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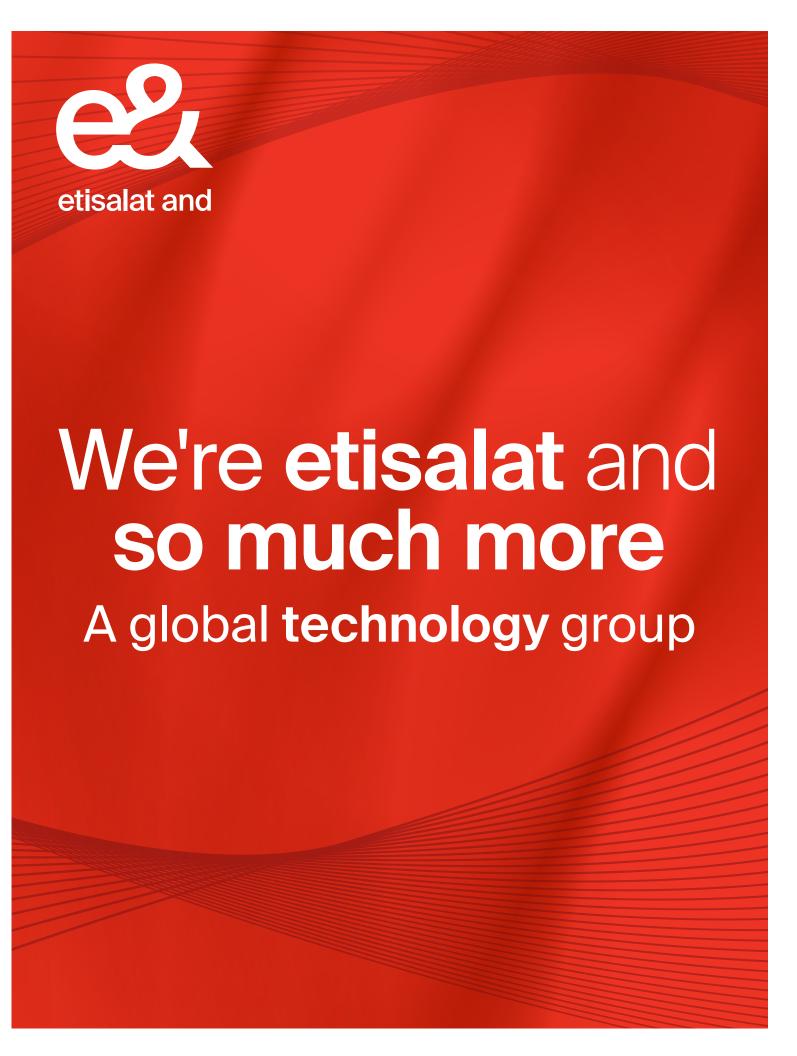






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Editor's Note



Dear Reader,

Welcome to the latest edition of Teletimes International.

The month of May brings our attention towards two key events taking place in Dubai. The SAMENA Telecom Council Leaders' Summit and CABSAT 2024. The leaders' summit is SAMENA Telecom Council's annual flagship event bringing together the region's telecom leadership for collaboration and networking. CABSAT 2024 will be doing the same for the region's satellite industry.

Teletimes is a media partner to both events and our team will be actively participating there. If you are interested to meet with us, organize any interviews or collaborate in any other way, feel free to write directly to me on khalidathar@teletimesinternational DOT com

Moving to the contents of this month's Teletimes, this edition features an article about Spacebridge's new platform, ESTELLATM, which is revolutionizing the satellite industry. Amongst other pieces, I also recommend two key interviews, one with Steven Yi, President of Huawei ME & CA and the other with Bocar A. BA, CEO of SAMENA Telecom Council.

As always, you will find the latest news and insights from all major players in this edition. Your feedback is welcome on info @ teletimesinternational DOT com

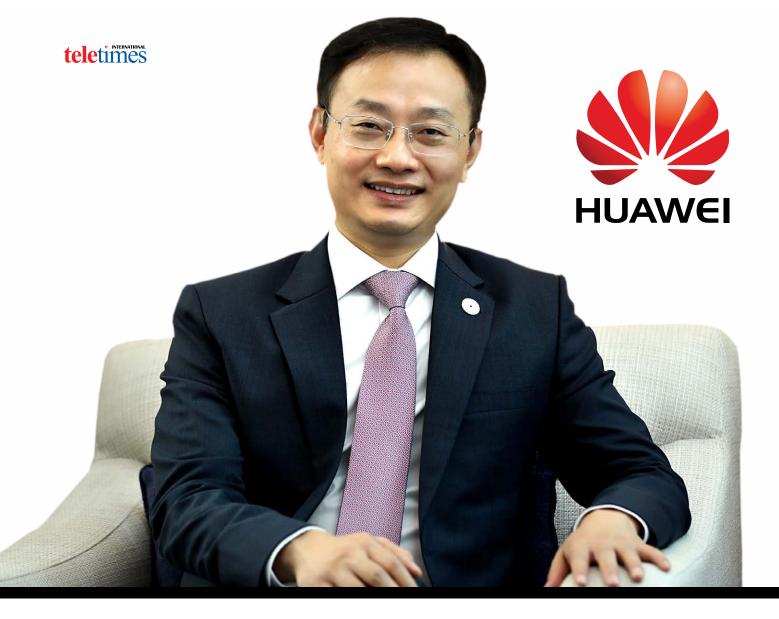
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Khalid Athar
Chief Editor



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"The most transformative shift in tech is undoubtedly the evolution of AI"

Steven Yi, President of Huawei ME & CA, talks to Teletimes about the evolving telecommunications sector and the digital economy in the Middle East

Teletimes: The GCC has made impressive strides in the deployment of 5G technology, with significant developments expected in 5G-Advanced (5G-A). Can you discuss how these technologies are shaping ICT development and the digital economy in the Middle East and Central Asia regions?

Steven: Certainly. The advent of 5G has marked a new era in telecommunications, with around 28 networks launched

commercially across the Middle East and Central Asia regions since 2019. This rapid adoption underscores the region's commitment to leveraging cutting-edge technology to drive economic and social transformation. 5G and the upcoming 5G-A advancements are critical as they offer unprecedented connectivity speeds, drastically reduced latency, and expanded network capacity. These features are vital for supporting emerging technologies such as IoT, AI, naked-eye 3D, and augmented

reality, which are integral to the digital economy's growth.

With the superior speed, low latency, 5G and 5G-A's impacts on consumer experience are evident. We envisage that as the naked-eye 3D, AR/VR devices and contents become more widely available and affordable, there will be a surge in 3D videos and AR/VR gaming traffic. Furthermore, new types of services such as New Calling, which integrates 5G features and can be

used for video calling, real-time translation, and interactive menu functions, will further enhance users' experience and bring additional digital services revenue to the ICT industry.

The impact of 5G and 5G-A extends beyond typical telecommunications sectors, encompassing transportation, education, oil and gas, and government services, etc. For instance, Huawei has been collaborating with a number of industry and ecosystem partners to develop a 5G-enabled smart port. Here, the remote control of cranes and tally systems, Automated Guided Vehicles (AGVs), and intelligent CCTV will make port operations more efficient and safer. In healthcare, 5G facilitates realtime remote telemedicine, significantly enhancing patient care. In education, it enables interactive and immersive learning experiences that were previously impossible. Each of these applications contributes significantly to the broader goals of economic diversification and digital transformation in the GCC.

TT: Huawei has been instrumental in the developments of 5G and 5G-A in the region. What specific strategies has Huawei employed to support the adoption of these technologies?

Steven: Huawei recognises the transformative potential of 5G and 5G-A technologies and is committed to fostering their adoption across the GCC. Our approach is multi-faceted, involving close collaboration with telecom operators and industry partners, significant investments in research and development, and a strong focus on local capacity building. For instance, in 2023 alone, we invested \$23.4

billion in R&D, which is over 23% of our total revenue. This investment fuels innovation and helps us develop and deploy advanced products and tailored solutions that meet the unique needs of the region.

Moreover, Huawei is committed to expanding a comprehensive ecosystem around these technologies, from terminal device communication modules, like redcap and passive IoT, to the cloud platform for hosting AI capability necessary for intelligent analysis. We work closely with players in the public and private sectors to implement a range of solutions, from advanced network infrastructure to industry-specific applications. This ecosystem approach not only enhances network capabilities but also enables a wide array of services and applications that capitalize on the speed and reliability of 5G and 5G-A networks.

TT: As we look to the future, what do you consider to be the most significant



Huawei has been collaborating with a number of industry and ecosystem partners to develop a 5G-enabled smart port. Here, the remote control of cranes and tally systems, Automated Guided Vehicles (AGVs), and intelligent CCTV will make port operations more efficient and safer



technological shifts in the region, and how is Huawei positioning itself with respect to these changes?

Steven: The future of technology in the region is incredibly promising, with several key trends, including AI, big data analytics, and cloud computing, poised to make a substantial impact. Huawei is actively aligning its strategy with these trends to drive further innovation and transformation.

The expansion of 5G and the evolution of 5G-A networks will amplify the proliferation of IoT and smart city applications and require the essential capability of AI and big data for driving innovation in areas like healthcare, public safety, and

essential for local enterprises looking to migrate their operations to the cloud.

Last year, we launched Huawei public cloud services in Saudi Arabia, increasing the number of Huawei Cloud regions to 30. This cloud will not only serve Saudi Arabia's needs for digital transformation but also extend its benefits across the region and

The most transformative shift in the technology sector is undoubtedly the evolution of artificial intelligence (AI), highlighted by advancements in Algenerated creative content (AIGC) and large models. Huawei has been at the forefront of AI research and development cybersecurity threats. Huawei is at the forefront of developing comprehensive security solutions that safeguard critical infrastructure and sensitive data across all

TT: Speaking of cybersecurity, can you elaborate on the strategies Huawei has implemented to address the growing concerns around security in digital networks?

Steven: Absolutely. Cybersecurity is a cornerstone of our digital strategy. Huawei has established a rigorous global cybersecurity and privacy assurance system designed to meet the highest international and local standards. This system encompasses everything from the supply chain to end-user data protection.

We also participate in over 360 industry standards organisations and play a proactive role in shaping global cybersecurity standards. For example, at major industry events like GITEX and GISEC, we showcase our latest cybersecurity innovations, including solutions specifically designed to protect against ransomware and other emerging cyber threats.

Training and capacity building are also critical components of our strategy. Huawei provides extensive training and certification programs through our ICT Academy, equipping professionals across the region with the skills necessary to manage and combat the evolving landscape of cybersecurity threats.

TT: With sustainability being a global priority, how is Huawei assisting countries in the region achieve their environmental and sustainability goals?

Steven: Huawei is deeply committed to supporting sustainable development through our technology and innovations. Through our innovative approaches, Huawei has significantly contributed to the generation of 997.9 billion kWh of green power and the conservation of 46.1 billion kWh of electricity by the end of 2023, effectively cutting CO2 emissions by 495

million tons, the equivalent of planting 68o million trees!

We leverage our expertise in ICT to offer solutions that have a direct positive impact on the environment. For example, Huawei's FusionSolar Smart PV solution has been widely adopted in various countries, optimising power generation and providing reliable green power. These technologies not only optimise power generation but also contribute significantly to reducing the carbon emissions associated with traditional energy sources.

Our efforts are dedicated to building technologies that utilize AI to minimise energy consumption, incorporate intelligent battery solutions, and advanced cooling technologies to reduce environmental impact. We design our ICT infrastructure be it networks, IT products, or data centre infrastructure—with these end-to-end green technologies in mind. Consequently, our 5G and 5G-A networks are engineered to be significantly more energy-efficient than previous generations, playing a crucial

role in reducing the overall energy usage of telecommunications networks. Huawei has already collaborated with a number of leading operators in the region to deploy low-carbon radio sites. Our partner event showcased one Net-Zero 5G site during COP₂8 last year.

TT: Finally, Huawei places a strong emphasis on nurturing local talent. What are the latest developments in Huawei's talent development initiatives in the

Steven: Nurturing local talent is essential for the sustained growth of the digital economy. In 2024, Huawei expanded its talent development initiatives, which include collaborations with global organizations like UNESCO and ITU. These programs focus on providing young people with the skills and opportunities to lead community projects that address critical issues like the digital divide.

Moreover, our partnership with UNESCO's Institute for Lifelong Learning aims

to enhance the digital literacy skills of educators, impacting thousands of teachers and trainers across the region. We also support technological education for women and girls, sponsoring events like the European Girls' Olympiad in Informatics to encourage more female participation in technology fields.

Huawei places great importance on nurturing talent in the region. We firmly believe in enabling each country to achieve its digital vision and ensuring the sustainable growth of its digital economy, which is greatly dependent on the skills and capabilities of its talent. By fostering a culture of continuous learning, innovation, and professional growth, we empower regional talent to reach their full potential. We invest in training and development programs to equip local talents with the necessary tools and knowledge to excel in their roles. During the last decades, Huawei has developed 240 ICT academies and ten Huawei Authorized Learning Partners (HALPs) with education sectors and training Institutions, training 50,000 local ICT

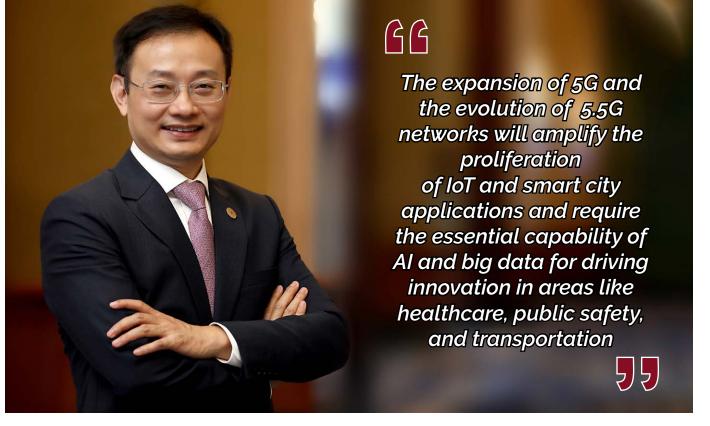
Huawei has established a rigorous global cybersecurity and privacy assurance system designed to meet the highest international and local standards. This system encompasses everything from the supply chain to end-user data protection

transportation. Leveraging our AI and big data capabilities, Huawei will be able to partner with governments and enterprises to implement smart city and e-government solutions. This includes traffic management systems, CCTV-based public security networks, AI-driven health services, autonomous vehicles, Al-managed remote control of heavy machinery in the port, and many more.

