendors and their systems, thanks to advanced API and flexible systems enabling AI and M2M integration.

Satcom Global Launches VNO Elite
October 21, 2021 - With the launch of VNO Elite, Satcom Global is empowering service providers to deliver high performance VSAT satellite communications services, including true bandwidth on-demand, with minimal investment and unprecedented flexibility. An industry first, the VNO Elite solution gives partners who collaborate with Satcom Global, the chance to move away from commoditised services with rigid terms and penalties, and deliver customisable offerings that really meet the evolving needs of their customers. Service providers will be able to operate their own VSAT service with true flexibility, making changes to their customers' bandwidth with as little as 24-hour billing increments. To complement the extensive functionality of the VNO Elite service, Satcom Global is offering free rental of the IPSignature 4 network management box and iDirect Modem, enabling ease of adoption for every customer. Furthermore, VNO Elite is available with no commitment contracts if end-customers already have KU-band antenna onboard.

BSNL Receives License to Operate Inmarsat's Global Xpress Satcom Services in India
October 20, 2021 - Inmarsat, the world leader in global, mobile satellite communications, today confirmed that its strategic partner BSNL has received the necessary licenses to deliver Inmarsat's world-leading Global Xpress (GX) mobile broadband services in India. Under BSNL's Inflight and Maritime Connectivity (IFMC) licence from the Department of Telecommunications, GX will be available to Indian customers across government, aviation and maritime. The announcement means that India's airlines will be able to deploy GX for in-flight connectivity within India and throughout the world, while India's commercial maritime companies will be able to enhance significantly the digitalisation of their vessels for more effective ship operations and crew welfare services. BSNL's license will also see the award-winning GX service offered to government and other users. There will be a phased introduction of services for customers and partners.

Astrocast and iWire Sign a Partnership for the Development of an IoT End-to-End Solution
October 20, 2021 - Astrocast announced the signature of a Memorandum of Understanding (MoU) with

iWire Group, aiming to have both companies becoming technology partners. The two companies believe in building sustainable infrastructure for deploying mass IoT solutions and will cooperate in offering IoT end-to-end solutions using different connectivity technologies. As the first step of this partnership, Astrocast and iWire will collaborate in the development and production of devices equipped with both Sigfox terrestrial connectivity and Astrocast Satellite IoT (SatIoT) services to offer an ubiquitous IoT end-to-end solution to iWire's customers.

Comtech Telecommunications Corp. Announces New Cybersecurity Solution

October 19, 2021 - Comtech Telecommunications Corp., a leading global provider of next-generation 911 emergency systems and secure wireless communications technologies, has announced that during its first quarter of fiscal year 2022, it launched a new cybersecurity brand, CyberStronger™. CyberStronger provides cybersecurity solutions and services tailored to threat monitoring and assessment, training, and workforce development. Offerings include cyber threat detection and management, off-the-shelf and custom training, hands-on skills labs, and competency-based assessments mapped to cybersecurity job roles. The CyberStronger solutions will also include the CYBRScore® set of products that provide hands-on assessments and training to upskill and reskill cybersecurity workforces. These solutions were created by a team of former national intelligence community members who have the practical cybersecurity experience and abilities required to meet the demanding needs of Comtech's customer base which includes large universities, government entities, and enterprise-level corporations.

Intellian and Inmarsat Launch Industry's Newest FleetBroadband Terminals

October 19, 2021 - Intellian is pleased to announce that it has received type approval from Inmarsat for its new FB250 and Fleet One L-band terminals, making it one of the first to market with user terminals for operation on Inmarsat's innovation catalyst L-band network, ELERA. The FB250 is a multi-functional terminal, either acting as a stand-alone primary communications terminal or combining with Intellian's market-leading GX60NX and GX100NX to create the perfect Fleet Xpress (FX) solution. The Fleet One terminal provides an easy-to-install, reliable voice and data solution, ideal for smaller fishing and leisure vessels. Intellian's FB250 User Terminal is a compact, best-of-both-worlds solution for vessel operations, safety and crew welfare, and is the most innovative and feature-rich FleetBroadband 250 terminal on the market. Enabling simultaneous voice and data connectivity up to 284kbps, the FB250's class-leading features and future-proofed technology deliver a far more cost-effective long-term investment than competing systems using terminal designs that, in many cases, are now many years old. The FB250's features include a built-in firewall, analog and digital voice lines, soft PABX and a WAN port, which will support existing and future terrestrial networks such as 3G/LTE/5G and more. Ideally suited to take advantage of and deliver optimal results from Inmarsat's springboard for innovation, the ELERA L-band network, the FB250 represents a robust choice for a range of data critical maritime applications, including IoT, smart shipping, ocean monitoring and green energy initiatives.

Comtech Announces $100 Million Strategic Growth Investment

October 18, 202 - Comtech Telecommunications Corp. announced a $100.0 million investment by current shareholder White Hat Capital Partners LP ("White Hat"), an investment firm focused on sustainable value creation in technology companies serving mission-critical applications, and Magnetar Capital ("Magnetar"), a leading alternative investment manager with approximately $13.8 billion of assets under management. This strategic growth investment significantly enhances Comtech's financial flexibility and strengthens the Company's ability to capitalize on its recent large contract awards and growing customer demand for its satellite communications technologies and next-generation 911 public safety solutions. Comtech expects to apply the proceeds of this investment across a range of initiatives to accelerate growth and increase profitability. White Hat and Magnetar's strategic investment also provides Comtech additional flexibility in terms of optimizing capital allocation and maximizing shareholder value, including the continuation of its annual dividend program as well as opportunistic share repurchases under the Company's existing common stock repurchase authorization. Comtech expects the investment to close in October 2021, subject to customary closing conditions.

Gilat Expands 4G Network with Tier-1 Mobile Operator in North America

October 18, 2021 - Gilat Satellite Networks has announced the expansion of the 4G network of a Tier-1 mobile network operator (MNO) in North America for disaster recovery and ongoing operational business needs. The satellite-based solutions for disaster recovery are widely needed to mitigate the breakdown of terrestrial infrastructure and restore 4G connectivity. The Tier-1 MNO successfully deployed these solutions during the recent weather and climate disastrous events including hurricanes, wildfires,

tornadoes and floods. In addition, Gilat provides solutions for managed satellite capacity and deployment services.

NCTS Selects Hughes JUPITER System to Deliver Satellite Broadband Connectivity in Egypt
October 14, 2021 - Hughes Network Systems, LLC announced that the National Company for Telecommunications Services (NCTS) has selected the Hughes JUPITER™ System to deliver the ground segment requirements for operation of the Ka-band TIBA-1 satellite. The deployment of the Egyptian government-owned TIBA-1 satellite is a major milestone in the country's mission to connect the unconnected; the Hughes JUPITER System will enable delivery of Internet and telecom services to millions of people in remote and rural areas of the country. With features that yield higher bandwidth efficiency and lower service cost for operators than other ground systems, the Hughes JUPITER System is the most widely used VSAT system in the world. Initially, NCTS will employ two JUPITER System gateways, a network management system an initial delivery of remote terminals and an OSS/BSS solution, with installation expected in 2022. NCTS may order additional end-user terminals as public adoption of broadband services expands.

SES and SnT Expand Partnership, Launch Joint Lab to Drive Innovation
October 14, 2021 - SES and the University of Luxembourg's Interdisciplinary Centre for Security, Reliability and Trust (SnT) announced today the creation of a joint lab that will explore the benefits of high-throughput satellite systems in the areas of next-generation networks, including quantum communications and cybersecurity. The agreement will see both institutions jointly utilise facilities at their respective sites to expand and strengthen their long-term partnership by leveraging Luxembourg's R&D and SES's industry leadership positions to explore next-generation technology. The partnership will focus on studying the potential of next-generation high-throughput satellite systems and multi-orbit capabilities, such as SES's Geostationary and non-geostationary medium Earth (MEO) orbit fleet.

Jet Edge Signs as Gogo 5G Launch Customer
October 13, 2021 - Jet Edge International, a leader in full-service private aviation, has signed an agreement with Gogo Business Aviation to become Gogo's 5G launch customer. Gogo 5G has been designed to deliver high throughput with very low latency to address the increased demand in data-heavy services and applications in use today, as well as emerging technologies in the future. Deployment of the 5G network has begun and the onboard hardware is in certification approval. Gogo 5G will serve aircraft operating within the contiguous United States and the nationwide network is expected to launch in the second half of 2022. Jet Edge is the largest operator of super-midsize and large cabin jets in private aviation. The fleet sets the standard with the highest safety certification, immaculate interiors, cabin amenities, and the fastest high-speed Wi-Fi in the sky. With Jet Edge Reserve, members enjoy exclusive benefits and dynamic pricing with the most client-friendly terms and conditions in the industry. Reserve membership is fully refundable with no annual fees and no expiration.

