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The latest in Telecom, ICT and SatCom sectors of the Middle East, Asia and Africa



**ITU invites collaboration for
metaverse interoperability**



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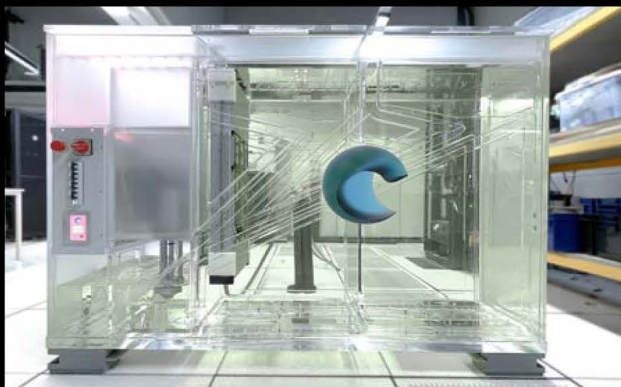
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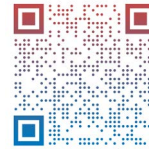
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Contents

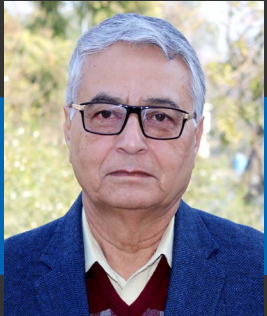


Articles

- 8 What's coming to telecoms in 2023?
- 12 Nokia Technology Vision 2030 in metaverse
- 26 Cybersecurity in the spotlight at Intersec 2023 supported by Government Partners DESC and UAE Cybersecurity Council
- 28 Cybercriminals eye passwords and cloud vulnerabilities with a sharp rise in attacks expected in 2023
- 33 2023 Technology Predictions from Cloudflare

Telecoms

- 15 Ooredoo Kuwait and Ericsson upgrade the network's billing system to enable 5G evolution
- 24 stc is the most valuable telecom brand in the Middle East with a value of \$12.3 billion: Brand Finance
- 30 stc, Nokia and MediaTek first to switch on 5G 4 Component Carrier Aggregation (4CC-CA) in the MEA
- 32 e& named MEA's most valuable portfolio of telecom brands by Brand Finance
- 40 etisalat by e& collaborates with Huawei to introduce Anywhere, Anytime Mobile Portable Private Network Connectivity



Editor's Note

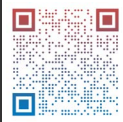
Dear Reader,
Welcome to the latest edition of Teletimes.
As we head into 2023, it's important to look at some of the factors that will continue to shape the telecom industry moving forward. Being most relevant to our audience, these factors will also shape the content of Teletimes this year and perhaps thereafter. Some of these key factors include:

- **5G networks:** The roll-out of 5G networks is expected to continue to accelerate in 2023, with more countries and regions launching the technology. This will likely lead to increased adoption of 5G-enabled devices and services, such as faster internet speeds, improved network capacity, and enhanced mobile broadband.
 - **Internet of Things (IoT):** The growth of IoT is expected to continue in 2023, with more connected devices and sensors being deployed across various industries, such as manufacturing, healthcare, and transportation. This will likely lead to increased demand for IoT-specific services and solutions from telecommunications companies.
 - **Fiber-optic networks:** The deployment of fiber-optic networks will also increase in 2023 getting picked up in markets left behind - with more companies and governments investing in the technology to improve internet speeds and capacity.
 - **Consolidation:** Mergers and Acquisitions are likely to continue in the telecommunications industry during 2023.
 - **Virtual and Augmented Reality:** With the growth of 5G and IoT, the use of virtual and augmented reality technology is now picking up and will likely increase in 2023, leading to new opportunities for telcos to offer VR/AR services and solutions.
 - **Increased competition and regulatory pressure:** Telcos will likely face increased competition from new market entrants and will continue to be subject to regulatory pressure, leading to a focus on cost reduction and efficiency. Regulatory pressure will also come from the need to regulate and standardize newer industry verticals such as VR/AR/Meta, Fintech and AI.
- If you are an expert in one of the above topics, we would like to invite you to be part of our editorial team. You may write directly to me on khalidathar@teletimesinternational.com

If you are not an expert, but still interested in these technologies - you are at the right place. We will continue to provide you with the latest on these subjects along with news and updates from key players across the ICT space.

Enjoy reading Teletimes!