In the field of cloud computing, we foresee more investments in expanding cloud infrastructure and local data centres, which are crucial for supporting the digital transformation of businesses. These facilities provide secure, reliable, and compliant cloud services, which are

for many years. To date, Huawei offers comprehensive AI solutions that span from chipsets to hardware platforms and software development frameworks. Aiming to diversify and enrich the ecosystem, Huawei joined the PyTorch Foundation in 2023 and has already collaborated with tens of thousands of developers and partners in developing AI applications and industry solutions. In mid-2023, Huawei unveiled its Pangu 3.0 large model, showcasing our capability to enhance a wide array of businesses and applications with innovative experiences through our full-stack AI and large model integration.

Additionally, as the digital landscape evolves, so does the complexity of









teletimes

Evolving toward Integration, Intelligence & Sustainability in Infrastructure

13th May, 2024





The SAMENA Council Leaders' Summit on May 13th to focus on technology integration in the 5.5G era as well as stakeholder inclusion & sustainable development, to help catalyze digital prosperity across regions

SAMENA Telecommunications Council's Leaders' Summit 2024 is on schedule to be held on May 13th, at Atlantis – The Palm. The annual international industry-leadership meeting is being held under the theme "Evolving toward Integration, Intelligence & Sustainability in Infrastructure", with chief-patronage from the TDRA-UAE, global collaboration with ITU, platinum digital partnership with Mobily, strategic partnerships with Huawei, stc, Zain, and industry development partnership with the World Broadband Association (WBBA). Teletimes International

is the official media partner for Leaders' Summit 2024.

Track-wise flow of the Leaders' Summit encompasses multiple areas of importance to the ICT and non-ICT private sector as well as regional governments: Technology, Infrastructure, and the Digital Environment, Sustainable Digital Transformation, Cyber Resilience, Spectrum Opportunities for the GCC Region, Digital Technology Integration & Sustainable Development, Leading the 5.5G Era, Space & Satellite Ecosystem

Development, Digital Innovation & Choice, Financing Broadband Infrastructure, and One-on-One Fireside Chats with leaders.

The SAMENA Council Leaders' Summit, one of the world's most highly-anticipated annual international meeting of the ICT industry leadership, will bring renowned regional and global private-sector players to also continue discussions from the last edition and from the SAMENA Council's earlier stakeholder roundtables and advocacy messaging done earlier during the current year.

A key partner in creating a legacy of stakeholder collaboration and demonstrating technological enablement via the Leaders' Summit platform, Huawei continues to reaffirm its commitment to multi-stakeholder collaboration and innovation materialized annually through the Summit.

"In our endeavor to create a Connected Intelligent World, Huawei is dedicated to developing industries across the Middle East & Central Asia by leveraging cuttingedge technologies such as 5G-Advanced (5G-A), Cloud, and AI. Our goal to building a future-ready ICT ecosystem that empowers businesses and fosters talent development in the digital sector at its core, is demonstrated by our commitment to innovation and collaboration with international organizations, industry leaders, partners and customers. With a focus on environment and green ICT practices, we thrive to drive industry innovation toward sustainable development, while with 5G-A and Huawei Cloud's "Everything as a Service" strategy, we aim to integrate technology capabilities and Al-ready to pave the way for intelligent infrastructure tailored to each industry to accelerate intelligence and advance enterprises towards the digital economy of tomorrow—all while keeping the principles of digital trust and resilience at the core of our business", said Steven Yi, President of Huawei ME & CA.

As a Member of the Board of SAMENA Council, Mobily joins forces with the Leaders' Summit as platinum innovation partner. Mobily CEO, Eng. Salaman Al Badran expressed: "As an innovationoriented and customer-experience driven, leading operator in the Middle East, Mobily is pleased to be a Platinum Innovation Partner of SAMENA Council's Leaders' Summit 2024. We believe the Summit's theme, "Evolving toward Integration, Intelligence & Sustainability in Infrastructure" is well-aligned with our aspirations in how we see the future of network development, investment planning, and digital experience evolving as a result of our continued focus on



Steven Yi President of Huawei ME & CA



Eng. Salaman Al Badran, CEO, Mobily

integrating latest technologies and methodologies to empower our customers."

The WBBA's Director General, Martin Creaner, who will deliver a special keynote during the Leaders' Summit 2024, and with WBBA being a key industry development partner to the Leaders' Summit, stated: "The broadband industry requires joint efforts from all stakeholders, especially on broadband investment and regulatory approaches, to fulfil the vision of Giga cities around the world."

SAMENA Council invites CxOs and leading innovators and thought-leaders to share expressions of interest to participate in order to receive formal invitation from the Council to attend. Leaders' Summit 2024 is a by-invitation-only industry forum, available to leaders driving change in digital



Bocar A. BA, CEO & Board Member, SAMENA Council



Martin Creaner, Director General WBBA

development, innovation, sustainability initiatives, digital infrastructure development, and fulfillment of SDGs within and beyond the SA-ME-NA region.

Bocar A. BA, CEO & Board Member, SAMENA Council, welcoming the Industry's leaders to join the annual congregation, expressed: "The SAMENA Council Leaders' Summit 2024 is a part of a series of continued efforts by the Council, to help catalyze regionwide digital prosperity, stakeholder inclusion across a spectrum of areas requiring productive dialogue, and keeping sustainability needs of our region, its people, and the Industry under our watch, as digital infrastructure and technologies evolve; as paradigms transform; and as our objectives become much more human-centric as they ought to be."

stc Group joins 'KSA Sustainability Champions'



stc Group has reinforced its position as a leader in sustainability by joining the inaugural edition of the 'KSA Sustainability Champions' program, launched by the Ministry of Economy and Planning at the World Economic Forum Special Meeting on Global Collaboration, Growth and Energy for Development in Riyadh.

The program is a knowledge transfer and partnership initiative that has identified the top performing Saudi companies in corporate sustainability. stc Group has joined 23 other champions which have been shortlisted from seven sectors, reflecting the continuous efforts by stc Group to focus on sustainability within its operations.

At the World Economic Forum Special Meeting in Riyadh, Olayan Al Wetaid, CEO of stc Group, signed a pledge that commits the Group to become net-zero by 2060 or earlier, supporting three or more companies in their sustainability transformation, and to improving sustainability performance and reporting across the Group.

stc Group has committed to integrating



sustainability in all its operations by adopting new technologies and solutions that help reduce its environmental footprint and boost operational efficiency. By adopting these policies, stc Group will be able to achieve its corporate objectives, support national and global sustainable development goals, and contribute to

Moreover, stc Group utilizes state-ofthe-art technologies and solutions to bolster the principles of sustainability and provide a healthier environment for next generations. In 2023, the Group won Forbes Middle East Sustainability Leaders Award in recognition of its efforts to reduce carbon emissions and promote sustainable practices.



"Evolving toward Integration, Intelligence & Sustainability in Infrastructure"

Bocar A. BA, CEO of SAMENA Telecommunications Council, sheds light on the council's role in an ever-evolving telecom regulatory landscape during an exclusive interview with Teletimes International

Teletimes: Given its multifaceted role within the Industry, what were some key impact areas led by SAMENA Council last year and what is your focus in the current

Bocar A. BA: During 2023, SAMENA Council's focus was on building stakeholder support, advocating regulatory transformation, correlating societal welfare with secure digital space, corroborating the necessity of high-capacity fixed networks, supporting 5G evolution for crossindustry development, bringing Mobility/ Transportation sector stakeholders together with ICT sector stakeholders, advocating sustainability imperatives, and leading a way forward on an innovative framework to finance and fund future digital infrastructure.

As you are aware, SAMENA Council is representing the Private Sector at the UN Member-State level and is at the center of information and experience exchange necessary for materializing digital transformation for the Industry as well as the economy of the region. In this role, in the current year, SAMENA Council is continuing to engage with regional and global bodies to help enhance national policy and regulatory capacities, while supporting general enablement and facilitation for the digital ecosystem.

The Council believes that the digital ecosystem needs to be made sustainable and thus attention is required to allow for end-user choice, fair competition in the digital services platforms that are boosting the digital economy, and strengthening ways to accelerate innovation and

entrepreneurship. Our RISE Roundtable in Riyadh in March this year, focusing specifically on these areas, is now being followed by Leaders' Summit 2024 in Dubai, which focuses on technology integration, intelligence and sustainability in the infrastructure. Soon thereafter, we will conduct an advocacy exercise in Riyadh through another conference toward end of May 2024 to assist in accelerating transition in Saudi Arabia toward 10 Gigabit network development, building onto the discussions we initiated with SAMENA Council Members last year.

TT: Teletimes notes SAMENA Council's seemingly sudden focus on FWA. What are your objectives in this regard?

BA: It may appear to be a "sudden" focus, but let us recall that, since 2018, SAMENA

The Council believes that the digital ecosystem needs to be made sustainable and thus attention is required to allow for end-user choice, fair competition in the digital services platforms that are boosting the digital economy, and strengthening ways to accelerate innovation and entrepreneurship.

importance in our region.

Council has actively voiced and provided the platform for demonstrating 5G policy imperatives, new use-cases, and new possibilities that 5G could bring to the business, to the industries, and to the end-

Our focus on Fixed Wireless Access (that is FWA) is simply to help draw the Industry's focus on monetizing 5G investments. 5G has catalyzed positive impact on new planning and developmental fronts, cross-industry co-operation, policy and regulation upgradation, and has provided the SA-ME-NA region's stakeholders visibility on what to expect and prepare for in the new Digital Age. Thus, 5G serves as a new foundation, and FWA is a very useful case, among various others, to effectively utilize 5G investments. By 2030, the FWA market space could exceed US \$150 billion, for instance. This, in strong ways, shows that 5G FWA is an area of interest around the world due to its excellent experienceenhancing prospects, fast time to market, and low initial cost.

Moreover, SAMENA Council views that major industry use-cases of FWA include education, healthcare, agriculture, transportation, public safety, manufacturing, retail, environmental management, and IoT ecosystem, among others. Notably, all these areas are of

unconnected through FWA.

So, that's the rationale for setting this technology area among our priorities.

TT: What do you view to be areas of immediate importance for policymakers and regulators for fostering development of the Industry and various digital ecosystems?

BA: Given that we all need to strive to digitally transform reginal markets and contribute to achieving a collective set of milestones we call the "SDGs", SAMENA Council observes that the region's policymakers and regulators need to drive greater impact and value from their existing digital transformation efforts and new initiatives. This can be achieved by promoting an open and competitive digital

Thanks to innovations introduced by leading technology provider Members of SAMENA Council, which are playing a highly active role in the manifestation and evolution of the 5G ecosystem, in the emerging markets and as an affordable high-speed home broadband access solution, FWA is making it possible for Operators to quickly recover investment costs. In more developed digital economies within the SA-ME-NA region, particularly in the greater GCC region, FWA can make a noticeable difference in Operators revenue growth as well, and I personally believe that we can also make real progress in connected the



On another global front, SAMENA Council is now fully active in the Digital Innovation Board, which has been established by the ITU's Innovation and Entrepreneurship Alliance for Digital Development.

environment, where pro-competition policies are adopted; where users have greater choice in digital services and platforms; and where multi-stakeholder dialogue and engagement efforts are carried out on a sustainable basis. To this effect, SAMENA Council specially appreciates the continued efforts of TDRA-UAE and CST Commission of Saudi Arabia for being always ready to enable and tangibly support industry-wide dialogue.

Furthermore, SAMENA Council feels that some other areas for policymakers and regulators to consider are proactively streamlining procedures for infrastructure development and faster service provisioning; prioritized consideration of needs of Telecom Operators, especially those that have made significant infrastructure investments and have played a visible role in uplifting digital experience of end-users and have demonstrated regulatory compliance; incentivize cybersecurity; empower new e-commerce and digital-economy boosting digital services and platforms; encourage the adoption of green technologies and practices to reduce energy consumption and carbon emissions; and promote ethical guidelines and standards for the development and deployment of digital technologies.

The digital environment will soon become even more complex, and we need all these areas placed under our observation and facilitation at the highest stakeholder level possible. This is one key reason for the

Council to conduct its industry meetings and advocacy work.

TT: Are they are any global-level initiatives that SAMENA Council is a part

BA: SAMENA Council is a key collaborator in building a comprehensive financing framework for building broadband infrastructure around the globe, especially for underserved or totally unconnected regions and communities. What started out as report on recommendations for expanding the base of contributors, steered by the UN Broadband Commission's working group on 21st century broadband financing and funding models and chaired by SAMENA Council, has now taken on a shape of an implementable set of strategies agreed upon by a diverse group of stakeholders including the ICT Industry, Telecom Operators, investors, regulators, and development banks. Moreover, the framework has already found pilot implementation prospects in some countries of Africa. Extension of this framework's application from pilot projects in those countries is now anticipated in the ASEAN region as well.