RSCC's Express-RV Satellites Will Help Increase Coverage up to 90 Percent of the Earth's Surface
October 13, 2021 - In 2025, the coverage area of the RSCC constellation may increase from 79.8 percent of the Earth surface to 90% due to the launch of new satellites into a highly elliptical orbit. Alexey Volin, General Director of Russian Satellite Communications Company (RSCC), mentioned it at the SATCOMRUS-2021 conference. The Express-RV spacecraft will help to accomplish a number of important tasks. Especially, it will cover the regions of the Far North, improve communications where challenging terrain complicates the work of GSO systems, and provide communications for trains, river vessels and trucks. Also, thanks to the Express-RV, high-quality communications and the Internet will be available to the ship crews on the Northern Sea Route, as well as to scientists and employees who often change their location: rotation workers, geologists, military personnel, etc.

Harvest Deal with Speedcast to Improve Global Remote Worker Connectivity
October 13, 2021 - Harvest Technology Group Limited has executed a formal reseller agreement with Speedcast, a leading communications and IT services provider, delivering critical communications services for remote customers in industries including energy, maritime, mining, and telecommunications. As part of the agreement between the two companies, Harvest's ultra-low bandwidth Network Optimised Livestreaming solutions will be integrated with Speedcast's SmartView solution. Harvest's ground-breaking Livestreaming solutions can securely stream high-definition, real-time voice, video, and data over ultra-low bandwidth from anywhere in the world, where connectivity is often constrained or absent. Half the globe doesn't have high-speed internet, more than 30% are without 4G, deal helps people,

business connect The agreement between the two companies will extend Harvest's sales capabilities on a global scale. Speedcast's technology and applications portfolio currently has more than 3,200 customers in 140 countries, serving over 10,000 maritime vessels and more than 8,000 terrestrial sites. The benefits for Speedcast customers using the Harvest solution include increased operational efficiencies from faster decision-making in the field, back at base, in the office or at home.

Marlink Breaks Boundaries to Deliver Smart Hybrid Connectivity to PONANT

October 13, 2021 - Marlink, the leading provider of smart network solutions, is supporting PONANT's first polar exploration ship Le Commandant Charcot, with unrivalled data and voice connectivity to create a unique, seamless communication experience for guests on board. Le Commandant Charcot became the first vessel of her kind to reach the geographic North Pole on September 6, 2021, during sea trials in preparation for her maiden voyage later this year. Marlink provided a truly unique and industry-first hybrid network solution, combining Sealink dual C- and Ku-band VSAT connectivity, GEO and LEO L-band connectivity and a high-data volume LEO store & forward capability. The network employs the latest technologies, including software defined routeing (SD-WAN) for an optimized and unparalleled guest experience. Marlink's LTE/GSM service completes the hybrid network solution and enables PONANT to provide aggregated delivery of hundreds of gigabytes per month, offering a record amount of data to connectivity-hungry customers.

Hiber and Inmarsat Announce Strategic Relationship to Develop Connectivity Backbone for Global IoT-As-A-Service Ecosystem

October 12, 2021 - Hiber has announced that Inmarsat will provide the satellite connectivity backbone on which it will continue to build Hiberband, its revolutionary low-cost, low-power network for Internet of Things (IoT) products. The agreement pairs Inmarsat's recently unveiled ELERA network, the global satellite network for IoT, with Hiber's IoT-as-a-service ecosystem to provide easy-to-use, low power and cost-effective IoT solutions and services to transport, logistics, agriculture, mining and other industries worldwide. Hiber will continue using its own proprietary protocols that allow for ultra-low power and low-data consumption levels to connect to the ELERA network and power its IoT solutions. Additionally, the partnership will enable Hiber to support a range of new industrial IoT applications and provide its customers with reliable, affordable connectivity even in areas without dependable cellular or Wi-Fi network availability.

Telesat Selects Ciena for Low Earth Orbit Terrestrial Network Technology

October 12, 2021 - Telesat is deploying Routing and Switching platforms from Ciena for its Telesat Lightspeed terrestrial backhaul network. Ciena's advanced routing and switching technology will ensure that Telesat has a modern, cost-effective network that takes advantage of emerging technologies including network functions virtualization (NFV) and edge computing to efficiently support both existing and future customer requirements. The Telesat Lightspeed network will initially be comprised of 298 advanced Low Earth Orbit (LEO) satellites that seamlessly integrate with terrestrial networks. LEO satellites operate 25 to 30 times closer to the Earth's surface than traditional satellites and can process data with ultra-low latency – typically on par with fiber-optic speeds, even to the world's most rural and remote locations. Ciena is supplying hardware and software that will provide high-speed, high-capacity connections to governments, telcos, mobile operators, and other enterprise customers for the delivery of 5G, cloud computing, video, and other bandwidth-intensive broadband services. Additionally, Telesat is utilizing Ciena Services for terrestrial network design, implementation, and testing.

Viasat Launches Direct Service for Business Aviation

October 11, 2021 - Viasat Inc. announced a direct service model for business aviation Ka-band In-flight Connectivity (IFC). Called Viasat Select, the new service introduces custom IFC solutions and compelling connectivity plans that are tailored to match a business aircraft's specific operational profile. The Viasat Select service plans include global and regional unlimited plans that feature uncapped data paired with Viasat's popular "No Speed Limit" Ka-band IFC. Viasat's ability to offer both uncapped data and no speed limits is unique because of its Ka-band satellite capacity advantage. Viasat Select also offers entry-level service plans, including a sub-$3k regional plan that delivers Ka-band connectivity at a significant value, especially when compared to current air-to-ground or other satellite-based IFC options. The Viasat Select plans empower operators to take advantage of the Company's current cross-regional capacity and coverage to suit current and anticipated connectivity demands and come with the expectation that Viasat's future global constellation, ViaSat-3, and forward compatible IFC system, will accommodate increasing speed and data requirements.

Intellian Signs Antenna Supply Agreement with SES for O3b mPOWER

October 8, 2021 - Following a successful co-development phase, Intellian is pleased to announce that it has entered into an agreement with leading content and connectivity satellite service provider SES to supply user terminals for SES's high performance O3b mPOWER communications system. O3b mPOWER will extend and develop SES's existing Ka-band medium Earth orbit (MEO) services, delivering low latency, high bandwidth connectivity at speeds ranging from tens of megabits to multiple gigabits per second to customers across land, maritime and government markets around the world. This scale of services will be partly enabled by Intellian terminals. The multi-year deal will see Intellian develop a portfolio of terminals ranging from 85cm to 2.4m, capable of harnessing the full capabilities of SES's second-generation MEO system. This wide array of Intellian products provides rapidly scalable solutions to a broad range of customers, including Government, Cruise, Energy, Maritime, Mining and Telecommunications sectors. As part of the new product portfolio, Intellian will provide single, dual and tri-band systems. These will enable SES's customers the flexibility to access its next-generation O3b mPOWER MEO service as well as its entire existing fleet of over 70 geostationary and MEO satellites. The agreement also covers current Intellian products, with easy, cost effective conversion kits available to provide existing owners of Intellian's NX, v240M 2 and v240MT 2 antennas a pathway to upgrade to the O3b mPOWER service.

Deutsche Telekom and Eutelsat Co-operate to Serve Remote Areas in Germany with High-speed Satellite Broadband

October 7, 2021 - Deutsche Telekom and Eutelsat Communications have signed an agreement covering the distribution by Deutsche Telekom, Europe's largest telecommunications provider, of high-speed satellite broadband via the EUTELSAT KONNECT satellite. Under the agreement, Deutsche Telekom will commercialize EUTELSAT KONNECT high-speed broadband Internet offers for households in Germany with limited internet connection, starting from the end of 2021. Deutsche Telekom and Eutelsat have also agreed to discuss an extension of their partnership in the future. This closer co-operation would result in Deutsche Telekom offering its own products via Eutelsat's current and future infrastructure. In service since November 2020, EUTELSAT KONNECT has a total capacity of 75 Gbps and is capable of offering speeds of up to 100 Mbps to both individuals and companies in the digital divide. It covers the whole of Germany, as well as 14 other European countries. Meanwhile, Deutsche Telekom and Eutelsat are currently piloting an initial deployment in the city of Heimerzheim where the fixed network was badly affected by the floods in July. Crucial connectivity has been re-established via satellite connection providing WLAN coverage for an information point where both relief workers and affected residents can access the Internet free of charge.

Comtech Announces $5.6 Million Contract Renewal to Provide Messaging Application Support

October 7, 2021 - Comtech Telecommunications Corp. a leading global provider of next-generation 911 emergency systems and secure wireless communications technologies, announced today, that during the first quarter of its fiscal 2022, it has finalized a maintenance renewal agreement worth over $5.6 million to continue providing messaging application support for a U.S. tier-one mobile network operator. The contract was awarded to Comtech's Trusted Location group, a leading provider of precise device location, mapping and messaging solutions for public safety, mobile network operators and enterprise solutions. Sold around the world to mobile network operators, government agencies, and Fortune 100 enterprises, its platforms locate, map, track and message.