Khalid Athar
Chief Editor



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Satcoms

- **35** AXESS Networks and Es'hailSat join forces in Qatar
- **45** Yahsat wins best Marine Satellite Technology accolade at Middle East Technology Excellence Awards 2022
- **47** Eutelsat statement on the suspension of broadcasting activities with respect to certain channels in Russia and Iran 47
- **48** European Space Agency joins forces with Euroconsult to support budding space entrepreneurs
- **49** OneWeb acquires 10,000 Hughes LEO Terminals to enable low latency, broadband connectivity worldwide

News & Reports

- **10** UN tech agency seeks open and inclusive metaverse
- **16** SAMENA holds "Rising for industry sustainability & efficiencies" conference in Riyadh
- **19** Huawei's Rotating Chairman confirms company's steady overall development in 2022, ensures continued sustainable survival in 2023
- **38** e& enterprise recognized as a leader by IDC in business and industrial IoT
- **43** Kcell completes the transition to unified billing with the help of Nexign

...and much more

What's coming to telecoms in 2023?

Changing regulations, Web3 and embedded connectivity



A lot has happened in telecoms in 2022 — mergers, regulatory changes and emerging technology. But while service providers (SPs) navigate the changes that 2022 has seen, there's also the changes of 2023 to anticipate. Here, Hamish White, CEO of telecoms software developer Mobilise, shares his predictions on the technology SPs should look to adopt in 2023 and beyond. While many could label 2022 as a tumultuous year, there's been plenty to shout about across the telecoms value chain. Moving into 2023, it's certain there will be more opportunities for growth, thanks to changing regulations, the development of Web3 and the opportunities brought about by the digitalisation of telecoms services through embedded connectivity solutions.

Regulatory changes

2022 has been full of regulatory

changes surrounding in a bid to protect competitive technology markets. In February, the US Senate passed the Open App Markets Act, which seeks to remove the control of Apple and Google over their app stores, creating a more accessible and diverse market. Similarly, in the EU, the Digital Markets Act was entered into force in November 2022, becoming applicable from May 2023. The act will ban practices used by Big Tech that gatekeep services information and uphold a system that eliminates competition and consumer choice.

Most recently, in the UK's Autumn Budget, Chancellor Jeremy Hunt revealed that the government will bring forward the Digital Markets, Competition and Consumer Bill to Parliament before the end of the current session next summer, meaning the UK will see some progress towards regulated Big Tech in 2023.

Each of these sets of regulation stop Big Tech from implementing changes to promote their own products and services over smaller providers, and as a direct result, invite much more competition to the market. More accessibility to smaller SPs will allow them to grow at a faster rate, invest and improve their platforms further and develop new features for end users. With increased competition, a fairer market share and a wider choice, user experience will develop to a level we've not yet seen as we move into 2023.

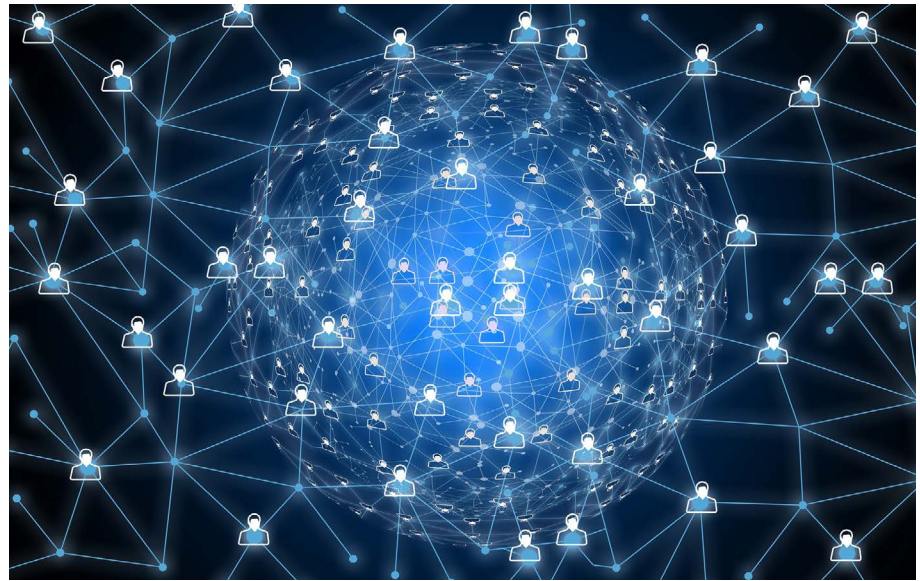
A Web3 world

A phrase first coined back in 2014 by Ethereum co-founder Gavin Wood, Web3 sounds like another buzzword that will pass us by. But in reality, Web3 will change how we use the internet forever. The current form of the internet that we use could be referred to as Web2, but moving forward, we will undoubtedly

see the continued development of a decentralised, more democratic version of the internet, which allows people to communicate and create content without limitations or interference from Big Tech or regulators.