This is a major milestone on the financial front that the Council has been privileged to lead and support, and it is expected to reduce financial burdens on our Operator Members, while unlocking access to new capital and making a direct difference in provisioning broadband connectivity

across regions.

On another global front, SAMENA Council is now fully active in the Digital Innovation Board, which has been established by the ITU's Innovation and Entrepreneurship Alliance for Digital Development. I am privileged to represent SAMENA Council in this board to provide strategic guidance and to advocate building critical local enablers and fostering innovation and entrepreneurship in digital development, with the larger goal of ensuring digital inclusion and creating an equitable future.

TT: What new regional-level collaborations has SAMENA Council embarked on in the larger interest of the Industry and the region?

BA: Our most recent collaborative undertaking has been initiated with the United Nations Development Programme (UNDP), to address key sustainable development challenges in the Arab region. Through this collaboration, both organizations are promoting digital inclusion, advocating enablement and fulfillment of sustainable development goals, and enhancing new connectivity and digitalization initiatives in the Arab region.

The primary focus of this regionallevel initiative is to support "Digital for Sustainable Development" in ensuring accessibility of digital connectivity and technologies by all; and to leverage digital technologies to improve access to education, healthcare, essential services, and foster digital innovation, which should be carried over across the neighboring

We also foresee making progress on green ICT development – which adds to SAMENA Council's continued messaging on the sustainability front over the last two years for reduction of carbon emissions, and engaging with governments, businesses, civil society, and other stakeholders. SAMENA Council's leadership congregation platforms, such as the annual Leaders' Summit, are some of the means utilized by the Council for the



We also foresee making progress on green ICT development - which adds to SAMENA Council's continued messaging on the sustainability front over the last two years for reduction of carbon emissions.

purpose of fostering such regional-level engagement with private and government sector stakeholders.

TT: About the Leaders' Summit, which we consider to be one of the most important

ICT stakeholders' meetings in the world, what is on the agenda this year?

BA: SAMENA Council's Leaders' Summit, for well over a decade, has positioned issues, private-sector players, and

leaders in ways that should support us all, collectively, and to foster predictability, sensibility, and sustainability in the Industry. With this legacy aim in mind, the 2024 edition of the SAMENA Council Leaders' Summit will delve into "Evolving toward Integration, Intelligence & Sustainability in Infrastructure". Under this theme, the annual, international industryleadership meeting will bring renowned regional and global private-sector players to discuss how we can thrive in the 5.5G Era, build cyber resilience in the telecom networks and business, benefit from post-WRC-23 spectrum opportunities, conduct sustainable digital transformation, and discuss new roles and opportunities in the space & satellite ecosystem.

Teletimes and your audience would appreciate knowing that, in the environs we operate in, sustained multi-stakeholder dialogue and priority alignment among leaders and drivers of change, are a constant need. The SAMENA Council Leaders' Summit serves to fulfill this need. This year, the SAMENA Council Leaders' Summit 2024 will be held on May 13th with chief-patronage of the TDRA-UAE, global collaboration of the ITU, platinum innovation partnership provided by Mobily, and strategic industry development partnership of Huawei, stc, Zain, and the World Broadband Association.

TT: Given your multiple roles within the Industry, what are your final thoughts?

BA: I feel, it is essential to remain mindful of advancements and innovations under play in relation to the regional digital transformation trends. The digital ecosystem needs to be made sustainable and thus attention is required to allow for end-user choice, fair competition in the digital services platforms, and in strengthening ways to accelerate innovation and entrepreneurship. The SAMENA Council platforms are ever ready to provide the necessary foundation and support to make progress on these and other areas, important for the Industry, for its leaders, and for the society, at large.



UNOOSA publishes Intersputnik report on activities relating to space law



Intersputnik, as an international organization, pursues the underlying principles of open and mutually beneficial cooperation, and supports the initiatives of the UN, ITU and other intergovernmental entities seeking to use space technologies to improve the quality of life on Earth.

Today, no human activity, including agriculture, construction, healthcare, education, natural assets management, finance, transportation and others, can advance without using satellite services.

Building a safe and sustainable space environment, optimal use of near-Earth space and any space resources, as well as equal and non-discriminatory access to outer space are the key factors driving the further harmonious development of the humanity.

This cannot be achieved without adopting and complying with international rules of peaceful use of outer space.

The main international forum to address and discuss legal matters related to the exploration and use of outer space is the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS), in whose activities Intersputnik takes part as a

permanent observer.

The activities of international intergovernmental and non-governmental organisations relating to space law are annually addressed by the Legal Subcommittee of COPUOS under an individual agenda item.

The results of Intersputnik's work in the field of space law in 2023 are described in its

annual report on activities relating to space law presented at the 63rd session of the Legal Subcommittee of COPUOS.

Intersputnik report was published on the website of the United Nations Office for Outer Space Affairs (UNOOSA), acting as the secretariat of COPUOS, and shows Intersputnik's commitment to promoting the development and improvement of international regulation of space activities.





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Huawei Cloud demonstrates Web3 innovations in Dubai

Huawei Cloud actively participated in several key Web3 events in Dubai as part of TOKEN2049 week, showcasing its cuttingedge cloud solutions and collaborating with industry partners to drive Web3 innovation across various domains, from infrastructure to the metaverse. During the events, Huawei Cloud engaged in meaningful discussions with industry leaders on ZK rollups, node hosting, and security.

TOKEN2049 is a global conference series where decision-makers in the crypto ecosystem connect to exchange ideas, network, and shape the industry. The Dubai chapter of the series was held between April 15-21, 2024, featuring a wide range of co-located events, meetups, workshops, networking events and hackathons.

On April 16, Huawei Cloud joined the Web3 Summit, a co-located event that brought together experts, scholars, and entrepreneurs from around the world in the Web3 field to explore the latest advancements in Web3 technology, including blockchain, decentralized finance, smart contracts, and more.

Dr. Li Huaxi, Director of Web3 Product at Huawei Cloud, described crypto-native technology as the core of the nextgeneration Internet, highlighting the importance of blockchain and its role in the future of the Internet. "When users submit transaction requests on the blockchain, they pay the node operator a fee for occupying a block space. To encourage operators to maintain stable network operation, they also receive corresponding block rewards from the blockchain protocol," he explained.

At the Token2049 Gate.io Exclusive Night VC & Web3 Ecosystem Party on April 19, Cui Lei, General Manager of Huawei Cloud Web3, shared Huawei Cloud's Web3 technology innovations and industry practices. "Huawei Cloud continuously builds innovative Web3





Dr. Li Huaxi, Director of Web3 Product at Huawei Cloud, delivering a speech

solutions, such as the NES solution, ranked No. 1 on Holesky, and the ZK hardware acceleration solution for cost-effective ZK-proof generation. Huawei Cloud is committed to the Middle East market and works closely with Web3 customers and partners to achieve business success," he

During the Web 3.0 Open - Meta Era Reunion on April 20, Dr. Xue Tengfei, Web3 Technical Planning Expert at Huawei Cloud, discussed the crucial role of zero-knowledge proofs in maintaining the development of the decentralized world computer, which forms the infrastructure of Web3. He noted that Moore's Law, a key factor in computer systems, will have a decisive impact on the industry's future development if effectively



Dr. Xue Tengfei, Web3 Technical Planning Expert at Huawei Cloud, delivering a speech

utilized within the Web 3.0 infrastructure. "Huawei Cloud will provide cloud instances and serverless services to accelerate the generation of ZKP," he added.

Over the past decade, Huawei has invested more than \$150 billion in research and development, demonstrating its commitment to advancing technologies and providing innovative solutions to customers. With a region in Saudi Arabia, Huawei Cloud collaborates with local carriers to deliver top-notch service and experience. As a close partner to Web3 customers in the Middle East, Huawei Cloud continues to drive the growth and development of the Web3 ecosystem in the region and beyond through collaboration with industry partners and participation in key



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e& UAE unveils multifaceted blueprint for Al strategic application in telco sector and beyond

e& UAE released a new whitepaper, offering a blueprint for navigating the future of telecommunications with artificial intelligence (AI). Titled "Unleashing the Power of AI: How e& UAE is Shaping the Future of AI in Telecommunications and Beyond" it offers an in-depth exploration of e& UAE's journey towards becoming an Al-driven organisation, significantly contributing to the nation's digital future. The whitepaper explores e& UAE's strategic integration of more than 400 Al use cases and 160 machine learning (ML) models across its operations.

Dena Almansoori, Group Chief Al and Data Officer, e&, said: "This whitepaper demonstrates the thoughtful approach, guiding principles, and remarkable AI achievements within e& UAE over the years. Whether adopting AI to improve customer experiences, optimise operations, scale productivity, or reduce costs, we cannot underscore enough the significant impact AI has on the telecommunications sector and beyond."

The comprehensive document provides a meticulous overview of how Al is ushering in a new era in which telecom players like e& UAE transcend their traditional role as connectivity providers to become architects of complete digital experiences. It offers a unique behind-the-scenes look at e& UAE's proactive AI and data-driven adoption, including key enablers, use cases, and ethics. It also provides practical guidance and best practices for businesses initiating their Al journeys.

Khalid Murshed, Chief Technology and Information Officer, e& UAE, said: "We're well-versed in the advantages AI can bring to telcos, and our whitepaper leaves no stone unturned in showcasing how we leverage it to deliver more sustainable, efficient, and innovative operations."

AI in action

As of 2024, e& UAE has accelerated its AI deployment to drive sustainability in resource allocation and energy efficiency and has developed AI processes for network optimisation.

The company's strategic Al implementations provided the telco with insights to identify improvement areas, significantly lowering operational costs. By creating a dedicated Robotic Process Automation (RPA) team and establishing a Robotics Centre of Excellence (CoE), the company successfully implemented RPA solutions across departments, streamlining tasks and reducing manual work.



e& UAE also revamped its approach to sales and marketing by leveraging AI. Whether launching the first AI-powered telecom store in the world or deploying Al-driven recommendations, e& UAE ensures every customer enjoys a seamless and personalised

With more than 160 machine learning models deployed in various functions, the telco addressed challenges such as fraud. By seamlessly integrating AI and ML solutions into its Customer Value Management (CVM) models and adopting innovations such as facial recognition, voice biometrics, and Optical Character Recognition (OCR), e& UAE ensured customer convenience and protection.

e&'s application of AI and ML extends far beyond its telco vertical, permeating all business pillars, including its enterprise arm, which offers Al-as-a-Service solutions.

The company has also implemented pioneering programmes to upskill its workforce and launched initiatives such as the AI Graduate Programme in 2021, underscoring its holistic approach to Al progress and commitment to ensuring its employees are equipped with the skills needed for the digital future.

Responsible AI transformation

e& UAE's whitepaper showcases the company's commitment to responsible AI deployment and supporting the UAE's visionary goal of becoming a global AI leader by 2031.

Prioritising ethical AI deployment and focusing on fairness and transparency, e& UAE has implemented responsible practices to mitigate potential risks and ensure the group's position as a trusted leader in the AI revolution.

"While this whitepaper marks a pivotal chapter in our journey with AI so far, continuing to build and deploy AI responsibly will be paramount as we navigate the everevolving digital landscape," said Almansoori.



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CABSAT 2024 to highlight new advancements in media and satellite technology with Content Congress and **SATExpo Summit**

CABSAT 2024, the Middle East's flagship event for content, broadcast, satellite, media, and entertainment, is set to provide participants with the opportunity to learn about the latest developments in global media, entertainment, and technology industries, especially over the course of this year's Content Congress and SATExpo sessions. The latest edition of CABSAT will highlight all the newest advancements in media and satellite technology, starting from May 21 to 23, 2024, at the Dubai World Trade Centre.

With the content creation and distribution landscape evolving regularly, the Content Congress at CABSAT 2024 will provide a space for digital innovators, industry leaders, and content creators to discuss new trends, opportunities, and challenges. The Content Congress will explore key industry trends, including the emergence of OTT content consumption, in light of the projection that 44.9 percent of global internet users will engage with OTT content in 2024.[i] In addition, they will look at the increasing demand for immersive media experiences, content monetisation strategies, and the future of broadcasting through interactive panel discussions, keynote addresses, and interactive workshops.

The platform will also offer a great opportunity to network with prominent members of the international media community, as well as hear from industry experts about their knowledge and expertise, laying the groundwork for future partnerships, collaborations, and business opportunities. The two-day program will

address significant topics through several sessions, such as 'What AI could mean for the Middle East Media Industry," Who is More Original: Human vs. AI,' and 'The Arab Box Office' among others.

Likewise, hands-on discussions about social and environmental responsibility in the media industry will enable visitors to broaden their perspectives and gain insights into ethical business practices. These additional benefits ensure a more personalised and immersive experience,





allowing attendees to engage in meaningful discussions, build new relationships, and increase the visibility of the industry.

Manoj Abraham Mathew, Director – Studios & Events at Dubai Media, stated, "I am delighted to take part in CABSAT 2024, where innovation and collaboration come together. This event provides an influential forum for innovators, content creators, and distributors to examine the

newest developments in technology, and trends that will impact the media and entertainment industry going forward. I look forward to connecting with industry leaders and sharing my vision for the content landscape at this year's CABSAT, which we believe will be truly transformative."

Meanwhile, SATExpo summit will serve as a hub for satellite technology enthusiasts, telecommunications experts, and satellite

service providers to showcase cuttingedge solutions and discuss the most recent advances in satellite communications. SATExpo is designed to showcase groundbreaking innovations aimed at improving connectivity, extending coverage, and closing the digital divide, ranging from highthroughput satellites to next-generation launch technologies.