Sony CSL Successfully Sent Signals to the KSAT Commercial Optical Ground Station

October 7, 2021 - Sony Computer Science Laboratories, Inc. (Sony CSL) and KSAT successfully demonstrated optical downlinks from a space terminal (Small Optical Link for ISS: SOLISS) on the International Space Station (ISS) to the KSAT commercial optical ground station in Greece. The communication format used is aligned with the CCSDS (141.0-B-1 + pink sheets for O3K) waveform standard. This is a great step towards providing small and affordable laser communication terminals for both ground and space segments. Demonstrating such capabilities while in this campaign period is important to introduce these technologies to the market. The KSAT optical ground station in Greece is the first station of the Optical Nucleus Network. The Optical Nucleus Network is an informal collaboration between Space Agencies and industry which is going to make available an optical ground station network to serve optical terminals in space. SOLISS is a small optical communication terminal currently attached to ISS for technology demonstration that is jointly developed by Sony CSL and Japan Aerospace Exploration Agency (JAXA).

Telenor Group Awards Multi-year Contract to NEC as Part of a Major Network Expansion and Modernization of Grameenphone

October 7, 2021- NEC Corporation today announced that Grameenphone, part of the Telenor Group and the leading telecommunications service provider in Bangladesh, has awarded it with a new radio equipment supply contract to expand and modernize Grameenphone's existing network. Under this contract, NEC will deploy some of the latest network technologies to ensure a seamless communications experience for more than 82 million Grameenphone subscribers, including higher modulation (4096QAM), channel aggregation (CA), multi-input multi-output (MIMO) systems and traffic aggregation functions across various layers and frequency bands (microwave and millimeter bands). These technologies will help Grameenphone to reduce total cost of ownership (TCO) and to provide more reliable networks with higher transmission capacity. The telecommunication industry has changed the economic outlook for a wide range of markets throughout the world. In the last 20 years, Bangladesh has also benefitted immensely from the expansion of telecommunication infrastructure. As a market leader, Grameenphone has contributed a great deal to the economic development of Bangladesh. NEC Corporation, has supplied and deployed radio equipment to Grameenphone since 2003, in support of network stability and efficient performance. Going forward, NEC will continue to leverage its more than 120 year history as a communications leader in order to drive market evolution into the 5G and Beyond 5G eras with cutting-edge technologies.

Eutelsat Raises its Shareholding in OneWeb

October 6, 2021 - Eutelsat Communications has exercised a call option on a portion of the latest OneWeb funding round subscribed by Bharti, for a consideration of $165 million, taking its shareholding from 17.6% to 22.9%. The transaction was undertaken on identical financial terms to Eutelsat's initial investment of $550 million announced in April and completed on 8 September. The completion of this latest transaction is expected around year-end 2021 subject to regulatory authorisations. Since Eutelsat's initial investment, OneWeb has gained significant traction, both operationally, with a 100% launch success rate leading to nearly half of the constellation now in orbit, and commercially, with numerous distribution partnerships secured ahead of its partial entry into service, which remains on track for end-2021. In the meantime, as already announced by the company, OneWeb's capital structure has been further strengthened with an additional $500 million commitment by Bharti completing the funding of its first-generation constellation and a $300 million capital injection from South Korea's Hanwha. Following the exercise of the call option and the completion of Hanwha's investment, Eutelsat's 22.9% holding will make it the second largest shareholder behind Bharti with 30.0%, thereby strengthening its position as a key shareholder and partner of OneWeb. Eutelsat's investment comes after it delivered a strong FY 2021 performance in terms of cash flow generation and leverage reduction, and is compliant with Eutelsat's financial framework. At 30 June 2021, Eutelsat's liquidity amounted to €1.9bn in cash and undrawn credit lines.

Eutelsat's Konnect Africa Selected by Globacom to Bring Satellite Broadband to Underserved Regions of Nigeria

October 5, 2021 - In the presence of the French President, Emmanuel Macron, Eutelsat Communications and Globacom have signed at the Elysée Palace in Paris, a multi-year, multi-Gbps wholesale capacity contract, enabling Globacom to extend its coverage beyond the reach of its terrestrial infrastructure, leveraging the EUTELSAT KONNECT satellite. The service will be used to deliver high-speed broadband via satellite to businesses and communities in unconnected and underserved areas throughout Nigeria. Globacom, trading under the name Glo, is a multinational telecommunications company and the second largest operator in Nigeria, with a market share of circa 28% and over 51 million subscribers. In service since early 2021, EUTELSAT KONNECT is a new-generation High Throughput Satellite offering unprecedented operational flexibility. Delivering significant resources for broadband services with quasi-complete coverage of Sub-Saharan Africa, it adresses direct-to-user consumer and enterprise broadband services, with a comprehensive range of packages from bite-sized "pay as you go" vouchers through to monthly and annual contracts.

Newest C-COM Antenna Receives Eutelsat Type Approval

October 4, 2021 - C-COM Satellite Systems Inc., the leading global provider of mobile auto-deploying satellite antenna systems, today announced that it has received approval for its iNetVu® Ka-74G antenna system from France based Eutelsat S.A., one of the world's largest satellite operators. The Ka-74G vehicle mounted mobile antenna system is now officially approved to operate on Eutelsat's KONNECT High Throughput Satellite service. This innovative satellite broadband service provides coverage in Europe and Sub-Saharan Africa. In order to provide IP connectivity, the Ka-74G is fully integrated with the KONNECT's

base-band system and is available across the entire KONNECT service area. The broadband service is designed to deliver speeds of up to 100Mbps download and 10Mbps upload for various applications.

INTEGRASYS Innovating by Providing Monthly Plans in SaaS Models

October 4, 2021 - As the vision at INTEGRASYS is to make satellite mainstream, INTEGRASYS is working to enable anyone to use its powerful link budget tool on a satellite as a service (SaaS) model with small monthly membership for Beam Budget. Beam Budget is the best link budget calculation, a cloud-based tool available anywhere, anytime, by any user, for designing, selling and buying capacity and networks, easily, rapidly, and efficiently. It pays for itself from month one by reducing OPEX and winning new opportunities and revenue. The Beam Budget interface allows to obtain 1000s of LB results with just a few inputs, by AI and automation; so, the tool can accurately calculate in seconds millions of links which are mandatory to design the network. The software company aligned with the latest customer demands and business trends has adopted the SaaS business model in order to provide its customers with more flexible options to adopt the tool, as the industry now is in transition. We continue to provide the CAPEX model which is also available for customers who want the permanent and complete Beam Budget license. INTEGRASYS' disruptive technology is the only web-based link budget software available design for any type of knowledge, even for sales teams. It also includes the latest technologies such as very high throughput satellites, adaptive coding modulation, flat panel antennas, mobility, and much more.

KVH and Net Feasa Collaborate on IoT Solution for Global Container Tracking & Monitoring

October 4, 2021 - KVH has announced that Net Feasa, an IoT service provider with expertise in supply chain logistics, has joined the KVH Watch® Solution Partner program and will offer the KVH Watch service to enhance global container tracking and monitoring. Net Feasa is a fully licensed and trusted wireless service provider specializing in the design and deployment of on-vessel networks for container tracking and monitoring. The shipping industry is presently IoT-enabling their vessel fleets to meet the contiguous connectivity demands of their clients and offer revenue-generating and service differentiating opportunities. KVH Watch is an IoT connectivity as a service (CaaS) solution that provides secure 24/7/365 machine-to-cloud data flow for remote monitoring of onboard equipment, plus the ability to perform on-demand remote expert interventions using video, voice, or text, all via KVH's global HTS network. KVH Watch is designed for IoT analytics experts, maritime equipment manufacturers, multicard service providers, and shipyards seeking affordable monthly subscription-based connectivity that cellular services cannot deliver at deep sea.

YahClick Partners with Universal Satcom Group to Provide High-Speed Broadband in the MEA Region

October 3, 2021 - YahClick announced a new partnership with Universal Satcom Group to provide reliable, high-speed Broadband through the Al Yah 2 satellite Coverage. This new partnership will provide cost-effective, quick, and secure satellite broadband services to assist new enterprises. Yahsat and Universal have introduced a comprehensive value proposition to enterprise customers, to offer satellite capacity and hosting services to Universal who will be given the support and capacity to provide their differentiated services. This collaboration is built from the combination of unique product offerings that both parties offer with both sides coming together to develop the concept of Cooperative Competition to support the unserved territories throughout the Middle East and Africa markets. With the difficult conditions, unreliable connectivity, and lack of terrestrial infrastructure currently in the market, YahClick will provide its fast, and reliable satellite Broadband services to support Universal as an established provider in the market. This will not only help support enterprises within Middle Eastern and African markets to grow and improve their business operations to become more efficient, but it will also provide the underserved and unserved communities across the nation with high-quality connectivity and reliable infrastructure.

BROADCAST

Eutelsat and Nilesat Renew Long-standing Partnership at the 7° West Orbital Position

October 29, 2021 - Eutelsat Communications and Nilesat, Egypt's premier satellite operator, have agreed partial renewal terms for Ku capacity at Eutelsat's 7° West position, part of the 7/8° West video hotspot, for broadcast services across the Middle East. The multi-year, multi-transponder agreement represents the partial renewal of capacity by Nilesat at enhanced terms. Eutelsat and Nilesat's 7/8° West video hotspot represents the most powerful, widespread and dense footprint in the Middle East and North Africa, reaching 90 percent of TV homes in the region. It is one of the most dynamic neighborhoods in the global

satellite TV market with over 60 million homes and 1,000 channels.