If Web2 is considered two-dimensional, in that it enables reading and writing, Web3 will become three-dimensional, enabling the reading, writing and owning of content. To create this more intelligent and connected internet, we'll need to continue developing the technologies that underlay Web3 and also consider how we use the internet will change. For example, for the metaverse to operate in its ideal way, it will require many of the features only available in Web3. Similarly, Web3 supports the use of non-fungible tokens (NFTs), which are also becoming their own important element that is more than just a way of selling digital art.

So what does this mean for telcoms? Thinking of physical infrastructure, Web3 will operate similarly to the current internet in terms of servers, internet providers and every other element of the ecosystem. The change, and opportunity, for telcoms players lies in the virtual ecosystem. Web3 operates on blockchain principles to facilitate encrypted, decentralised interactions between users.



Could blockchain services become a new service offering for telcos?

Embedded connectivity

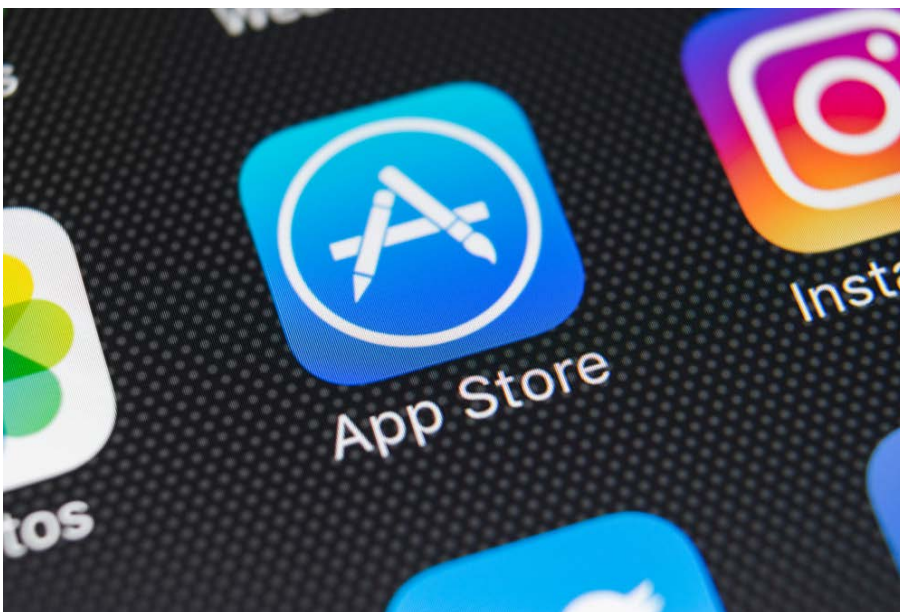
The telcoms business model is becoming more and more about creating an ecosystem of products and services around the core telcom products to drive greater customer lifetime value (CLV) — a particularly relevant strategy today as operators are searching for ways to monetise 5G investments.

Traditional bundling strategies include

internet companies adding mobile or mobile companies becoming quad play by adding TV, voice or fixed line internet to their service offering. This is becoming more sophisticated with operators broadening further in adjacent industries. Think neo-banks, ride-hailing services and travel. Embedded connectivity solutions allow the transcendence of telcoms into these industries in a much more seamless, intuitive way.

For example, connecting to the internet and roaming abroad is a double-edged sword — take the hit of using your domestic subscription abroad or go through the hassle of sourcing and setting up a local SIM. Any business working in travel, like airlines or accommodation sites, could offer eSIMs as part of their offering, allowing customers to cover their connectivity at the same time as booking their flights and hotel. In 2023 we'll be sure to see a growing number of applications and real-life examples where telcoms enters other markets, offering enterprises an additional revenue stream.

While we can't be certain of exactly what twists and turns lie ahead, telecom service providers will undoubtedly see greater opportunities, and hopefully a more level playing field, moving into 2023. **T**



UN tech agency seeks open and inclusive metaverse

New ITU focus group invites collaboration for metaverse interoperability

The International Telecommunication Union (ITU) has established an expert focus group to work towards international technical standards for the metaverse.

The focus group offers a venue to start laying the groundwork for technical standards that can help create an underlying technology and business ecosystem that encourages market entry, innovation, and cost efficiency in a sector expected by some industry analysts to grow to a value of nearly USD 800 billion by 2024.