For the past decade, SATExpo has been a driving force in the satellite and space communities, facilitating strategic partnerships and meaningful conversations. The conference will offer attendees in-depth knowledge of topics such as commercial/enterprise connectivity services, government and military services, ground systems and hardware, space data, and more. This year, leading industry experts and executives will be present at SATExpo to facilitate discussions on the global launch and manufacturing markets, future trends and trajectories, and business strategies of the leading companies.

The executive discussion will shed light on key areas like end-user markets, emerging technology, financial insights, technical content, and regional focus. The conference is of great significance to stakeholders, especially as the Middle East Satellite Communications Market is expected to grow from its estimated US \$3.35 billion in 2024 to US \$4.79 billion by 2029, with a compound annual growth rate (CAGR) of 7.40 percent from 2024 to 2029 [ii].

In addition, various trends and

developments will be covered through several sessions, such as 'Satellite and HAPS: Transformational Technology Disruption, Service Resilience, 'Into the Blue: Flying and Sailing with Satcoms,' and 'Turning Constellations into Networks – A New Connectivity Architecture for the Middle East Region' among others.

"In addition to serving as a key forum for stakeholders and industry leaders to convene, CABSAT has been instrumental in providing us with the opportunity to learn about the latest developments and trends in the media and satellite technology domains. We firmly believe that this year's conference will open doors to innovations and foster strategic partnerships that will completely transform the sector. On top of that, platforms such as CABSAT will certainly accelerate the industry's transition to a new era of transformation and expedite the adoption of current market trends," Sanjay Raina, Global Media and Entertainment Executive, commented.

The SATExpo summit this year will also cover how they can and should responsibly use space exploration to support futureproof life on Earth. This is in light of the satellite industry's significant and long-term impact on our future, offering services that can help them monitor the planet effectively and purposefully.

CABSAT 2024 will be an influential platform for stakeholders, cementing its position as the region's largest gathering for the media, broadcast, and satellite industries. This will be reinforced by conversations and debates about the media industry's social and environmental responsibility, innovative developments in the satellite industry, and other global innovations that will influence the industry's future.

CABSAT marks its 30th anniversary with return of prestigious MENA **Co-Production Salon**

CABSAT celebrates its 30th anniversary by continuing its partnership with HConsult, a leading content market specialist in the

teletimes





Arabic-speaking MENA region, to host MENA Co-Production Salon. The exclusive gathering, scheduled from May 21 to 23, 2024, at the Dubai World Trade Centre, is poised to elevate the collaborative spirit that has long been a hallmark of the annual event.

The Co-Production Salon, which is located within a specially designed VIP lounge near the Content Congress area, is an exclusive, invitation-only lounge that assembles the region's most prestigious production houses, OTT platforms, TV networks, content investors, and brand representatives. It serves as a vital platform for exploring co-production and investment opportunities, aimed at creating internationally viable TV and film content.

2023: A Retrospective Look

Last year's Co-Production Salon was highly sought-after edition, with more than 250 companies applying for entry. However, due to stringent participation criteria and the intimate nature of the event, only about a quarter of applicants were admitted. The attendees had the opportunity to participate in an average of 15 high quality meetings each, resulting in numerous collaborative investment deals in content production both within and outside the MENA region.

Heba Korayem, Content Market and Partnerships Specialist at Hoonsult and MENA Co-Production Salon's host, said:



"There are huge things happening in this seemingly compact space. We have tracked US \$8 million in content investment through partnership deals directly resulting from the meetings conducted at the Co-Production Salon in CABSAT. Furthermore, several new deals are still unfolding, but for now, these are the deals we were authorised

Stressing on the importance of CABSAT to the media industry, she added: "The best part about consistently having the Co-Production Salon at CABSAT, is the diverse mix of companies it attracts. It serves as an ideal one-stop-shop for our participants, producers and broadcasters When they attend Co-Production Salon, they stick around because they could also find everything they need, from new technologies to cameras and filming equipment, to broadcast support for their

Elena Brodskaia. Head of International Content Strategy at the MENA region's first Entertainment super App 'Yango', underscores her experience from the previous year, which was held just months prior to the app's remarkable launch in the MENA region. This highlights the success and impact of the Co-Production Salon at CABSAT.

Elena said: "We participated in Coproduction Salon at CABSAT 2023 at the onset of 'Yango' Play's development and it offered a unique opportunity to connect with numerous leading production houses of the region all in one place. The panel discussions on Ramadan shows and the insightful analytics presented by HConsult were also very useful and

it helped us in shaping our content strategy for the app's launch."



Integrate Middle East 2024 to optimise Digital Signage Systems, a major factor of growth in Pro AV market

Integrate Middle East 2024, the only professional audio-visual (Pro AV) and media technology exhibition, to optimise the digital signage systems which are the major factors driving the Pro AV market's growth in the Middle East and North Africa (MENA) region. This second edition of the exhibition, which will be held from May 21 to 23, 2024, at the Dubai World Trade Centre, will be co-located with the CABSAT, 30th anniversary of the long-running trade event for the media industry sector.

According to the Data Bridge Market Research*, the global Pro AV market was valued at US \$3.2 billion in 2021. The market is projected to grow at a compound annual growth rate (CAGR) of 12 percent to reach US \$7.92 billion by 2029. One of the key drivers of this growth forecast in this market is the rapid expansion of digital signage systems, a digital installation that displays video or multimedia content for informational or advertising reasons.

Furthermore, the market for digital signage in the Middle East and Africa (MEA) region is also surging and accounts for more than three percent of revenue share **.

Janne lee, Marketing Director of Shenzhen iDisplay Technology Co. Ltd. stated, "We look forward to participating at the second edition of Integrate Middle East as we will be launching our new product, CrystalFlex LED Flexible Transparent Film Display, a 360-degree curve screen. We expect to witness more interactive learning zones, state-of-the-art digital art installations, and the launch of various cutting-edge products and services. Additionally, we are excited to showcase our array of cuttingedge technologies that hold the immense potential to transform the digital signage

Digital signage has become an integral



part of the Pro AV market. By combining digital signage and AV technologies, brands are offered the ability to deliver dynamic content with captivating graphics and interactive features, going beyond static displays. Digital signage and audiovisual technology work together to produce a powerful medium that allows companies to narrate their stories using compelling and impactful visuals.

In its second edition, Integrate ME will offer valuable networking opportunities as well as feature numerous educational seminars and workshops to emphasise the growing popularity of interactive digital signage systems. These seminars are expected to help participants forge new partnerships and provide insightful knowledge to help their businesses grow in the rapidly evolving digital signage market, all while enhancing customer experiences and fostering innovation.

Jassim N P, Director of Unilumin Group Middle East and Africa, commented: "We are thrilled to announce our participation in the second edition of the Integrate Middle East, which is expected

to revolutionise digital signage in the region. Unilumin LED signage offers exceptional visual experiences in a variety of indoor and outdoor applications for retail, hospitality, entertainment, stadiums, playgrounds, corporate, banking, healthcare, education, and transport facilities, ranging from exciting concerts and sporting events to missioncritical control rooms and ever-changing outdoor environments."

It is anticipated that this year's edition of the Integrate ME will set the standard for innovation in the Pro AV space by showcasing cutting-edge concepts and solutions from industry experts across the world as well as providing insights into market trends and best practices. Throughout the Integrate ME 2024, visitors will be offered opportunities to explore innovative products and solutions for digital signage, command and control rooms, live events, and smart buildings from global Pro AV technology companies.

- * Pro AV (Audio-Visual) Market to Observe Prominent Growth of (globenewswire.com)
- ** Digital Signage Market Size & Dig



In today's digitally connected world, businesses rely on robust communication networks to drive efficiency, productivity, and growth. The SpaceBridge ESTELLA™ VSAT Platform is the first VSAT platform that combines both dynamic SCPC and MF-TDMA and stands at the forefront of New Space for satellite communication technology, offering a comprehensive suite of features designed to meet the diverse needs of modern enterprises. From advanced modulation schemes to intelligent network management capabilities, ESTELLA™ has emerged as the most powerful platform that allows businesses to unlock new opportunities, achieve unparalleled connectivity and significantly reduce the return channel OpEx (up to 300%), all at the same time.

Industry-Leading Performance: The foundation of the ESTELLA[™] platform lies in the fully developed DVB-RCS2 (Second Generation Return Channel via Satellite)

technology, an Open Standard known for its evolutionary benefits in two-way interactive satellite networks. SpaceBridge has elevated this technology to the revolutionary level, surpassing DVB-RCS2 capabilities in many aspects. With support for a wide range of modulation schemes, including RCS2 QPSK, 8PSK, and 16QAM, SpaceBridge innovation with ESTELLA™ increases scope to introduce SS-BPSK, BPSK, 32PSK, and 64QAM and many new MODCODs, providing exceptional

support across many applications, from military operations to IIoT connectivity and broadband internet. Its adaptive nature ensures optimal performance across various scenarios, maximizing the utilization of satellite power and capacity then it is

Flexible Modulation Schemes: The platform supports a range of modulation schemes, allowing users to tailor their connectivity



solutions to meet specific requirements. Whether it's Very Low SNR (VL-SNR) Frequency Hopping Spread Spectrum for military applications or High Es/No applications for cellular backhaul, ESTELLA™ delivers exceptional performance across a wide range of use cases.

ESTELLA's strength lies in its flexibility and ability to assess the user terminals requests, perform the instant virtual Link Budget for entire population every frame and maximize the throughput for all UT by optimizing the satellite power and bandwidth ratio.

Efficient Data Transmission: ESTELLA™ incorporates advanced FEC technology and customizable block sizes to ensure efficient data transmission. By minimizing overhead and optimizing throughput, the platform maximizes network end-to-end efficiency to be at 97-99% and delivers an improved user experience. Whether it's small IoT packets or large broadband streams, ESTELLA™ increases the use of available bandwidth, ensuring seamless connectivity for users.

Seamless Connectivity: With WaveSwitch™, ESTELLA™ introduces patent pending dynamic SCPC-like carrier switching capabilities, ensuring uninterrupted connectivity for remote terminals. Whether it's MF-TDMA or BM-FDMA of WaveSwitch™ ESTELLA™ seamlessly adapts to changing network conditions, providing stable latency and low jitter, crucial for many jitter-intolerant applications. This seamless switching capability minimizes disruptions and ensures consistent high reliability (>99.999%), high throughput connectivity, even in challenging environments.

ESTELLA™ has emerged as the most powerful platform that allows businesses to unlock new opportunities, achieve unparalleled connectivity and significantly reduce the return channel OpEx (up to 300%), all at the same time.

 $\Xi S T \Xi L L \Lambda$ Broadband Internet Rural cellular Private enterprise Service Provider backhaul networks **USERS** SCADA Military and paramilitary

Whether it's small IoT packets or large broadband streams, ESTELLA™ optimizes the use of available bandwidth, ensuring seamless connectivity for users.

Intelligent Network Management:

ESTELLA's Network Control Center (NCC) powered by an intelligent engine, which constantly optimizes power and bandwidth utilization for the entire user terminals population. Through these smart and fast decision-making algorithms, ESTELLA™ maximizes efficiency and ensures consistent performance across the entire single beam, or multi-beam network. This intelligent

network management capability minimizes downtime and enhances platform's overall Mbps/Hz efficiency, enabling businesses to stay connected and competitive, increasing their ROI and significantly decreasing time for the investment pay-back break-even point, that makes any business case close much faster.

Future-Proof Design: Designed to support legacy satellites and upcoming Software Defined Satellite Networks (SDSN), ESTELLA™ offers unmatched deployment flexibility. Its ability to dynamically allocate resources and adjust beam capacity makes it ideally suited for evolving network requirements, ensuring long-term scalability and adaptability. Whether it's supporting legacy infrastructure or embracing future technologies, ESTELLA™ provides businesses with the flexibility they need to thrive in a rapidly evolving satellite two-way communications NewSpace.



Unrivaled Performance: From IIoT applications to high-bandwidth SCPC-like connections, ESTELLA™ delivers unmatched performance on a single platform. Its ability to dynamically allocate resources and adapt to changing demands ensures that businesses stay connected and productive, regardless of the scale or complexity of their operations. With ESTELLA™, enterprises can achieve optimal connectivity, unlocking new opportunities for growth and innovation.

Driving Innovation: SpaceBridge is committed to driving innovation in satellite communication technology. With ESTELLA™, businesses can harness the power of satellite connectivity like never before, transforming the way they operate and stay connected in today's digital world. By continuously pushing the boundaries of technology and innovation, SpaceBridge ensures that ESTELLA™ remains at the forefront of satellite communication solutions, empowering businesses to achieve their goals and stay ahead of the competition.

Key Use Cases:

Broadband ISP: Provides essential broadband Internet services over satellite. ESTELLA™ scales to thousands of remotes, supporting oversubscribed services while providing essential user experience enhancements such as IPTCP acceleration over satellite.

Rural Cellular Backhaul: In the new age of data centric and high priority cellular backhaul services, ESTELLA™ provides mobile operators the opportunity to deploy right sized networks tailored to their networking needs. High level of bandwidth sharing, QOS enforcement, and bandwidth



efficient FWD/Return link, and cellular traffic optimization are key features in this important market.

Private Enterprise Networks: TDM/ TDMA networks have long been favored by enterprise or commercial networks with large or medium number of remotes (gas stations, bank branches, insurance offices, POS, school internet services, highway speeding monitoring systems). ESTELLA™ provides efficient network utilization while offering ability to support encrypted and highly secure traffic across the networks.