SAWA Launches New Commercial Video Distribution Platform for MENA with SES
October 28, 2021 - AWA Rights Management (SAWA), a strategic service provider to the MENA Pay-TV industry, concluded a multi-year agreement with global content connectivity solutions provider SES, where it will be delivering TV channels to commercial properties, the two companies have announced. Under this agreement, SAWA will utilize MonacoSAT, a satellite located at 52 degrees East, to distribute the first 14 premium channels that are licensed by leading regional and international providers as well as more than 20 channels from FOX, Rotana and other channels currently available on the same satellite location. SAWA's TV channel distribution business reaches all main IPTV and OTT platforms as well as over 750 commercial properties across the MENA region. In addition, SAWA holds international rights to over 40 TV channels which are currently being licensed to both commercial properties and consumer platforms worldwide.

Arqiva Delivers New Cloud-based VoD Solution for A+E Networks EMEA
October 28, 2021 - Arqiva, the leading UK communications infrastructure and media services provider, has today announced the renewal of its contract with A+E Networks EMEA for a further two years. This renewal includes the delivery of video on demand (VoD) services to around 35 European head end affiliate platforms. The contract extension will see Arqiva implement a completely cloud-based solution that will allow A+E Networks to bring audiences an expanded library of on-demand content until at least 2023. Over the past three years Arqiva has delivered a hybrid solution, however as Arqiva has continually enhanced its cloud capabilities, it will now simultaneously work with A+E Networks to shift all existing archived content to an entirely virtual environment. Arqiva's productized offering is tailored by the creation of custom workflows suitable for A+E's destination platform specific requirements. Featuring an end-to-end cloud-contained journey, the solution takes content from the archive, then processes, packages and delivers it to platforms such as Amazon Prime, Apple TV+, Sky Italia, MediaSet and M7 Group for on-demand viewing. Processing VoD requests in the cloud drives significant cost-savings, and also enables Arqiva to process and deliver more assets, at the same time and at a far quicker pace.

Nilesat and TVU Networks Expand Partnership, Contribution and Transmission Service to Customers in Africa
October 26, 2021 - TVU Networks announced an expanded partnership with Nilesat, the Egyptian satellite communication provider, that will increase contribution capability for Nilesat's African customers and decrease transmission costs. In conjunction with a new satellite scheduled to launch in Q2 2022, TVU Networks will offer an IP contribution and delivery solution to Nilesat customers throughout the African continent. Nilesat-301 will deliver digital broadcast services to its existing customer base and extend its footprint into North Africa, East Africa and the Middle East. TVU Servers are currently in place to receive IP streams from digital television customers sent to Nilesat's Cairo headquarters, and TVU Networks' TVU One mobile transmitters and TVU Anywhere mobile production app are widely deployed for remote production by Arab and African media companies. As part of this expanded partnership, TVU Networks is offering its MLink rack-mount transmitter and G-Link for point-to-point transmission to Nilesat customers in the region to create an end-to-end, IP-based delivery platform.

EUTELSAT 9B Satellite Selected by Zeonbud to Extend its Broadcast Coverage throughout Ukraine
October 25, 2021 - Eutelsat Communications' has been selected by Zeonbud to assure the distribution of its high-quality broadcast content in Ukraine. Zeonbud Limited is the nation-wide licensed Digital Terrestrial Television operator transmitting Ukraine's 33 major channels covering a wide range of quality broadcast content. Launched in 2010, it reaches approximately 40% of the population and covers 95% of the territory. Through this long-term contract it will leverage the unparalleled coverage of the EUTELSAT 9B satellite over Ukraine to feed its DTT network, and potentially extend its offer to a DTH service beyond the reach of its existing tower infrastructure. The 9° East orbital location is home to a powerful satellite optimized for broadcast services and representing an ideal platform for channels seeking maximum reach into satellite homes and to terrestrial head-ends in the high-growth digital TV markets within its footprint, notably Ukraine.

TVN S.A. Contracts Additional Capacity at Eutelsat's HOTBIRD Video Neighbourhood
October 20, 2021 - Eutelsat Communications and TVN S.A. have signed a multi-year agreement enabling Poland's leading media company to secure incremental in-orbit resources at Eutelsat's flagship HOTBIRD video neighbourhood at 13° East. The agreement is another step in the long-standing partnership between

TVN, one of HOTBIRD's anchor customers, and Eutelsat, which has accompanied TVN's growth since the 1990s. It will support TVN's ongoing effort to further enhance the quality of its offer at HOTBIRD. Part of the Discovery Group, TVN is Poland's leading private broadcaster with 24 channel brands, including free-to-air networks and a variety of lifestyle, news, sports and film pay-TV brands. Eutelsat's HOTBIRD neighbourhood is one of Europe's most comprehensive satellite broadcasting systems in terms of coverage. It will be further optimised with the entry into service of two next-generation HOTBIRD satellites due to be launched in 2022 to replace the spacecraft currently operating at 13° East.

AsiaSat Takes a Strategic Stake in Leading Live Streaming Service 'One Click Go Live'
October 19, 2021 - Asia Satellite Telecommunications Company Limited has acquired a strategic stake in One Click Go Live Limited (formerly known as HERMES Live Technology Limited), a company incorporated in Hong Kong and specialised in video live streaming services and solutions. 'One Click Go Live' offers video live-streaming solutions that provide professional, broadcast-grade video streaming for live events. Its stable and scalable platform, built on patented video technologies, has delivered more than 300 live events across a geographical footprint of over 50 countries, reaching an audience of more than 20 million. 'One Click Go Live' also offers customised low latency live streaming solutions, which are particularly ideal for broadcasting content types such as sports streaming, live auctions, allowing viewers to watch the events on any devices in close to real-time. 'One Click Go Live' can be offered independently or as part of AsiaSat's end-to-end media solution offerings to its blue-chip full time and occasional use customers for linear TV and occasional feed distribution. The extensive client portfolio of 'One Click Go Live' has included customers from entertainment and media sectors serving mega-events such as concerts, award presentations and sports matches; enterprise and business clients for conference and education events such as global meetings and summits, auctions, webinars and workshops; corporate activities from shareholder meetings, town hall meetings to recruitment and staff training.

Sirius TV Partners with SES to Broadcast TV Channels across Malaysia
October 5, 2021 - Sirius TV, a brand of Smart Digital International Sdn Bhd – the 2nd DTH (direct-to-home) operator in Malaysia – has signed a multi-year contract with SES, the leading global content connectivity solutions provider, to deliver a new bouquet of satellite TV channels across Malaysia. The Sirius Basic subscription package launched last Friday with 13 initial channels, five of which are broadcast in HD. The Siruis TV offering is available for an affordable annual fee starting from RM 299, and includes free installation, as well as the initial year for free. The bouquet of channels will continue to expand, and subscribers will gain access to the full range of channels once they are released. Sirius TV will be using high-powered capacity on the SES-12 satellite – SES's advanced geostationary satellite at 95 degrees East – to support the distribution of channels to over 7.5 million satellite TV equipped homes across Malaysia. In addition, Sirius TV has adopted SES's Cloud Playout services, which provides a cost-effective solution while enabling an agile and scalable business model as the broadcast and media industries move toward a cloud-focused landscape.

LAUNCH / SPACE

Thales Alenia Space and Telkom Indonesia to Build HTS 113BT Telecommunication Satellite to Provide More Capacity over Indonesia
October 28, 2021 - Thales Alenia Space announced that it has signed a contract with the leading satellite service provider in Indonesia, PT Telkom Satelit Indonesia (Telkomsat) as subsidiary of PT Telkom Indonesia (Persero) Tbk (Telkom) a state-owned digital telecommunication company in Indonesia, to build HTS 113BT, a new High Throughput Satellite telecommunications satellite in C-band/Ku-Band from its orbital position at 113° East. Thales Alenia Space is the program prime contractor and responsible for the design, construction, testing and on-ground delivery of the satellite. It is also in charge of the early orbital positioning phase (LEOP) and in-orbit tests (IOT). In addition, Thales Alenia Space will supply the Ground control segment and will train and support the Customer team of engineers on site. The in-orbit support will also be provided all along the satellite lifetime. Built on Thales Alenia Space's historical Spacebus 4000B2 platform, HTS 113BT will provide more than 32 Gbps capacity over Indonesia. The satellite will weigh about 4 metric tons at launch and will be delivered early 2024 for a 15-year expected lifetime.