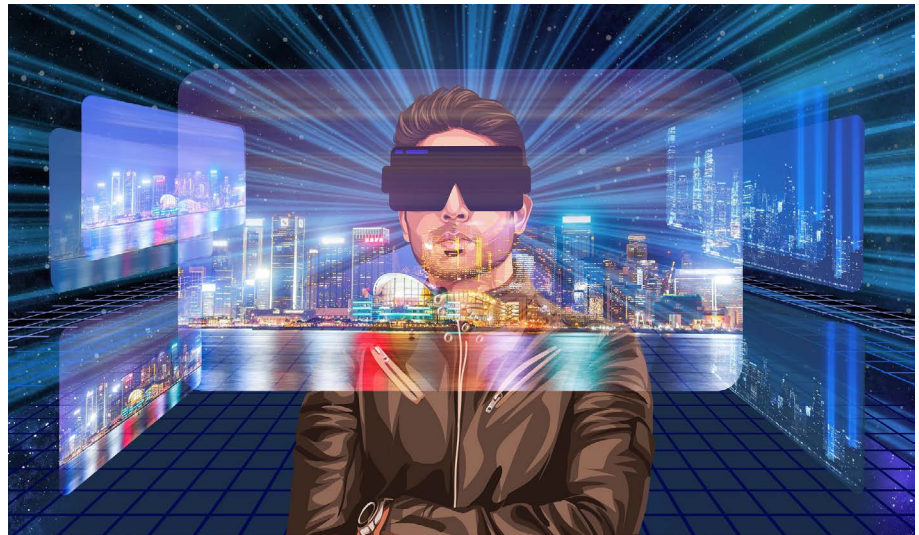
"The metaverse and its layers of technologies can help human development and progress," said ITU Secretary-General Doreen Bogdan-Martin. "The work of this ITU focus group is the first step in ensuring that these technologies work well and that they work for all. The benefits of the metaverse should be shared broadly and equitably, and the risks should be well understood and addressed."

Metaverse standardization roadmap

ITU, the United Nations specialized agency for information and communication technologies, is mandated by governments to expand digital connectivity and promote sustainable digital transformation.

The ITU focus group aims to develop a roadmap for setting technical standards to make metaverse services and applications interoperable, enable a high-quality user experience, ensure security, and protect personal data.

"Standards development must be driven by everyone that will rely on the



resulting standards," said Seizo Onoe, Director of the ITU Telecommunication Standardization Bureau. "This focus group will support our work together to envision technology use cases for the metaverse, determine the associated technical requirements, and develop standards that help meet these requirements on a global scale."

Public-private expert consultation

Uniquely in the United Nations family, ITU brings together a global membership of 193 Member States and over 900 member companies, universities, and international and regional organizations to work on issues such as technical standardization.

ITU focus groups, open to all interested experts, accelerate standardization by leading intensive studies in areas of rapidly evolving strategic importance. The metaverse focus group will be active for one year and will conduct "pre-standardization" work as a basis for developing new ITU standards.

To stimulate cohesive metaverse standards development, the focus group aims to elaborate common terms and definitions and promote collaboration among relevant standards bodies. The group will report to the ITU Telecommunication Standardization Advisory Group.

"The establishment of this focus group is very important to define in a timely manner the standards that contribute to a secure and interoperable metaverse and enable growth and prosperity," said Abdurahman M. Al Hassan, Chairman of the ITU Telecommunication Standardization Advisory Group from the National Cybersecurity Authority (NCA) of Saudi Arabia.

The focus group will meet for the first time in Riyadh, Saudi Arabia, on 8 and 9 March 2023, hosted by NCA, following an ITU forum on embracing the metaverse on 7 March, co-organized by ITU and NCA. The forum and meeting are open for online participation. **T**