IoT and SCADA: Intermittent or low usage traffic demands are often required in

obscure and distant locations. ESTELLA™ cost effective, low residual bandwidth and low power requirements provide a comprehensive solution to address this

> Military and paramilitary: Whether it is emergency response services, or military needs such as naval services or COTP/COTM, ESTELLA™ provides essential on-demand bandwidth and support for mobility, beam hopping and other services to ensure connectivity everywhere and all the time.

Transform Your Business

Discover the future of satellite communication with SpaceBridge ESTELLA™ VSAT Platform. Unlock new opportunities, streamline operations, increase capacity and reduce cost at the same time and drive growth with the most advanced VSAT platform on the market. Contact SpaceBridge today to learn more about how ESTELLA™ can transform your business and propel you towards success in

Mansoor bin Mohammed inaugurates GISEC Global 2024

Middle East and Africa's largest cybersecurity event opens with record 50 percent year-on-year growth in exhibitor numbers in its 13th edition

Experts from more than 130 countries gather for the event, which is being held under the theme 'AI-driven cyber resilience'



His Highness Sheikh Mansoor bin Mohammed bin Rashid Al Maktoum. Chairman of the Dubai Ports and Borders Security Council, inaugurated GISEC Global 2024, the Middle East and Africa's largest and most impactful cybersecurity event.

Running for three days at the Dubai World Trade Centre (DWTC), GISEC Global's 13th edition featured more than 750 exhibiting brands – a 50 percent increase over the previous year – as more than 20,000 cyber professionals from 130-plus countries gathered to combat digital threats in a Gulf

Cooperation Council cybersecurity market that, according to analysts Frost & Sullivan, would triple in value by 2030 to reach \$13.4 billion.

The three-day powerhouse showcase, organized by DWTC, and hosted by the UAE Cybersecurity Council, featured returning headline players and tech titans Huawei, Honeywell, du, Microsoft, and Google Cloud Security, alongside groundbreaking cybersecurity companies such as Spire Solutions, Pentera, Cloudflare, and Kaspersky.

More than 350 expert speakers and Chief Information Security Officers (CISOs), alongside 1,000-plus ethical hackers, also convened under the show's 'Al-driven cyberresilience' theme to detangle and demystify the rising global threats of the dark cybercriminal underworld, as they delivered 300-plus hours of immersive content across nine conference and workshop stages.

His Excellency Dr. Mohamed Al-Kuwaiti, Head of the UAE Cybersecurity Council, emphasized the importance of fostering collaboration to develop a more cyber-

Its ability to dynamically allocate resources and adjust beam capacity makes it ideally suited for evolving network requirements, ensuring long-term scalability and adaptability.





resilient society amid the new era of cyberthreats. "The evolution of cybersecurity continued to present new challenges and opportunities for industry leaders around the world," said Dr. Al-Kuwaiti.

"The UAE Cybersecurity Council aimed to create a safe and trusted cyber environment that helped organizations, institutions, and individuals achieve their potential. Such results were amplified at GISEC Global, which acted as a super-connector bridging the industry gap, encouraging thought-provoking discussions, and promoting forwardthinking collaborations critical to the future of digital services and assets.

"In light of the latest developments in AI technology, GISEC Global 2024 served as a pivotal platform in our relentless mission to forge and advocate for a cyber-resilient society grounded in the partnerships between the private and public sectors and aiming to cultivate a bold ecosystem that safeguarded the integrity of companies and individuals," Dr. Al-Kuwaiti added.

Dr. Aloysius Cheang, Chief Security Officer of Huawei Middle East and Central Asia, said: "GISEC Global was the region's largest and most reputable cybersecurity event that was in its thirteenth year. I would expect no less in terms of relevance, forward thinking, and innovation when it came to programming.

"It was the perfect opportunity not only for the industry to gather and to share stories from the trenches but also the right platform for networking at the highest level. GISEC Global and the UAE together were the formula for building a trusted digital oasis in the heart of the Arab World," added Dr. Cheang.

Enticing line-up of events

Exclusive cybersecurity experiences took place during the three-day event, including the inaugural edition of the Global CyberDrill, a realistic simulation assessing critical targets and engaging experts from CERTs, CIRTs, and CSIRTs hailing from over 100 countries, fostering global cooperation to mitigate cyber threats.

Dubai security teams from several government entities joined the new Capture the Flag competition for the first time in partnership with the Dubai Electronic Security Center (DESC), GISEC Global's official government cybersecurity partner, while flourishing start-ups from all across the region competed in the most awaited Unlock Pitch Competition at the returning GISEC Cyber Stars.

Showing its appreciation for the most prominent and visionary players in the Middle East and Africa's cybersecurity industry, GISEC Global this year saw the launch of the inaugural GISEC Cyber

Excellence Awards in partnership with the UAE Cybersecurity Council and the United Cybersecurity Alliance.

Another brand-new feature designed to showcase the best of open-source projects, tools, and solutions, GISEC Armory offered developers and experts a unique opportunity to display their work and connect with like-minded professionals in the cybersecurity space.

An extensive conference program with 300+ hours of future-oriented content promoted a new enhanced experience with exciting highlights spanning everything from the inaugural series of executive boardrooms and conference roundtables to the new cyber defense track discussing the mitigation plans and weaponry against rising threats.

The 2024 agenda also launched the most awaited Ask the Hacker Q&A sessions and the spotlight on True Stories where the audience heard world-class CISOs narrating true horror stories around billion-dollar ransomware attacks, financial frauds, celebrity phone hacks, and more, for the first time on stage.

GISEC Global also featured the Dubai Electronic Security Center (DESC) as its official government cybersecurity partner, and the Ministry of Interior and Dubai Police

SES to acquire Intelsat in compelling transaction focused on the future

SES S.A. ("SES") and Intelsat S.A. ("Intelsat") announce an agreement for SES to acquire Intelsat through the purchase of 100% of the equity of Intelsat Holdings S.a.r.l. for a cash consideration of \$3.1 billion (€2.8 billion) and certain contingent value rights. The combination will create a stronger multi-orbit operator with greater coverage, improved resiliency, expanded suite of solutions, enhanced resources to profitably invest in innovation, and benefit from the collective talent, expertise, and track record of both companies. The combination will deliver greater value for customers and partners, as well as providing a compelling alternative in the new era of growth, innovation, and competition for the satellite communications industry.

The transaction, which is subject to relevant regulatory clearances/filings and customary provisions concerning cooperation and measures in seeking such regulatory clearances, which are expected to be received during the second half of 2025, is fully supportive of SES's financial policy and is underpinned by expected total synergies equivalent to 85% of the total equity value of the transaction. The transaction has been unanimously approved by the Board of Directors of both companies and Intelsat shareholders holding approximately 73% of the common shares have entered into customary support agreements requiring them to vote in favour of the transaction.

Transaction highlights

- Delivers €2.4 billion (NPV) of synergies (85% of equity consideration) with 70% executed within 3 years after closing.
- Expands multi-orbit satellite-based capabilities, spectrum portfolio, and global ground network to serve customers.
- Increases revenue in high demand and growing Networks segments representing

~60% of expanded revenue base.

- Combines complementary investment in space, ground, and network innovation to unlock future value and opportunity.
- Brings together a wealth of collective talent, expertise, engineering knowledge, and go-to-market capabilities.
- Company will benefit from gross backlog of €9 billion, revenue of €3.8 billion, and Adjusted EBITDA of €1.8 billion.
- Medium-term Adjusted EBITDA growth driving future free cash flow (FCF) generation outlook.
- Commitment to investment grade metrics with net leverage below 3 times within 12-18 months after closing.
- Commitment to annual dividend of €0.50 per A-share with expanded FCF base supporting potential for future increases.

Adel Al-Saleh, CEO of SES, commented: "This important, transformational agreement strengthens our business, enhances our ability to deliver worldclass customer solutions, and generates significant value for our shareholders in a value accretive acquisition which is underpinned by sizeable and readily executable synergies.

"In a fast-moving and competitive satellite communication industry, this transaction expands our multi-orbit space network, spectrum portfolio, ground infrastructure around the world, go-tomarket capabilities, managed service solutions, and financial profile. I am excited by the opportunity to bring together our two companies and augment SES's own knowledge base with the added experience, expertise, and customer focus of the Intelsat colleagues.

"Going forward, customers will benefit from a more competitive portfolio of solutions with end-to-end offerings in valuable Government and Mobility segments, combined with valueadded, efficient, and reliable offerings for Fixed Data and Media customers. This combination is also positive for our supply chain partners and the industry in creating new opportunities as satellite-based solutions become an increasingly integral part of the wider communications ecosystem.

"Our expanded business will deliver sustained EBITDA growth and strong cash generation, in turn supporting incremental profitable investment in capabilities and solutions to fulfil rapidly expanding and evolving customer demand while also delivering sustained returns to shareholders," Al-Saleh added.

David Wajsgras, CEO of Intelsat, commented: "Over the past two years, the Intelsat team has executed a remarkable strategic reset. We have reversed a 10-year negative trend to return to growth, established a new and game-changing technology roadmap, and focused on productivity and execution to deliver competitive capabilities. The team today is providing our customers with network performance at five 9s and is more dedicated than ever to customer engagement and delivering on our commitments. This strategic pivot sets the foundation for Intelsat's next chapter.

"By combining our financial strength and world-class team with that of SES, we create a more competitive, growth-oriented solutions provider in an industry going through disruptive change. The combined company will be positioned to meet customers' needs around the world and exceed their





Huawei focused on three key areas: Data Protection, **Network Protection, and Cloud Security**

Sultan Mahmood Malik, Chief Security Officer at Huawei Gulf North, speaks with Teletimes International about the growing cybersecurity challenges faced by the Middle East

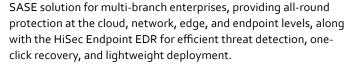
Interview: Khalid Athar

Khalid Athar: Can you share some key takeaways or insights from Huawei's participation in GISEC this year?

Sultan Mahmood Malik: As the Lead Strategic Partner for GISEC Global 2024, Huawei focused on three key areas: data protection, network protection, and cloud security. Technologies like AI, networks, and cloud are pushing the boundaries of business design, boosting productivity, and redefining business models. Industries are plotting new roadmaps and moving ahead with greater speed. As digital transformation picks up speed, cybersecurity and privacy protection will become key to business success in the future digital world.

We launched two groundbreaking solutions—the industry's first multi-layer ransom protection and 'SecMaster,' which incorporates AI to enhance security operations. Our Pangu Model and GPT technologies are being used to fortify cybersecurity measures, allowing organizations to leverage AI for better protection.

At GISEC, Huawei also demonstrated the class-leading capabilities of its HiSec



In addition, Huawei emphasized the importance of data protection, recognizing that data storage is the foundation of the intelligent world. Huawei OceanProtect Backup Storage delivers three to five times higher backup and recovery performance and, with the industry's only six-layer Network and Storage Ransomware Protection capabilities that ensure the security and availability of backup copies.

Huawei also showcased its full-stack, cloud-native security system, empowered by AI and built upon the collaboration between a security operations center (SOC) and seven layers of protection covering physical, identity, network, application, server, data, and O&M layers that guarantee service resilience, data security, and regulatory compliance.

These innovations are crucial for safeguarding businesses and their customers against the escalating threats in today's digital landscape.

KA: My next question concerns the key cybersecurity challenges currently faced by the GCC. How is Huawei Gulf North addressing these challenges? Feel free to discuss the general GCC context as well, not just the northern regions.

SM: To put things into perspective globally, every nation is actively pursuing digitalization to enhance their digital economies. However, digitalization brings several cybersecurity challenges. The GCC is no exception to these challenges. In fact, due to our advanced, high-paced technological, and industrycentric economies, the GCC, and particularly the Gulf North region, have more at stake compared to other parts of the world.

For instance, consider ransomware—should an entity in Asia or South Asia suffer a ransomware attack, the financial impact would be significantly lesser, perhaps 10 to 100 times less, than if the same were to happen to an entity within the GCC. This stark contrast underscores the heightened stakes for cybersecurity in our region. Furthermore, let's consider network resilience; we recently witnessed heavy rains in Dubai, yet our telecom network remained stable. If such a network were to fail, it could result in financial losses amounting to hundreds of millions of dollars in just a short period, highlighting the critical nature of our cybersecurity challenges.

Addressing these concerns at Huawei, a global leader in cybersecurity, involves three fundamental strategies: First, we provide reliable and trustworthy solutions and services, ensuring our customers receive the best from Huawei, reflecting our core value of customer centricity. Second, we are proactive in





AR and VR blur the lines between the cyber and physical worlds. For instance, augmented reality applications that enable remote operations present unique challenges; a disruption in these services during critical procedures like medical operations could have dire consequences

developing and supporting policy frameworks that enhance the resilience of our digital economy. This involves engaging with regulatory bodies and industry partners to craft and



We've obtained over 600 security certifications for our products, with 57 achieved in the last year. This rigorous compliance framework is part of our commitment to ensuring the safety and security of our customers

refine these policies. Lastly, we are deeply involved in capacity building, addressing the global shortage of over three million cybersecurity professionals. Huawei, with its extensive experience and expertise in the global ICT and cybersecurity industries, contributes to this by engaging with universities and academia, conducting awareness campaigns, and providing expert-level training to prepare the next generation of professionals to handle cybersecurity challenges not only in the GCC but globally.

KA: Could you delve a bit deeper into the cybersecurity challenges associated with emerging technologies like virtual reality (VR) and augmented reality (AR), particularly how these affect Huawei Gulf North customers?