NanoAvionics Signs Earth Observation Mission Contract with South Korea's Contec
October 27, 2021 - Smallsat has signed a contract with Contec that includes supplying a 16U nanosatellite as well as mission integration and launch services to the Korean company. The launch of the Earth

observation (EO) nanosatellite is planned for the first half of 2023. The contract also marks the beginning of a two-way collaboration between NanoAvionics and Contec, a provider of ground station services, which NanoAvionics intends to use for its future mission operations in order to extend its global transmission cadence. The payload of NanoAvionics' modular 16U satellite bus will consist of an integrated imager with 1.5m resolution, supplied by NanoAvionics partner, and Contec's laser communication terminal (LCT). For the efficient delivery of satellite data, Contec will use its existing ground station in Jeju (South Korea) and further 12 stations, to be built by 2022, in Alaska, Sweden, Ireland, and other countries across the globe. Contec will also analyze the raw image data, pre-process it and provide insights for applications across various segments, including urban change detection, maritime and junk monitoring and crop yield prediction. The company, established in January 2015, as a spin-off from KARI (Korea Aerospace Research Institute), is already in discussions with local governmental bodies in South Korea which intend to use the satellite imagery obtained from the mission.

Thales Alenia Space Selected by ESA to Study Specific Technical Aspects for a Future Lunar Radio Navigation System

October 27, 2021 - Thales Alenia Space, a joint venture between Thales (67%) and Leonardo (33%), has been selected by the European Space Agency (ESA) to study fundamental techniques, models and algorithms to facilitate a future Lunar Radio Navigation System (LNRS). This study contract is part of ESAs Moonlight initiative, aiming to build reliable communication and navigation services to support the next generation of institutional and private Lunar Exploration Missions. Moon exploration is a strategic priority in space exploration, for both ESA and the industries, and it will enable the future manned missions to Mars. This contract covers the definition of the Orbit Determination and Timing Synchronization (ODTS) concepts, the Lunar reference frames (selenodetic and timing) and the signal modulation techniques for one -way and two-way services applicable to future lunar radio navigation communication.

SSC and Bradford ECAPS Sign MoU Regarding Commercial Orbital Debris Removal Services

October 27, 2021 - Swedish Space Corporation (SSC) and Bradford Space / ECAPS, a leading manufacturer of non-toxic propulsion systems, have signed an MoU for the collaborative offering of orbital debris removal services. Starting in 2024, SSC and Bradford Space will offer orbital debris removal as a commercial service from Esrange Space Center in northern Sweden, mainland Europe. The new services will address the issue of common orbits becoming increasingly congested as more actors are accessing space, creating a hazard to other spacecraft using these orbits. A Bradford Space satellite bus, named 'Square Rocket,' with significant delta-V capability will be inserted into orbit via launch from the Esrange Space Center to then rendezvous with and deorbit the debris. The target orbits are high-inclination polar, including the common sun synchronous orbit (SSO). The orbital debris removal service will be provided from the new spaceport facility now being built at Esrange Space Center – ready for launch in 2022. The service will showcase Sweden as a leader in debris mitigation and an advocate for a sustainable use of space.

Blue Origin and Sierra Space Developing Commercial Space Station

October 25, 2021 - Blue Origin and Sierra Space today announced plans for Orbital Reef, a commercially developed, owned, and operated space station to be built in low Earth orbit. The station will open the next chapter of human space exploration and development by facilitating the growth of a vibrant ecosystem and business model for the future. Orbital Reef is backed by space industry leaders and teammates including Boeing, Redwire Space, Genesis Engineering Solutions, and Arizona State University. Designed to open multiple new markets in space, Orbital Reef will provide anyone with the opportunity to establish their own address on orbit. This unique destination will offer research, industrial, international, and commercial customers the cost competitive end-to-end services they need including space transportation and logistics, space habitation, equipment accommodation, and operations including onboard crew. The station will start operating in the second half of this decade. Orbital Reef will be operated as a "mixed use business park" in space. Shared infrastructure efficiently supports the proprietary needs of diverse tenants and visitors. It features a human-centered space architecture with world-class services and amenities that is inspiring, practical, and safe. As the premier commercial destination in low Earth orbit, Orbital Reef will provide the essential infrastructure needed to scale economic activity and open new markets in space. Reusable space transportation and smart design, accompanied by advanced automation and logistics, will minimize cost and complexity for both traditional space operators and new arrivals, allowing the widest range of users to pursue their goals. The open system architecture allows any customer or nation to link up and scale to support demand. Module berths, vehicle ports, utilities, and amenities all increase as the market grows.

Operated by Arianespace for the Benefit of SES and the French Ministry of the Armed Forces
October 24, 2021 - On Sunday, October 24, at 02:10 UTC, Ariane 5 lifted off from the Guiana Space Center (CSG), Europe's Spaceport in Kourou, French Guiana, successfully orbiting two satellites built by Thales Alenia Space: SES-17, a telecommunications satellite operated by SES, and SYRACUSE 4A, a telecommunications satellite developed for the French Ministry of the Armed Forces. SES-17, a telecommunications satellite for the Luxembourg-based operator SES, will offer excellent coverage of the Americas, the Atlantic Ocean and the Caribbean. It was designed to revolutionize in-flight connectivity for airline passengers and accelerate initiatives to bridge the digital divide. Its 200 powerful spot-beams can be dynamically allocated to match evolving customer requirements. SES-17 is also the first SES satellite to be fitted with an all-digital payload, controlled by a new-generation digital transparent processor (DTP), which will deliver unprecedented flexibility and efficiency. It was one of the largest satellites ever launched by Arianespace. SYRACUSE 4A, the military communications satellite, commissioned by the French Armament General Directorate (DGA), will allow to connect the armed forces together when deployed. On the ground, at sea, on the air and even in space, militaries needs secured, militaries need secured and powerful communication means in order to be able to exchange information with the command center. Thanks to its state-of-the-art equipment (anti-jamming antenna and digital transparent processor, SYRACUSE 4A will guarantee a high resistance to extreme jamming methods. At the service of France's sovereignty, the satellite will also support NATO and European-led operations SES-17 and SYRACUSE 4A will be the 164th and 165th Thales Alenia Space satellites to be launched by Arianespace.

Nanoracks, Voyager Space, and Lockheed Martin Teaming to Develop Commercial Space Station
October 22, 2021 - Nanoracks, in collaboration with Voyager Space and Lockheed Martin, has formed a team to develop the first-ever free flying commercial space station. The space station, known as Starlab, will be a continuously crewed commercial platform, dedicated to conducting critical research, fostering industrial activity, and ensuring continued US presence and leadership in low-Earth orbit. Starlab is expected to achieve initial operational capability by 2027. To meet US government, international space agency, and commercial needs in space, these industry leaders will develop Starlab specifically to enable the growing space economy and meet pent-up customer demand for space services such as materials research, plant growth, and astronaut activity. Together, these companies bring unparalleled experience in commercial space utilization, engineering design and performance, technology innovation, and investment strategy. NASA recently announced the commercial low-Earth orbit (LEO) destination (CLD) project to support the development of private space stations. CLD will stimulate a multifaceted LEO economy and provide science and crew capabilities in LEO before the International Space Station (ISS) retires. Nanoracks will prime the Starlab development effort leveraging over a decade of experience as the pathfinder of and global leader in commercial ISS utilization. Voyager Space, the majority shareholder in Nanoracks, will lead strategy and capital investment and Lockheed Martin, a leader in developing and operating complex spacecraft, will serve as the manufacturer and technical integrator.

Space Agencies Invest in Methera Led Low-cost User Terminal Programme
October 21, 2021 - Methera is delighted to announce, in conjunction with the European, UK and Norwegian space agencies (UKSA, ESA and NOSA), the receipt of a €6.5 million grant towards a major and innovative programme to develop a family of low-cost satellite user terminals. This initiative will directly support the Methera constellation and other MEO, GEO and LEO systems. It will not only make Broadband Internet more accessible for all but also enable more innovative service opportunities through major cost, performance and availability improvements. Methera has partnered with Global Invacom Ltd, Riverbeck Ltd and TSAT AS to create a strong and experienced consortium to design, develop and deliver the system. The project will support the growth of a number of UK companies including those directly involved in the project and through the supply chain that will be created once the product goes to market.

Kleos Commits to Build and Launch Fourth Satellite Cluster
October 19, 2021 - Kleos Space S.A has signed new contracts with satellite builder Innovative Solutions in Space B.V. (ISISPACE) and global launch services provider Spaceflight Inc to build and manage the launch its fourth satellite cluster of four satellites, the Observer Mission (KSF3) mid-2022. Kleos' fourth satellite cluster complements the 37-degree orbit of the 'Scouting Mission' and Sun Synchronous orbits of the 'Vigilance Mission' and 'Patrol Mission' satellites with up to a further 119 million km^2 data collection capacity per day (Vigilance and Patrol Missions each have similar data collect capacity). Netherlands-based ISISPACE will provide Kleos with a turn-key solution for its four Observer Mission satellites, including design, development, production, testing, launch integration services, and support for checkout and commissioning". ISISPACE has more than 15 years' nanosatellite experience, successfully built Kleos'

'Vigilance Mission' (KSF1) and is currently building the 'Patrol Mission' (KSF2) satellites.