SM: The challenges associated with AR and VR primarily pertain to privacy issues. For example, the unauthorized collection and use of personal data in augmented reality are considered significant violations. These technologies, while innovative and efficient, introduce substantial risks concerning user privacy. Moreover, AR and VR blur the lines between the cyber and physical worlds. For instance, augmented reality applications that enable remote operations present unique challenges; a disruption in these services during critical procedures like medical operations could have dire consequences. Therefore, ensuring the reliability and security of AR and VR technologies is crucial for maintaining the integrity of both virtual and physical interactions.

KA: How does Huawei Gulf North ensure that its cybersecurity measures are in line with industry best practices and regulatory requirements?

SM: That's an excellent question. At Huawei, everything revolves around our customers, with cybersecurity being paramount in maintaining and establishing their trust. We have developed an end-to-end cybersecurity assurance framework that spans

people, processes, and technology. This framework ensures that every department at Huawei adheres to the highest cybersecurity standards and practices.

We employ over 3,000 security professionals who continuously monitor and incorporate industry standards into Huawei's operations. Over the past five years, we've invested over \$2 billion in securing our software and an additional \$750 million in hardware security. These investments ensure that our products are secure by default, following the stringent baselines set by industry standards. Furthermore, we've obtained over 600 security certifications for our products, with 57 achieved in the last year. This rigorous compliance framework is part of our commitment to ensuring the safety and security of our customers through a robust and secure supply chain, where any software vulnerability can be traced back within an hour and hardware issues within 24 hours.

KA: Can you discuss any specific initiatives or announcements made by Huawei at GISEC that are particularly relevant to the cybersecurity landscape in the Gulf region?

SM: As part of its commitment to fostering cybersecurity knowledge and best practices, Huawei hosted several strategic industry forums at GISEC. The Huawei Cloud Security Forum, themed "Intelligent, Simplified Cloud-Native Security for Greater Resilience of Cloud Services," featured Huawei Cloud experts discussing trends and challenges in cloud security governance, why cloud-native security is a better choice for the cloud era, and how to implement efficient security operations. The forum also hosted Huawei's partners and customers, who shared their best practices concerning these topics.

At the Huawei Cybersecurity Forum, we explored how enterprises can build Secure Access Service Edge (SASE) and how to promote the development of the SASE industry in the future. We also hosted the Cybersecurity Enablement Bootcamp, which was designed for regulators in the Middle East and Central Asia region, providing them with an opportunity to learn about global cybersecurity legislation, governance practices, and industry best practices and standards in the areas of 5G and cloud security. Finally, Huawei also supported our ecosystem partner, Organization of The Islamic Cooperation - Computer Emergency Response Teams (OIC-CERT) to host an expert working group workshop during GISEC. As you may be aware, OIC-CERT involves prominent Islamic nations like the UAE, Saudi Arabia, and Qatar. These countries are leveraging their advanced technological capabilities to assist other member countries in enhancing their cybersecurity frameworks. This collaboration helps avoid common pitfalls and strengthens these nations' overall security posture. OIC-CERT is rapidly becoming a global cybersecurity leader, with comprehensive frameworks already developed for 5G and cloud security. This initiative not only aims to bolster cybersecurity in Islamic countries but also sets a precedent for global cybersecurity



Advancing global critical communications for a safer, more connected world

Mladen Vratonjić, Chairman of the Board of TCCA, speaks with Teletimes International

Mladen Vratonjić is Chairman of the Board of TCCA. With 40 years of experience in telecommunications, and more than 15 years in public safety, Mladen has chaired TCCA since 2015. He is also vice president of EENA (European Emergency Number Association).

Mladen's previous roles include Public Safety Specialist at Motorola Solutions; Head of Telecommunications Directorate of the Serbian MOI with responsibility for all telecommunication systems of the Serbian police and fire brigades including the emergency call centres, and leading expert of

Geneva DCAF (Democratic Control of Armed Forces) in the field of telecommunications for public safety, serving as Chair of the Western Balkans Telecommunications Committee for the improvement of cross-border cooperation.

TT: Could you start by giving us an overview of TCCA and its mission in the context of critical communications?

Mladen Vratonjić: TCCA is a memberdriven organisation formed of end users, governments, critical national infrastructure organisations, operators, industry and other stakeholders from around the world. TCCA aims to benefit professional end users of critical communications, some of whom regularly need to make immediate decisions that can save lives and prevent harm to society and the wider economy. First and foremost, TCCA promotes the use of standardised technologies to deliver mission-critical communication systems that are secure, available, resilient, interoperable and, ultimately, trusted. We provide the forum for the critical communications sector to discuss, debate, deliver and evolve the market for the benefit of all.

TCCA influences key decision makers on the need for and benefits of open and competitive markets, and lobbies for the spectrum required for critical communications to operate effectively. We work closely with organisations responsible for the development of open standards relating to critical mobile communications, including ETSI and 3GPP, and with complementary organisations such as the Global Certification Forum (GCF), International Union of Railways (UIC) and the 450 MHz Alliance to progress key advancements related to critical communications.

TT: How has the landscape of critical communications evolved over the years, especially in terms of technology and global collaboration?

MV: For many years, narrowband technologies such as TETRA, DMR



TCCA influences key decision makers on the need for and benefits of open and competitive markets, and lobbies for the spectrum required for critical communications to operate effectively

and P25 were the mainstay of critical communications products and services for critical users – in fact TCCA was originally conceived as the TETRA MoU Association in 1994, responsible for driving the development of the TETRA standard through ETSI. Technology has evolved with the advent of broadband networks and services, and so too has our association, working to leverage the potential of broadband technologies to enhance the work of first responders and other critical users. We established our Critical Communications Broadband Group (CCBG) more than ten years ago to influence and support the deployment of 3GPP mobile broadband critical communications, which in many cases will complement or replace narrowband networks.

In terms of collaboration, the vast majority of TETRA manufacturers and network operators are members of TCCA and work together in the spirit of cooperation to ensure the ongoing success of the standard. For critical broadband, our CCBG, Broadband Industry Group, Legal and Regulatory Working Group and others are emulating the success of that cooperation to ensure a strong and stable global market for critical broadband. TCCA is the Market Representation Partner in 3GPP for critical communications, bringing the user requirements for critical broadband to the 3GPP table to inform technology developments. Whereas narrowband networks were designed specifically for critical communications, broadband networks are designed principally for

consumer use. Standards for critical communications have gone from dedicated standards to becoming part of global, mainstream standards. Our role here is to influence the evolution of the technological landscape to ensure that the fundamental requirements of critical users are included in 3GPP Release features and specifications.

TT: The Government Authorities Global Village (GAGV) is highlighted as a key meeting place for the global operator community. Can you elaborate on the vision behind GAGV - how does the GAGV facilitate dialogue and partnership among different stakeholders in the critical communications ecosystem, and with 16 operators from around the world confirmed to attend to date, what outcomes do you anticipate from the global gathering?

MV: This follows on from the previous answer, where we are championing cooperation and collaboration to drive the critical communications market forward for the benefit of all. With governments around the world looking to ensure they have the best possible critical communications networks to support their first responders and protect their citizens, we wanted to provide a physical meeting place where they could meet and discuss opportunities, challenges, issues and progress. Nations are at different stages of development in their critical networks - some are remaining with their trusted narrowband networks and taking steps to enhance those; others are looking at hybrid networks while a number are working on purely broadband networks,

often in partnership with existing mobile network operators.

With its own area within Critical Communications World, and dedicated presentation sessions in the conference program, the GAGV brings together government representatives from around the globe to share their thoughts and

In terms of outcomes, we hope the GAGV participants will gain mutual benefit from sharing relevant learnings and insights and will leverage TCCA's organisation to continue the conversations. TCCA has developed across the critical communications broadband ecosystem to become the place where user organisations and industry can debate and clarify their common issues, and to be the honest place to obtain and share information.

TT: CCW plays a significant role in engaging stakeholders and showcasing innovation. How has CCW evolved to meet the changing needs of the critical communications community?

MV: The benefits of meeting face-toface cannot be overstated, and Critical Communications World is the most important annual event to facilitate conversations and connections that shape the future of our sector.

Originally the TETRA World Congress, the event was traditionally held in Europe, reflecting at the time the main installed base of TETRA users. As the standard become widely adopted around the world, the first TETRA World Congress outside Europe was held in Hong Kong in 2008. With the early promise of critical broadband, the event became Critical Communications World (CCW) in 2013, held in Paris, France. The aim was to attract new visitors through its incorporation of mobile broadband technologies and their potential for mission critical communications when used in combination with TETRA. This first CCW was a huge success, and the event continues to go from strength to strength.

Like many conferences, CCW moved online during the pandemic, and gained a significant new audience who could not usually attend an event such as CCW in person. Following an understandably smaller in-person event in Madrid in 2021, the full CCW experience returned in Vienna in 2022, followed by our most successful event to date in Helsinki last year.

We are extremely proud of the quality of the CCW conference program, which brings together experts from around the world. Topics expand each year to ensure we are at the forefront of discussions around trending areas such as AI, digital twins and cybersecurity, as well as presenting the latest in products and solutions for both narrowband and critical broadband users.

We constantly look for opportunities to create an even better event – whether through the introduction of the GAGV, our in-depth Focus Forums, lively panel debates, and new for this year the Rising Stars panel – chaired by the 2023 winner of TCCA's Young Engineer of the Year Aaron Page. This brings together people in the industry under 30 years of age to highlight the importance of future talent, their upcoming contribution to critical communications, observations of the emerging challenges most pertinent to them and how to drive, improve upon and develop the industry whilst preparing and supporting future talent.

TT: Can you discuss some of the key innovations or technologies that will be highlighted at this year's CCW?

MV: We have more than 110 confirmed exhibitors to date, so it is impossible to highlight specific innovations or technologies. Critical communications for vertical sectors will be of interest to many – for airports, for power utilities, for transportation, for healthcare, for smart and connected digital cities, and for increased efficiency in public safety. We'll be seeing how 4G and 5G networks are shaping mission critical communications, looking ahead to 6G, learning about the latest in early warning systems, and progress in



It should be noted however that TETRA standard is still being enhanced and is seen as having a long-term future well into the 2030s and beyond, underpinned by our world-leading Interoperability (IOP) process led by our Technical Forum

deploying MCX services - mission-critical push-to-talk, mission-critical data and mission-critical video.

There will be updates on standardisation and spectrum issues, the growing importance of non-terrestrial networks for critical communications, and our Focus Forums will be providing in-depth information on TETRA security, data, apps and interworking with critical broadband; legal and regulatory considerations, testing and certification programs and critical broadband roadmaps. As we said, standards drive innovation and competition and that is why it is encouraging that an increasing number of companies are entering the production of devices according to 3GPP standards. I expect to see a range of new solutions for use in both broadband and hybrid environments. The best way to find out what the highlights might be is to join us at the show!

TT: Dubai is known for its technological advancements and smart city initiatives. How does the city's infrastructure and tech ecosystem complement the goals of CCW why was Dubai chosen as the location for this year's CCW?

MV: Dubai is variously referred to as the city of the future, the city of innovation, and is known around the world for its technological achievements and advancements. The implementation of the ITU Smart City initiative makes Dubai a

unique city with implications in all aspects of society from city administration to economy, from transport to education or culture. As a part of this initiative, Dubai Police opened the world's first AI powered Smart Police Station (SPS), an unmanned police station providing round-the-clock services where the public can report crime virtually, track criminal investigations, pay traffic tickets, report lost items or suspicious behaviour, and get information on a variety of community services. Bearing in mind that the Middle East region is one of the pioneers in the introduction of the most modern communication systems, it is difficult to find a better place to organize an exhibition and conference that will be a showcase of the latest technologies and trends in critical communications.

Dubai has hosted TCCA events before - we have presented our Critical Communications Middle East and North Africa in the city a few times, so we are very familiar with the advantages of Dubai.

One of the key considerations in choosing a venue for Critical Communications World is gaining support from a critical communications host operator, and in Nedaa we have a most proactive and encouraging partner. Nedaa is a unique pioneer in the communications market and is the exclusive secure network provider for the Government of Dubai.

Nedaa's vision is 'Leading in providing





together!

The benefits of meeting face-to-face cannot be overstated, and Critical Communications World is the most important annual event to facilitate conversations and connections that shape the future of our sector

secure communications for sustainable connectivity' – with a mission to provide smart communications to enhance security and safety. TCCA's vision is to advance global critical communications for a safer, more connected world, with a mission to empower critical communication users with secure, trusted, and standardised technologies. We are working well

TT: Looking beyond CCW, what are the next big challenges you see for the critical communications sector?

MV: The introduction of critical broadband technology has many challenges. It requires careful consideration, including aspects such as coverage, security, resilience, capacity, performance, interoperability, and integration into user operations. In general,

each end user organisation will, at their own pace, go through an evolution process, this technology shift providing the opportunity for new operational models to become institutionalised over time.

To create an open and healthy worldwide market, TCCA is working with partners such as ETSI and the Global Certification Forum (GCF) to develop and implement a global MCX interoperability testing and certification regime to ensure critical broadband delivers a trusted service, as well as working with an increasingly wide range of industry partners to advance critical communications worldwide. Our aim is to enable a smooth navigation of the challenges around the introduction of critical broadband, while continuing to work on those ongoing areas of concern such as network security, and the ethical deployment of AI. Our work on lobbying for critical broadband spectrum also continues – there was some good progress from the World Radio Communications Conference last year, but still much to be done.

Moving forward with Mission Critical Services Certification

TCCA and GCF to work on next steps in Dubai in May

Ensuring that mission critical services over broadband networks are actually mission critical is a complex process. First responders and other users of critical communications services need to have full trust in their voice, video and data applications in what could be life-threatening situations. To ensure this trust, the Global Certification Forum (GCF) is working together with TCCA to develop an industry certification program for mission critical products and solutions where conformance to 3GPP standards will be checked and verified and thus ensure interoperability between different solution providers.

The work on establishing this certification program will progress at a dedicated workshop on May 17, following Critical Communications World in Dubai, which

takes place from May 14 -16. This workshop, the third in the series, will aim to gather input to the future development of the MCX certification programme, and due to its location and timing, will provide an opportunity to hear from local stakeholders to understand regional requirements and ensure alignment with industry. Hosted by TCCA member Airbus n Dubai, the workshop is open to all GCF and TCCA members, and to non-members subject to approval.

GCF and TCCA have established a permanent Mission Critical Services Workstream (MCS WS) within the GCF. This comprises key industry players and subject matter experts from GCF and TCCA member companies, who are in the process of developing the key requirements for

testing mission critical services, as well as defining the policies and procedures for the certification program. The team has established testing scope for both Conformance Testing and Field Trials testing and is working to develop Interoperability and Performance testing criteria.

The MCS certification program will ensure that the dependability and resilience that are core characteristics of narrowband services such as TETRA are carried forward into the 4G/5G ecosystem. In 1999, TCCA created and continues to manage the world-leading TETRA Interoperability (IOP) process that underpins the continued success of TETRA around the world. GCF has more than 25 years of best practices in managing certification of wireless products for the telecoms industry.

Thuraya signs agreement with CYSEC to offer powerful satellite encryption and cybersecurity solution



Thuraya has partnered with CYSEC to provide enhanced cybersecurity and encryption protection to its existing data service customers.

The partnership was unveiled during the Satellite 2024 conference held in Washington D.C. and will be a gamechanger for sectors that require safe, secure, and reliable data services protected from potential risk of loss. Under the agreement, Thuraya will now bundle CYSEC's ARCA SATCOM solution as part of its existing data services plan, thereby enhancing its offerings for customers that require the highest level of cyber protection.

Thuraya has already certified the solution over its network, noting that it is also certified by the Federal Information Processing Standard (FIPS) authority in the

CYSEC has designed ARCA SATCOM specifically for satellite data communications. The solution provides performance enhanced capabilities for data users by integrating cutting-edge encryption technologies. This feature

reinforces Thuraya's network, empowering seamless transmission and reception of encrypted data without compromising connectivity or performance. The offering of constant and uninterrupted connectivity is of critical importance to various entities including governments, remote enterprise establishments, core heavy industries, utilities communications, the military, and the overall deployment of secure IoT devices and services. The solution provides customers with flexible options to accommodate different use cases as its endto-end encryption is based on international standards optimized for satellite networks.



Sulaiman Al Ali, Chief Commercial Officer of Yahsat, said: "We are delighted to announce CYSEC as our latest satellite communications security partner, reflecting our determination to push innovation and value to the next level. By adding CYSEC's powerful ARCA SATCOM technology to our existing suite of data services, customers will have the peace of mind to know that their data is safe, secure, and based on the highest industry standards. We have chosen to work with CYSEC because its solution is specifically designed for satellite-based communications, ensuring it will work seamlessly across our networks."

Patrick Trinkler, Chief Executive Officer of CYSEC, said: "Our new partnership with Thuraya demonstrates the enhanced performance and cybersecurity capabilities of ARCA SATCOM. Once deployed, customers can use the system safely knowing that their data is protected to the strictest standards. ARCA SATCOM is the first solution designed for satellite communications security, which means it can be seamlessly added to a network and begin operating without any service

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e& reports consolidated revenues of AED 14.2 billion in Q1 2024, up 9 percent

e& has disclosed its consolidated financial results for Q1 2024, reporting consolidated revenue of AED 14.2 billion, growing 9% year-over-year, while consolidated net profit increased to AED 2.3 billion, a year-overyear growth of 7%. The group's consolidated EBITDA reached AED 6.4 billion, growing 3% year-over-year, resulting in an EBITDA margin of 45%.

The number of e& UAE subscribers reached 14.5 million in Q1 2024, while consolidated group subscribers reached 173 million, representing an increase of 5 percent over the same period last year.

Financial Highlights for Q1 2024

e& reported strong performance across its operations. This was driven by the expansion of partnerships across its verticals and continuous investments in developing critical infrastructure for future readiness.

H.E. Jassem Mohamed Bu Ataba Alzaabi. Chairman of e& said: "e& reported strong performance in Q1 with consolidated net profits reaching AED 2.3 billion, a growth of 7 per cent year-over-year. This was driven by our focus to build a progressive business model represented by our wellpositioned verticals to grow and succeed throughout the year. The group's efforts towards forming new partnerships across the business ecosystem to deploy emerging technologies that drive next-generation digital connectivity has played a significant role in this success journey. We are pushing the boundaries of technology, empowering millions of people with innovative solutions and making breakthroughs in supporting the UAE's well-defined vision for digital transformation."

Hatem Dowidar, Group Chief Executive Officer of e&, said: "Our evolution as a tech-co that embraces the future is



reflected in our Q1 financial results, building on the momentum of last year's success. e&'s robust performance in Q1, with consolidated revenue growth of 9 per cent to AED 14.2 billion while consolidated EBITDA reached AED 6.4 billion, growing 3 per cent year-over-year. This is a testament of the strategic choices we've made in diversifying our portfolio, fortifying our brand, and cementing partnerships in our unrelenting efforts to digitally empower

the people and communities we serve while maximising value creation for our shareholders."

Key Operational Highlights

e& was named the Fastest Growing Tech Brand and Most Valuable Brand Portfolio in MEA and has continued its growth







Hatem Dowidar, Group CEO, e&

trajectory exemplified by landmark partnerships, alliances, and large-scale infrastructural developments that position the group as a transformational force.

In Q1 e& and its partners in the Global Telco Al Alliance announced a joint venture to develop telco-specific Large Language Models (LLMs) to revolutionise customer service through advanced AI solutions. e& also made a commitment to the International Telecommunication Union's (ITU) Partner2Connect Digital Coalition, pledging to invest US \$6 billion between 2024 and 2026 in technological advancement, infrastructure development and innovative digital solutions to extend meaningful connectivity to communities across its markets.

e& Carrier & Wholesale (C&W) has made advancements in accelerating the growth of connectivity with milestone agreements in the subsea cable space. C&W is set to anchor the 2Africa subsea cable, marking the most extensive subsea cable system landing in the UAE to date. A collaboration with Ooredoo will introduce the Gulf Gateway Cable (GGC-1), connecting data centres in Abu Dhabi and Doha while

facilitating seamless communication and data exchange. In addition, C&W launched the region's first Smart Connect (Bandwidth on Demand) service.

e&, Telecom Egypt, Telin and a major Indian operator formed a consortium to develop the ICE IV Project to seamlessly connect the Intra Asia region to India and the Middle East. e& expanded its Tier III SmartHub data centre network to Abu Dhabi, providing state-of-the-art infrastructure and connectivity to support the entire region's digital ecosystem.

e& C&W launched a one-stop-shop solution with a new wholesale service model empowering emerging network operators with fully managed services, giving them access to the entire value chain, including Bilateral Roaming Services, Roaming as a Service (RaaS), Voice Gateway Services, A2P Gateway services, and Data connectivity for faster internet access.

e& and Vodafone joined forces to empower other operators to confidently adapt to the evolving voice landscape with crossborder managed voice solutions. e& and Dell Technologies partnered to support and

strengthen e&'s mobile networks transition to open technologies. In addition, e& and Huawei signed an agreement that will see both entities collaborating on developing green and energy-efficient networks in the

Setting a new precedent in the UAE's journey towards net-zero carbon emissions, e& also continued its sustainability efforts by partnering with Al-Futtaim Electric Mobility Company to deploy a fleet of 100 BYD electric vehicles (EVs).

Recognising that its people are central to its success, e& consistently invests in fostering a positive and supportive work environment and was recognised as a 'Great Place to Work®'.

e& UAE

e& UAE continued to reign as the Strongest Telecom Brand in the World in 2024. ABAC Center of Excellence also awarded e& UAE the distinguished ISO 37001:2016 Anti-Bribery Management System (ABMS) certification, a significant milestone in its commitment to ethical business practices.



As a pioneer in network technology and services, e& UAE completed multiple cloud Radio Access Network (RAN) trials, a first in the MEA region, providing network innovation and agility to operators and enterprises to improve performance in the 5G ecosystem.

Setting an industry benchmark in the Middle East, e& UAE announced a network upgrade capability that will deliver speeds of up to 50Gbps. Powered by the successful completion of the Middle East's first symmetric 50-Gigabit-capable Passive Optical Networks (50G PON) broadband service, e& UAE is set to accelerate the digital experience for households and businesses.

e& UAE continued to drive innovation in the market, opening the second AI-empowered autonomous telecom store, 'EASE,' in Dubai mall. Powered by AI and ground-breaking technologies, the store is designed to help customers seamlessly purchase products and services.

The first quarter was characterised by collaborations and advancements in connectivity solutions that maximise stakeholder value and customer experience. By partnering with Cisco it will enable businesses in the UAE to digitally transform and bring efficiency in their operations. A partnership with Advanced Real Estate Services (ADRES), a PropTech venture developer, will enhance the entity's digital framework and expand its reach through e& UAE's digital platforms.

Additional collaborations with Huawei include a live trial of MENA's first 800GE router, marking a major step toward moving 800GE technology out of lab tests and into practical use. e& UAE became the first company outside North America to deploy Microsoft's Azure Operator Nexus and Azure Operator 5G Core solutions. Deepening its efforts to elevate customer experiences using custom Generative AI (GenAI), e& UAE partnered with Amazon Web Services

e& UAE partnered with Ericsson to

implement the latest charging features across its network to boost 5G capabilities, monetise new 5G services, and provide enhanced experiences to customers in the UAE through technology, security, and operational upgrades. Both organisations also completed a Cloud RAN trial in the UAE, successfully conducting a 5G data call using Ericsson's Cloud RAN architecture in a lab environment.

Nokia and e& UAE came together to showcase the industry's first Multi-Access Edge Slicing on a live network. With Oracle, the partnership entailed enhancing AI capabilities by deploying NVIDIA H100 GPU clusters within e& UAE's Oracle Cloud Infrastructure (OCI) Dedicated Region, located at its data centres.

In a trailblazing move that will enhance global connectivity, e& UAE became the first operator to join Yahsat's Direct-to-Device (D₂D) to bring satellite coverage to standard smartphones.

e& UAE unveiled new 5Gbps and 10Gbps Plans, the first of its kind in the UAE. The new Fibre-to-the-Home (FTTH) plans are set to significantly enhance the connectivity experience for consumers with ultra-fast fibre internet. Bringing transformative connectivity to the water's edge, Corning Incorporated and e& UAE introduced Fibre-to-the-Yacht (FTTY) at Yas Marina, integrating 138 yachts with the latter's advanced solutions and Corning's preterminated fibre optic cables.

KEZAD Communities partnered with e& UAE to redefine the digital landscape of Razeen Residential City in Abu Dhabi, leveraging advanced technology to significantly enhance the quality of life for the city's residents. Agara collaborated with e& UAE to meet the region's growing demand for smart living. e& UAE released a whitepaper to showcase its capabilities at the forefront of the UAE's transition to 5G.

e& life

In Q1, e& life followed through on its philosophy of "simplicity being the ultimate

sophistication", refreshing the design of the e& money financial app, the number one native fintech app in the UAE in terms of monthly active users.

evision continued to fortify its content library to meet the diverse demands of the MENA audience. In an impressive Q1 performance, it showcased substantial growth, surpassing a milestone of 5.5 million users. This achievement was propelled by the resounding success of STARZ ON, evision's ad-supported streaming platform, launched last year in the MENA region.

In addition, evision cemented its position as a pioneer in delivering world-class entertainment to MENA, catering to sports enthusiasts and thrill-seeking audiences with the launch of Red Bull TV and 'DAZN Combat' on STARZ ON. The channel showcases the best of boxing, MMA, and other combat sports. STARZ ON also offered the 2024 Women's Premier League cricket tournament live and for free.

Evision reinforced its position as a leading media and entertainment powerhouse in the MENAP region by expanding its strategic collaboration with Disney Star. Under the extended partnership, evision built MENA's home of content for the subcontinent audience, bringing the best of South Asian entertainment to audiences across the region by securing four-year MENA exclusive ICC cricket rights and becoming the home of Hotstar Specials in the region.

Directly supporting the strategic objective of e& life to be the leading consumer ecosystem player in the region, evision partnered with Cricbuzz to transform cricket broadcasting in the Middle East.

Evision successfully re-established direct Hollywood studio deals with Sony Pictures and MGM Amazon for SVOD, signalling a renewed focus on bringing high-quality entertainment to audiences in MENA. It also enhanced its Arabic portfolio with a strategic partnership with Noor Play, offering an exciting array of Ramadan

content available across e& platforms, including Egyptian drama, Turkish programming, sports, cooking, and kid's content.

e& enterprise

Continuing its objective on digitally transforming the healthcare sector, e& enterprise and Daman launched "Hayakom Digital Booth", a visionary concept designed to redefine health insurance accessibility and improve customer service in the UAE.

Two landmark collaborations with Burjeel Holdings, including the launch of a pioneering telemedicine services project and an MoU to transform delivery models, were aimed at redefining healthcare in the UAE and beyond. Each collaboration represents a transformative approach to healthcare that prioritises accessibility, efficiency, and sustainability across the

e& enterprise's partnership with Fils is set to establish a new standard in the digital payments sector by promoting sustainability with businesses sharing precise information with their customers, including carbon emissions per transaction and the option to offset their carbon footprint using reliable methods.