Arianespace Has Successfully Performed Soyuz Flight ST36
October 14, 2021 - Performed on Thursday, October 14 at precisely 6:40 pm. local time at Russia's Vostochny Cosmodrome (9:40 a.m. UTC), Soyuz Flight ST36 lifted-off with 36 OneWeb satellites onboard, bringing the size of the fleet in orbit to 358, after this successful deployment. Flight ST36 was the 61st Soyuz mission carried out by Arianespace and its Starsem affiliate. The mission lasted three hours and 51 minutes. The 36 satellites were deployed during nine separation sequences, at an altitude of 450 km. The launch of the satellites was operated by Arianespace and its Euro-Russian affiliate Starsem under contract with Glavkosmos, a subsidiary of Roscosmos, the Russian space agency. Arianespace is responsible for the overall mission and flight-worthiness, with the support of Starsem for launch campaign activities including management of its own launch facilities at the Baikonur Cosmodrome. RKTs-Progress (the Samara Space Center) is responsible for the design, development, manufacture and integration of the Soyuz launch vehicle as well as for the 3-stage Soyuz flight. NPO Lavotchkin is responsible for the launch preparation operations and flight of the Fregat orbital vehicle.

AAC Clyde Space Receives Order on Sirius Avionics to Arctic Weather Satellite
October 14, 2021 - AAC Clyde Space, a leading new space company, has been contracted by OHB Sweden to deliver its Sirius command and data handling unit worth approx. €545,000 (approx. 5.6MSEK) to ESA's Arctic Weather Satellite. OHB Sweden is the mission prime contractor for the Arctic Weather Satellite, providing the satellite platform and system integration. AAC Clyde Space received an order earlier in September to deliver a Starbuck power system with a value of €797,000 (approx. 8.2MSEK), hence the total order value of core avionics to the project amounts to 1.3MEUR (approx. 14MSEK). Omnisys Instruments, acquired in April 2021, was in March contracted to supply weather sensors to the Artic Weather Satellite with a value of 12.2MEUR (approx. 124MSEK). The group has thereby received orders with a total value of 13.5MEUR (approx. 138MSEK) from the satellite project.

SpaceLink Selects OHB as Preferred Tenderer for Satellite Manufacturing Contract
October 14, 2021 - SpaceLink, the company building the communications superhighway for the space economy, announced it has reached a significant milestone in the manufacture and launch of the initial constellation of four high-capacity optical relay satellites. Following a comprehensive tender process, leading satellite manufacturer, OHB Systems AG, has been selected as the preferred tenderer for the initial constellation. The parties are currently in advanced negotiations in relation to a contract for the manufacture and delivery of the initial constellation and expect to sign an 'authorization to proceed' next week. An authorization to proceed is the legal basis for the commencement of the project, and the finalization of the contract. The total value of the contract is expected to exceed US$300 million. Negotiations with OHB have reached an advanced stage and the relevant terms and conditions of the contract are expected to be legally finalized in the coming week. In addition, OHB intends to invest US$25 million into SpaceLink as the cornerstone investor in the first tranche of financing for the project.

Skyrora Agrees First Multi-launch Deal with Shetland Spaceport for the Next Decade
October 12, 2021 - British rocket company Skyrora has agreed a multi-launch deal with the SaxaVord spaceport on Unst, the most northerly of the Shetland Islands, as it moves closer to launching its XL rocket in 2022. This is the first agreement Skyrora has made with a Scottish Spaceport. If successful, this could be the first rocket to go to space from the UK. The multi-launch agreement with SaxaVord will run for the next decade, giving Skyrora the ability to build towards its target of 16 launches a year by 2030. Once operational, the SaxaVord spaceport is expected to create 140 jobs locally, with an additional 70 jobs across the Shetland. Shetland Space Centre recently changed its name to SaxaVord Spaceport, rebranding to position itself at the heart of the new space economy in Europe.

Rocket Lab Completes Acquisition of Space Software Company Advanced Solutions, Inc
October 12, 2021 - Rocket Lab USA, Inc. has completed the acquisition of Advanced Solutions, Inc. (ASI), a Colorado-based aerospace engineering firm delivering mission proven space software, mission simulation and test systems, and Guidance, Navigation, and Control (GNC) solutions, for $40 million plus the potential for an additional $5.5 million performance earnout based on CY 2021 results. ASI's industry-leading advances in flight software, mission simulation, and GNC significantly strengthen Rocket Lab's Space Systems portfolio, which encompasses the Photon spacecraft line and a growing suite of spacecraft hardware solutions, including those brought to the portfolio through the acquisition of Sinclair Interplanetary in April 2020.

Airbus Zephyr Solar High Altitude Platform System (HAPS) Reaches New Heights in its Successful 2021 Summer Test Flights

October 11, 2021 - The Airbus Zephyr S completes a successful 2021 test flight campaign in the United States. The final Airbus solar-powered High Altitude Platform System (HAPS) flight touched down on 13th September in Arizona, USA, ending the most ambitious and successful Zephyr flight campaign to date. The flight campaign had a clear customer focus - to demonstrate how Zephyr could be used for future operations, flying outside of restricted airspace and over airspace shared with commercial air traffic. Carrying an Optical Advanced Earth Observation system for Zephyr (OPAZ) payload, Zephyr proved its operational value to provide instant, persistent, and improved situational awareness. With its ability to remain in the stratosphere for months at a time, Zephyr will bring new see, sense and connect capabilities to both commercial and military customers. Zephyr will provide the potential to revolutionise disaster management, including monitoring the spread of wildfires or oil spills. It provides persistent surveillance, tracing the world's changing environmental landscape and will be able to provide communications to the most unconnected parts of the world.

NSIL/ISRO and OneWeb to Collaborate for Taking Digital Connectivity to Every Corner of the World

October 11, 2021 - Bharti-backed OneWeb, announced an arrangement through Letter of Intent with NewSpace India Limited (NSIL), the commercial arm of Indian Space Research Organisation (ISRO), to use the Indian-built PSLV (Polar Satellite Launch Vehicle) and the heavier GSLV-MkIII (Geosynchronous Satellite Launch Vehicle) as potential platforms to launch OneWeb's satellites in India from 2022. The non-binding Letter of Intent was unveiled at the launch of Indian Space Association (ISpA) in the presence of the Hon'ble Prime Minister of India Sh. Narendra Modi. OneWeb is amongst the founding members of ISpA, which strives to be the collective voice of space and satellite companies in India and will work with stakeholders across for the development of India's space ecosystem. OneWeb is building its initial constellation of 648 LEO satellites and has already put 322 satellites into orbit. Services will begin this year to the Arctic region including Alaska, Canada, and the U.K. By late 2022, OneWeb will offer its high-speed, low latency connectivity services in India and the rest of the world. Service testing on the satellites already in orbit is underway. The results are positive, including seamless satellite and beam handovers, high speeds and low latency. OneWeb and NSIL will expeditiously convert the Letter of Intent into a binding agreement after obtaining all necessary approvals from their respective Boards.

mu Space Unveils New Satellite and Space Factory

October 11, 2021 - Aerospace manufacturer and satellite internet service provider mu Space Corp. has announced and displayed to the public their brand-new satellite, the mu-B200 and the opening of Factory 2 in Bangkok. Factory 2 is the company's third factory to date and aims to cement the Southeast Asian company as an aerospace leader. mu Space Corp is an aerospace manufacturer and satellite internet service provider redefining the aerospace landscape in Southeast Asia. The organization emphasizes the importance of a vertical-integrated approach, meaning that they design, build, and test in-house all their products in order to improve performance and quality while reducing the additional costs of an extensive supply chain. The opening of the new factory and announcement of the mu-B200 is significant in that it will enable mu Space to triple its efforts in leading Thailand in the global space race. In December 2020, mu Space opened its first small-sized factory, known as Factory 0 for research and its technology's prototypes. Lesser than a year later, Factory 1, their second factory, was opened. The factory is designated for most of the manufacturing stages, development, tests, productions of entire satellites and components. Factory 2 which was unveiled via live stream at today's Satellite Tech Unveil 2021 event is considered an extension area to be able to produce more satellites. The factory also focuses on producing electronic parts and power systems relating to mu Space's satellites. The organization researches, designs, builds and tests all its technology in-house. Founded in 2017 by James Yenbamroong, mu Space has conducted orbital microgravity experiments as part of Blue Origin's New Shephard rocket launches and plans to work further alongside other commercial agencies, as well as conduct its own launches in the near future.

Thales Alenia Space Supports Final Integration of ESM 2 for the Orion Spacecraft and Signs Contract Extension for Modules 4, 5 and 6

October 6, 2021 - Thales Alenia Space announced today that it has supported the final integration of critical systems on Orion's European Service Module 2 (ESM 2) at the Airbus cleanroom in Bremen, Germany. It also signed contract extensions concerning similar contributions to ESM 4, 5 and 6. The Orion spacecraft is designed to bring astronauts to the Moon as part of NASA's Artemis program. The European Service Module is being developed under a European Space Agency (ESA) contract and covers the structure, propulsion, power supply, thermal control and main life support capabilities. Airbus Defence

and Space, the Orion ESM prime contractor, once again chose Thales Alenia Space to provide critical subsystems for the next three service modules, ESM 4, 5 and 6, including structure and micrometeoroid protection, thermal control and consumable storage and distribution. These subsystems are an essential part of the modules, playing a vital role in ensuring the safety of the crew and the entire mission.

Swedish Space Corporation Invests to Finalize Satellite Launch Capability at Esrange Space Center
October 6, 2021 - Swedish Space Corporation (SSC) and the Nordic Investment Bank (NIB) have signed a EUR 12 million loan agreement for the finalization of a new spaceport at Esrange Space Center in Kiruna, northern Sweden. The 12-year maturity loan will finance the investments to enable the use of reusable rockets and the ability to launch small satellites into orbit as early as 2022, making Esrange the first major orbital launch site in the EU. The 12 MEUR loan is part of an extensive modernization of Esrange that has been ongoing since 2015 – a total investment of around 50 MEUR. The loan will finance the completion of the construction of a new spaceport capability, aiming at a first satellite launch in 2022. The project entails construction work for the new launch site, including integration halls for rockets and satellites, expansion of planned fuel plants, launch pads and surrounding technical ground systems as well as development of technical support systems in Esrange's operational communication center.

Arianespace to Launch GSAT-24 Satellite for NSIL with Ariane 5
October 5, 2021 - On September 28, 2021, NewSpace India Limited (NSIL) entrusted Arianespace with the launch of its GSAT-24 telecommunications satellite. GSAT-24 is scheduled for launch in the 1st quarter of 2022, from the Guiana Space Center, Europe's Spaceport in Kourou, French Guiana, on one of the seven Ariane 5 missions remaining to be performed with the heavy-lift launcher. This Ku-band satellite is a 4-ton class communications satellite built by the Indian Space Research Organization (ISRO) and will be placed into geostationary transfer orbit (GTO). Once orbited, GSAT-24 will provide high-quality television, telecommunications and broadcasting services. GSAT-24 satellite is the "1st Demand Driven communication satellite mission" undertaken by NSIL.

EnduroSat and Exolaunch Announce Launch Agreements for SpaceX Falcon 9 Rideshare Missions
October 04, 2021 - EnduroSat and Exolaunch announced the signing of launch agreements for sending two EnduroSat NanoSats into orbit aboard SpaceX's Falcon 9. The 6U XL SharedSat nanosatellites, built by EnduroSat for its customers, will be launched via Exolaunch in H1 2022 as part of SpaceX's SmallSat Rideshare Program. The SharedSats are 6U XL NanoSats with several multi-purpose payloads on a single bus. By simplifying access to space services through shared missions for a range of commercial, exploration and science customers, EnduroSat aims to lower significantly the entry barrier of operations in orbit. The two SharedSats are part of the commercial EnduroSat's Missions. They foresee integration, validation, and testing, launch and operations of the satellite and hosted payloads. Direct access to the payload data will be made available in the cloud through EnduroSat's Digital Mission Control. The software-centric NanoSat architecture allows for multiple payloads to operate together reliably on a single platform with access to on-demand processing, power and pointing capability.

Maxar Awarded G-EGD Contract Renewal for Mission-Ready Satellite Imagery by U.S. Government
October 04, 2021 - Maxar Technologies has been awarded an Option Year 2 contract renewal by the U.S. National Geospatial-Intelligence Agency (NGA) for the Global Enhanced GEOINT Delivery (G-EGD) program. The contract, which began September 1, 2021, is valued at $44 million. This is the second of three option years for the contract, which has a total value of up to $176M. With this award, Maxar will continue to provide more than 400,000 U.S. government users with unclassified, online and offline, on-demand access to high-resolution commercial imagery from Maxar in addition to geospatial data from other industry providers. Since 2011, the G-EGD program has enabled warfighters, first responders, intelligence analysts and civil government users to tap into Maxar's 125-petabyte historical imagery library and daily imagery collections for time-sensitive, mission-critical planning and operations.

Reusable Small Rocket Will Apply Honda's Core Technologies
October 4, 2021 - Honda is working on the development of small rockets. This rocket development was initiated by the proposal made by young Honda engineers who wanted to build a small rocket by utilizing core technologies, such as combustion and control technologies, that Honda has amassed through the development of various products. Artificial satellites are indispensable for various purposes including the observation of the global environment, such as global warming and abnormal weather conditions and also to enable wide-area communication, which is an effective means to provide connectivity to mobility products. However, currently, there are not enough rockets available to meet demand for satellite launches.

To address this issue, Honda is developing a small rocket with a goal to use it as a launch vehicle for small low-earth orbit satellites. Moreover, Honda is conducting research with an assumption to make its rocket "reusable" by enabling at least some of the rocket components to land back on earth after the launching. For this challenge, Honda will strive to utilize control and guidance technologies Honda has amassed through the development of automated driving technologies. In addition to a complete commitment to its environmental and safety challenges, Honda will continue pursuing outside-the-box research to leverage its core technologies and take on challenges in new areas to bring about new value that overcomes the constraints of time and space of people.

EXECUTIVE MOVES

Inmarsat Announces Philippe Carette as President of its Aviation Business Unit
October 28, 2021 - Inmarsat, the world leader in global, mobile satellite communications, has announced that Philippe Carette will be joining the company as President of its Aviation Business Unit on 22 November 2021. Philippe joins Inmarsat from Thales, where he held several roles since joining the company in 2013. This includes the position of CEO of Thales' InFlyt Experience Business Line (IFE), where he led a digital transformation of the business, leveraging cloud based disruptive applications and achieving a significant increase in customer satisfaction. Philippe has over 30 years' experience in the technology & aerospace industries, which in addition to his tenure at Thales includes 14 years with the Safran Group, a major French aerospace engineering company. Philip Balaam, currently business unit President for aviation, is moving into a new strategy role at Inmarsat, where he will be working with Chief Strategy Officer (CSO) Fredrik Gustavsson to reinforce the company's growing, broad-based commercial momentum.

Spire Global, Inc. Appoints Theresa Condor Chief Operating Officer
October 27, 2021 - Spire Global, Inc., a leading global provider of space-based data, analytics, and space services, announced that it has appointed Theresa Condor to Chief Operating Officer. In her role, Ms. Condor will directly oversee Spire's Weather, Aviation, Earth Intelligence, and Space Services business units worldwide. Ms. Condor was formerly Executive Vice President and General Manager of Spire Space Services and Earth Intelligence. Spire designs, builds, tests and operates all of its satellites globally from its facility in Glasgow.

Intelsat Announces Planned Retirement of Stephen Spengler as Chief Executive Officer
October 21, 2021 - Intelsat S.A. announced today that Chief Executive Officer Stephen Spengler has decided to retire as CEO upon the Company's emergence from its financial restructuring process and the naming of a successor. Until that time, Spengler will continue as CEO and lead Intelsat through the final stages of this process, ensuring a smooth transition. Egon Zehnder, a leading executive search firm, has been engaged to lead the search process for a new CEO.

ESA Names Three New Directors
October 21, 2021 - To help European companies succeed in space, ESA has established a Directorate of Commercialisation, Industry and Procurement. Its inaugural Director was named today as Ms Géraldine Naja. She will be responsible for helping to enable European space companies to be among the biggest and best, strongly contributing to a greener and more digital economic recovery. Ms Naja will take up duty on 1 November 2021. Ms Naja was made acting Director for Commercialisation, Industry and Procurement at ESA in June 2021. Ms Simonetta Cheli has been appointed as Director of Earth Observation Programmes, succeeding Josef Aschbacher, who became ESA Director General in March 2021. She will take up duty on 1 January 2022. Mr Francisco-Javier Benedicto Ruiz has been appointed as Director of Navigation. He will take up duty on 16 February 2022. He is currently Head of the Galileo Programme Department within the Directorate of Navigation at ESA. A Spanish national, Mr Benedicto Ruiz spent his early career in academia, working as a microwave engineer at the Polytechnical University Catalonia in Barcelona and as a telecommunications engineer at MIER Comunicaciones, also in Barcelona, before joining ESA in 1990.

Eutelsat Chief Executive Officer Rodolphe Belmer to Step Down
October 20, 2021 - Eutelsat Communications Chief Executive Officer Rodolphe Belmer has notified the board of directors of his intention to step down at the beginning of 2022. Rodolphe Belmer has been CEO of Eutelsat since March 2016, during which time he has successfully implemented a strategy of strict operating and financial discipline and set the company firmly on its strategic path to address the opportunities of the connectivity sector. The process of recruiting a successor will begin immediately. In

the meantime, Rodolphe will remain fully at the helm and focused on the development and performance of Eutelsat.

Germany's Exolaunch Expands Business Operations in North America
October 19, 2021 - Exolaunch, a provider of launch, deployment, and in-space transportation services, has expanded its business operations and sales in North America by opening offices in Denver, CO and Washington, DC. To lead its US operations (Exolaunch, Inc. doing business as Exolaunch USA), capture new market opportunities, and continue business growth in the region, Exolaunch USA has hired aerospace executive Chris Hearsey as its Chief Executive Officer. Having doubled sales globally, compared to last year, in 2022 Exolaunch is expecting to further increase its sales and keep its high launch rate by sending +100 smallsats into space for the industry's leading players. In addition to further developing the business and establishing the US headquarters office in Denver, Hearsey will lead policy, industry outreach, and government affairs in Washington, DC. He will also complement and strengthen the work coming out of Exolaunch's Berlin headquarters in Germany. Through the Denver office, Exolaunch expects to better provide tailored and reliable launch solutions to all its customers in North America. The company, which has successfully launched satellites for multiple North American customers including Loft Orbital, Spire Global and Kepler Communications among others, provides its own separation systems and is developing a line of orbital transfer vehicles for precise satellite injection into custom orbits and the removal of space debris.