Its commitment to unlocking the public and private sector's digital potential was given increased vitality with several new partnerships and collaborations formed in Q1. The year began with the CX World Forum, where e& enterprise participated as a strategic partner, joining industry leaders and decision-makers to explore the future of customer experience.

Haifin, the freshly rebranded trade finance blockchain platform of e& enterprise, announced its broader vision to expand beyond the UAE where, in 2023, it evaluated over AED 116 billion worth of transactions, representing close to 70 per cent year-onyear growth.

A partnership with the Abu Dhabi Social Support Authority (ADSSA) illustrates e&



enterprise's capabilities in digitally enabling public sector entities to develop the "House Visit and Interviews Management System".

e& enterprise and SAS joined forces to enable AI-powered and data-driven innovations in the UAE and KSA. It also reinforced its commitment to accelerating Saudi Arabia's digital future held in partnership with the King Abdullah Financial District (KAFD) and International Data Corporation (IDC), exploring the current state of the Kingdom's digital landscape and highlighted e& enterprise's investments in the region and its contribution to advancing the objectives of Saudi Vision 2030.

As the official host partner for the IDC Middle East CIO Summit 2024, e& enterprise reaffirmed its commitment to driving digital transformation in the region, leading discussions focused on the role of IT leaders in today's increasingly Al-infused landscape.

e& international

e& international continued to expand its Partner Networks Programme, aimed at extending the benefits of its extensive scale to other operators. In the first quarter there was significant progress with the new partner Ncell Nepal, now extending the programme to five operators across six

Additionally, the business reinforced its commitment to boosting partner networks at the second annual Chief Business Officer (CBO) Forum, where the Partner Network Programme was expanded with the addition of Sudatel.

PTCL became the market leader in Fibreto-the-Home (FTTH) services in Pakistan. Its ascent to the forefront of this critical segment of the telecommunications market is a testament to its robust infrastructure and innovative offerings.

e& capital

Since the launch of e& capital in 2022, it has invested over US \$100 million in more than 10 high-growth, technologically innovative companies, making e& capital the most active CVC investor in the Middle East.

Its portfolio companies are disrupting the technological landscape and driving substantial value to customers across MENA and globally. e& capital's companies are the source of the most technologically advanced innovations, supported by leading global institutions and universities. It continues to source and invest in innovative founders, helping them scale and benefit from synergies across the e& group.

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Hughes opens manufacturing facility and private **5G** incubation Center in Maryland

Hughes Network Systems has announced the opening of a new cutting-edge manufacturing facility and private 5G incubation center in Germantown, Maryland, underscoring the long-standing commitment of Hughes to technological advancement and fostering local talent in

The Hughes Manufacturing Facility (EXM) produces U.S.-made hardware that powers the networks on which people, enterprises, and governments everywhere depend, like the Hughes HT3000W JUPITER™ System satellite modem and the Hughes HL1120W Low Earth Orbit (LEO) satellite terminal. In addition to about 400 engineers, technicians and manufacturing staff, the Hughes EXM facility utilizes advanced robotics to assist in the manufacture of high-tech products such as satellite modems and terminals. The EXM facility will also serve as a testing ground for private 5G

solutions just now reaching the market for Enterprise applications as well as secure 5G networking applications critical to the U.S. Department of Defense.

"Hughes has deep roots in this community. Our capabilities evolved from a long-ago startup in Rockville, Maryland, and we have grown into what is now the leading provider of broadband satellite services, products, and managed network solutions," said Paul Gaske, COO, Hughes. "The EXM facility allows us to continue a proud tradition of designing and manufacturing leading edge products here in Maryland."

Located in the Pinkney Innovation Complex for Science and Technology on the Montgomery College campus, the new manufacturing center will offer hands-on training and educational initiatives for students, helping to develop a pipeline of local technical talent. Students will be

able to interact with leading engineers at Hughes through internships, mentoring, and shadowing opportunities. This 140,000-square-foot space is the first-ever manufacturing facility on a community college campus in the U.S.

As a leading satellite technology and managed service provider for government entities and defense agencies, Hughes will use the new manufacturing center to provide the U.S. Department of Defense with much-needed, secure onshore manufacturing capabilities.

"The opening of EXM solidifies our dedication to technological innovation, engineering expertise, and fostering the next generation of industry leaders," said Hamid Akhavan, President and CEO, EchoStar. "The products imagined, designed, and fabricated in this building further advance our mission of connecting everyone, everywhere."

Comtech partners with Eutelsat OneWeb to deliver LEO connectivity services to Antarctica

Comtech in partnership with Eutelsat OneWeb, GEO-LEO connectivity provider in satellite communications, announces trial services to deliver Low Earth Orbit (LEO) satellite connectivity services to multiple regions of Antarctica.

Launched in January 2024, the service provides connectivity to customers in Antarctica. Through this trial, Comtech's market-leading ELEVATE VSAT ground system supported Eutelsat OneWeb's ability to deliver groundbreaking LEO connectivity services, with data rates reaching up to 120 Mbps, to one of the most challenging geographic regions in the world. Comtech worked with Eutelsat OneWeb to configure and install the company's ELEVATE ground

system to simultaneously route robust and resilient connectivity services over multiple OneWeb LEO satellites.

"This is a remarkable achievement—not only for the satellite industry, but also for the broader scientific, technology, and connectivity markets around the world," said John Ratigan, Interim CEO of Comtech. "We are thrilled to partner with OneWeb to deliver LEO connectivity services to Antarctica, which further demonstrates the advanced capabilities of our ELEVATE VSAT ground system. With proprietary softwaredefined technology embedded at the core, we are continuing to build out network agnostic capabilities of our ELEVATE system to meet the future demands of innovative

satellite constellations and hybrid network infrastructures."

This trial showcased the importance of high-speed, low latency connectivity for the scientific community and wider Antarctic region. Through satellite-based LEO connectivity services, like those provided by Comtech and Eutelsat OneWeb, scientists in Antarctica can better conduct day-to-day activities by facilitating real-time support from scientific, technical or health teams around the world. LEO connectivity services also have the potential to improve the welfare of the scientists, outside of working hours, as they are often deployed for 18 months at a time in one of the most remote and geographically challenging areas of the world.

Viettel partners Singtel to develop new submarine cable system connecting Vietnam to Singapore

Viettel Business Solutions Corporation (Viettel Solutions), representing Viettel Group (Viettel) signed a Memorandum of Understanding (MoU) with Singtel to plan and develop the Vietnam - Singapore Cable System submarine cable system (VTS), directly connecting Vietnam and Singapore.

This marks a significant milestone for Viettel in its efforts to implement the "Development Strategy of Vietnam's International Optical Cable System by 2030, vision to 2035" by the Ministry of Information and Communications (MIC) of Vietnam. With the goal of becoming a regional data center (Digital Hub), Vietnam's international optical cables have been identified as a critical component of the digital infrastructure that must be invested in first. This will provide international connectivity that will be boosted by super-large capacity, ultra-wide bandwidth, in-house expertise, security capabilities to support the nation's digital transformation, digital economy, digital society as well as international integration, sustainably.

According to this strategy, by 2030, Vietnam needs to increase its total number of submarine cables to a minimum of 15 systems with a total capacity of at least 334 Tbps. At least two of these submarine cable systems founded by Vietnam must be in operation, with priority given to short routes directly connecting to major Digital Hubs in Asia. The submarine cable systems shall be deployed evenly in three directions: to the North of the East Sea; the South of the East Sea and to the Southern

Recognising its role as the leading telco in Vietnam, Viettel has closely followed the MIC's strategic

2030 plans for the deployment of submarine cables to meet the capacity needs and ensure secure connectivity across Viettel's networks under all circumstances, especially with regard to national information security. The Vietnam - Singapore Cable System (VTS) is a key project for Viettel under this initiative.

As part of the MoU, both parties intend to develop the submarine cable system connecting Vietnam to Singapore (VTS cable) with a configuration of 8 fiber pairs (8FP), using the latest advanced wavelength division multiplexing technology available today. The main trunk landing stations are planned to be in Vietnam (managed by Viettel) and Singapore (managed by Singtel). Additionally, the VTS cable is expected to have branch landing stations in Cambodia, Thailand, and Malaysia. The VTS cable is scheduled to be operational in Q2, 2027.

The VTS will become the first cable with the latest advanced bandwidth technology jointly established by the two largest operators in Vietnam and Singapore and will be the shortest cable directly connecting



Vietnam to the largest digital hub in Asia, Singapore. The deployment of this cable system is in line with Vietnam's strategy for developing its international optical cable system by 2030, with a vision to 2035. When put into operation, the cable will add hundreds of Tbps to Viettel's total international connectivity capacity, providing a large amount of highspeed capacity, opening up a new connection direction to the South, and enhancing the redundancy and security of Viettel's international connection infrastructure.

Nguyen Manh Ho, General Director of Viettel Solutions, stated: "Through investing in the VTS submarine cable project, Viettel affirms its pioneering role in accompanying the Government in building and developing digital infrastructure in Vietnam, promoting comprehensive digital transformation, meeting the demand for high-speed data transmission, efficiently utilising 4.0 technologies, and ensuring information security of national communication."

At the signing ceremony, Ooi Seng Keat, Vice President, Digital Infrastructure & Services of Singtel said, "Vietnam is one of the world's fastest growing digital economies in Southeast Asia with enterprises and consumers adopting new technologies such as artificial intelligence and data-intensive applications. The construction of the VTS cable will support this increasing demand for higher-bandwidth and lower-latency connectivity. We look forward to partnering with Viettel to support Vietnam's and the region's digital and economic growth ambitions."

With investment in and ownership of new submarine cables, Viettel expects to play a significant role as a crucial link in the digital infrastructure and international and regional data transmission infrastructure, deploying international Internet connection applications requiring high-speed connection such as: 5G, Internet of Things (IoT), Automation, Artificial Intelligence (AI), Virtual Reality (AR/VR), etc. Viettel will also ensure the safety and redundancy of its network, the quality of Internet services and other international connection services, as well as national information security.



Huawei Pakistan hosted a Digital Week in Islamabad, showcasing the cutting edge technologies and solutions unveiled at the Mobile World Congress in Barcelona. The event brought together the various strands integral to creating a fully connected world, that is the physical infrastructure for greener, sustainable and scalable technologies, and the digitalization through artificial intelligence, cloud computing, and 5G & 5.5G.

Huawei's vision is to bring digital to every person, home and organization for a fully connected, intelligent world. With a global workforce of more than 207,000 in 170+ countries and regions, Huawei has dedicated 55% of its personnel to research and development. The focus on R&D has resulted in more than 140,000 active patents worldwide.

Huawei is working closely with carriers and partners around the world and in Pakistan to strengthen digital infrastructure, build out the ecosystem, and unleash the full value of connectivity. The new Huawei 5.5G uses ultrabroadband as a foundation, determinacy as a differentiator, and autonomy as an enabler. Having showcased the extensive portfolio of 5.5G, F5.5G, and Net5.5G products and solutions for multiple scenarios at MWC Barcelona 2024, the visitors experienced how this diverse offering empowers operators to build ubiquitous, efficient, and collaborative networks that pave the way for the intelligent world of tomorrow.

Yu Shaoning, Vice CEO Government and Public Affairs, Huawei, said, "Huawei has served and collaborated with public and private sector partners over the past 25 years as the leading

global carrier, enterprise solution provider, and creator of cutting-edge consumer products. In Pakistan, our objective is to support the government in building a robust ICT talent ecosystem and accelerate the digitalization progress. We work closely with our partners to create solutions that optimize the outcomes for them."

Huawei Cloud is on the cutting edge of global technologies due to the rapid advancement of AI and foundation models, offering collaborative heterogeneous computing architecture, cloud native compute with superlative performance, mass data storage, security compliance, lean governance, and flexible deployment.

The attention to green solutions and lowcarbon and carbon-neutral alternatives of physical infrastructure drew the attention of many stakeholders as Pakistan is deeply affected by climate change. Green antennas will help build efficient 5.5G networks, especially as there are no limits to deployment with optical and electromagnetic transparency, which will reduce site acquisition time and increase capability. Moreover, there is improved coverage and energy savings.

The shift to solar power solutions that are being optimised to limit the effect of shadow due to congestion is a key component of greening the entire network.

With customer-centricity as its core value proposition, Huawei delivers cutting-edge, innovative, highly reliable, low-latency, and secure cloud services. Huawei Cloud is becoming a solid cloud foundation and robust engine for intelligence, delivering innovative, resilient, and trustworthy cloud services and industry solutions across different sectors in a more innovative, inclusive, and open

Coupled with top-notch networks and infrastructure, high-performance computing and AI solutions tailored to various industries such as e-commerce, automotive, finance, and government are the hallmark of Huawei's approach. The capacity to create tailored solutions that are scalable and feed into a business case makes the approach unique.

From manufacturing and electric power to education and beyond, Huawei's new launches signify the start of a new era of intelligence, efficiency, and environmental consciousness, setting the stage for a brighter and smarter future. At a time when AI will reshape almost everything, AI is a key strategy at Huawei.

Held at the Huawei Smart Office, with automation and green technologies, the Digital Week gave visitors a sense of the workplaces of the future. As investments are made in solutions that reduce latency and waste, space and services will be optimised. The displays and presentations set up for the edification of the visitors, provided a clear directional overview of the progression of technologies and the rapid acceleration in development in recent years. Organised thematically, the presentations looked at the Gigabit Experience Network, Green Sites, the Connectivity Network, and the Digital Experience. The age of intelligence is, and will continue to be, characterised by advancements

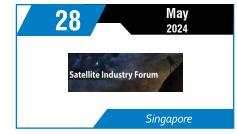
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