INTEGRASYS Welcomes New Vice President Global Sales
October 18, 2021 - Integrasys welcomes the new Vice President Global Sales, and Head of Americas Sales Office in Herndon, Virginia, Jackson Kemper. With more than 25 years of experience of successful sales and business development management in the Satellite industry with a focus on SATCOM and Communication Solutions to Commercial Markets and Global Governments. Kemper has been recruited by Integrasys to develop the business and leading the sales teams globally. Having previously worked with major organizations of the industry, such as Iridium, Intelsat, Inmarsat, telecommunication, and high-tech companies among others. Jackson brings a ton of quality experience, and a great knowledge of business, sales, and management to a fast-growing company with innovative solutions as INTEGRASYS is.

Inmarsat Announces Ben Palmer as President of its Martime Business Unit
October 14, 2021 - Inmarsat, the world leader in global, mobile satellite communications, has today announced that Ben Palmer OBE will be joining the company as President of its Maritime Business Unit on 8th November 2021. Most recently head of Northrop Grumman's Mission Systems division across Europe, Ben brings 25 years' experience of driving transformational change in technology-heavy industries, including maritime, with a strong customer-centric focus and a track record of delivering results.

Comtech Announces Leadership Transition
October 4, 2021 - Comtech Telecommunications Corp. announced today that its President and Chief Operating Officer Michael Porcelain will become Chief Executive Officer, succeeding Fred Kornberg, by the end of calendar 2021. Mr. Porcelain will also continue as President of Comtech and join its Board of Directors. It is anticipated that Mr. Kornberg will become an advisor to the Company on technology matters and continue as a director and a non-executive Chairman of the Board. As a senior technology advisor to the Company, Mr. Kornberg would assist with the leadership transition and provide the executive team counsel based on his deep technical expertise. This change completes the Company's CEO succession plan process initiated by the Board of Directors with its appointment of Mr. Porcelain as Chief Operating Officer in 2018 and President in 2020. Mr. Porcelain previously served as the Company's Chief Financial Officer for more than 12 years and, prior to that, served as Comtech's Vice President of Finance and Internal Audit from 2002 to 2006. Before joining Comtech, he was Director of Corporate Profit and Business Planning for Symbol Technologies (which was subsequently acquired by Motorola) and also served as a Manager in the Transaction Advisory Services Group of PricewaterhouseCoopers where he specialized in providing consulting services to both large and small technology companies.

REPORTS

Satellite 5G Transition Generates US$125.5 Billion Service Revenue Opportunity by 2030
October 18, 2021 - NSR's *5G via Satellite, 2nd Edition* report, launched today, sees 5G access protocols that incorporate non-terrestrial networks will attract 100s of millions of smartphones and IoT devices to satellite networks by the decade's close. Beyond traditional telco areas, multiple segments show

accelerated growth from transition to 5G, generating US$125.5 billion in cumulative service revenues. While COVID-19 may increase demand, delaying 3GPP release 17, key actors in the industry are rushing to adopt 5G standards for network orchestration and integration with telco networks. Value chain transformation is already taking shape with Space and Ground Segment vendors providing infrastructure 'as-a-Service.' the development of verticalized offers, and growing interest of mainstream Telcos in Satellite technologies.

Significant Acceleration in Digitalisation of Maritime Industry Highlighted in Inmarsat Report
October 13, 2021 - Inmarsat, the world leader in global, mobile satellite communications, has published a new report pinpointing the impact of COVID-19 in accelerating global shipping's digital journey. Written by maritime innovation consultancy Thetius and sponsored by the Inmarsat Research Programme, 'A Changed World: The state of digital transformation in a post-COVID-19 maritime industry' captures a sector fast-tracking IoT-based solutions from November 2019*. It characterises COVID-19 as a "universal disruptor and catalyst for digital transformation". The report finds that, as COVID-19 emerged and global travel restrictions took hold, surging demand for crew connectivity was echoed in uptake for other digital services needed to keep ships running.

Software-Defined Satellite Trend Triggers $86.9 Billion Revenue Opportunity
October 12, 2021 - NSR's new report *Software-Defined Satellites (SDS)*, launched today, sees growing satellite flexibility requirements trigger an $86.9 Billion cumulative revenue opportunity by decade's end. Non-GEO- HTS constellation satellites will lead uptake with 95% demonstrating full or partial flexibility as software-defined platforms by 2030. However, operator hesitancy sees only 70% of GEO satellite orders to capture this trend in the medium term. With testing still in progress, GEO adoption will be slower in the short to medium term, though the customer flexibility ask is clear. Most high-throughput comms constellations are expected to have the ability to steer beams, redistribute power and reshape spectrum, to enable network efficiency, cater to current/future customers, and new use cases. Strategic planning

Euroconsult Releases Earth Observatio: Data & Services Market Report
October 6, 2021 - Euroconsult has released its latest *Earth Observation: Data & Services Market (EODSM)* report for 2021, providing a fresh global assessment of the Earth Observation (EO) satellite-based commercial demand for imagery and value-added services, in 8 regions and across 9 vertical markets. In 2020, the commercial market for EO data stood at $1.6 billion, growing at a 5-year Compound Annual Growth Rate (CAGR) of 5%. It is expected to top $2.5 billion by 2030 at 4% CAGR throughout the decade. In its comprehensive overview of the EO market, EODSM 2021 observes that defense maintains its place as the most significant market for commercial data, with $1.8 billion in 2020, or around 45% of the total market. The Value-Added Services market is also expected to undergo an accelerated growth driven by constellation supply, topping $5 billion by 2030 with 7% CAGR through the decade. Still fragmented, some emerging but promising applications such as LBS and insurance are expected to lead the growth due to the increasing bigdata and data fusion capabilities. The report also gives a comprehensive overview of major events occurred last year with a unprecedent impact in Earth Observation sector.

NSR Predicts Earth Observation Market to Generate US$73 Billion by 2030
October 4, 2021 - NSR's *Satellite-Based Earth Observation, 13th Edition (EO13),* report launched today, finds multiple trends converging to achieve a longstanding industry goal, an open EO market. Driven by Gov/Mil customers and rapidly growing commercial demand, derived EO data products present a US$73 billion opportunity, as new business models push ground segment evolution boosting revenues. With downstream information products and big data analytics growing fast, new capabilities such as persistent monitoring, ground segment virtualization and cloud computing are expected to drive the market toward becoming a more consumer-friendly sector over the next decade. As operators look toward fusion of multiple data types to provide information products and analytical insights, a lack of standardization will slow market uptake in the short term. However, improvements on the distribution of data and services will catch up, with volumes of supply coming via dozens of constellations.

UPCOMING EVENTS

APSCC 2021 Webinar Series, Virtual Event, https://apsccsat.com
LIVE Every Tuesday 9AM HK l Singapore Time

Asia Video Summit 2021, November 1-12 | 16-18, https://asiavideosummit.com/

Join us at the Asia Video Summit 2021 from 16 – 18 November where we will aim to provide you with a comprehensive view of what you need to survive in the video industry. Be part of the marquee event of the year for the video industry in Asia. Visit www.asiavideosummit.com for more information.

Satellite Industry Forum, November 18, https://avia.org/
Join us at the Satellite Industry Forum on 18 November as we talk with the players who are shaping the industry, understand where the satellite market is today, and where it is headed for in the coming years. Visit www.aviasif.com for more information.

COSPAR Symposium, November 15-19, Singapore, https://www.cospar-assembly.org

India Satcom 2021, November 23-24, 2021, https://broadbandindiaforum.com/event/india-satcom-2021-23rd-24th-november-2021/
India SatCom 2021, the 7th edition of BIF's annual flagship event, is being held virtually this year on 23rd & 24th November 2021. Considered as the country's oldest, most reputed and most comprehensive platform for deliberations on all critical policy, regulatory and technology related aspects pertaining to the satellite communications ecosystem, India SatCom 2021 will have participation from all vital stakeholder groups, including relevant Ministries and Departments of the Government, concerned Space Agencies, Technology solutions providers, allied sector representatives, and from the leading global and national players in the satcom vertical.

World Satellite Business Week, December 13-16, Paris & Online, http://www.satellite-business.com
Held between the 13th and 16th of December in Paris, Euroconsult's World Satellite Business Week will bring together an outstanding assembly of actors from the international community, emerging from all levels of the value chain on an international scale. Featuring a rich 40+ sessions program covering the entire space and satellite value chains, join the #WSBW in Paris for four days of immersive content, valuable networking opportunities and key market insights to stay on top of a rapidly changing business environment with the world's top sector executives. For the detailed program and registration visit www.satellite-business.com

APSCC members can use the code APSCC10 to obtain 10% for in-person format and APSCC25 for 25% for online only registrations discount.

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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.