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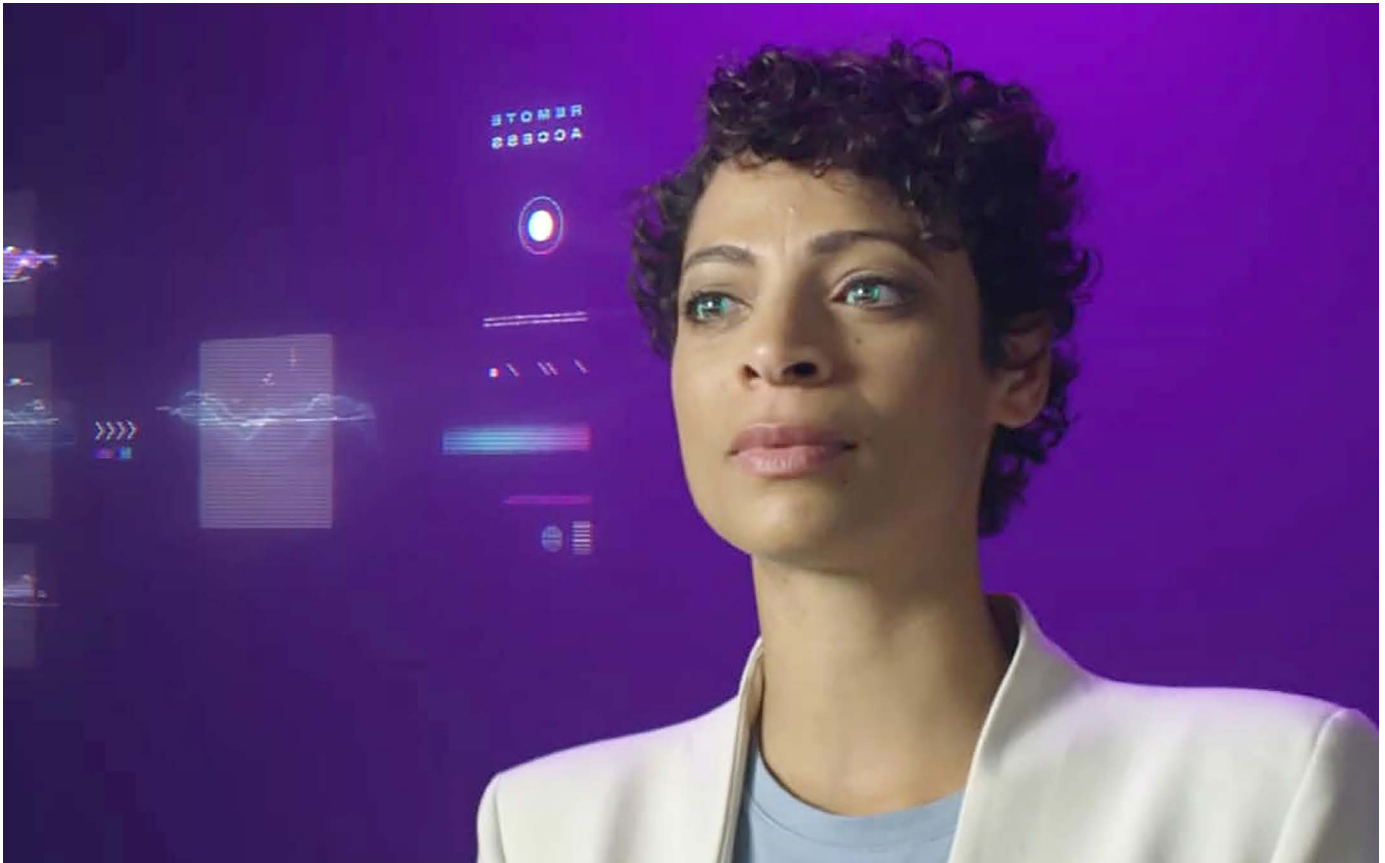
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Nokia Technology Vision 2030 in metaverse



Metaverse explained

Imagine a shared virtual universe, where the digital and physical fuse together to create unprecedented opportunities that redefine the very way we live, work, play and socialize. While the next decade is set to be marked by massive technological progress, it will be the coming together of cutting-edge innovations in software, semiconductors, the Internet of Things (IoT), blockchain, virtual reality (VR), augmented reality (AR), digital twins, artificial intelligence and machine learning (AI/ML) that will trigger the creation of a transformative digital space.

Enter the metaverse, a highly interactive three-dimensional virtual domain where real-world conditions can be simulated by combining a multitude of Internet functions. It is a spectrum of digitally augmented worlds, realities, and business

models. In the metaverse people can use personal avatars to seamlessly execute all kinds of activities, whether work or recreation in a truly immersive digital environment.



Pekka Lundmark
President and CEO, Nokia

Despite the ongoing debate over the definition of the metaverse, there is hardly any doubt on how the technology will spearhead the evolution of the Internet in the future. According to the technological research and consulting firm, Gartner, by 2026, 25 percent of people will spend at least one hour a day in the metaverse for work, education, socializing, entertainment and shopping.

With time, engagement will rise as the metaverse becomes device independent and goes beyond the confines of a specific location - untethered from Wi-Fi or wireline connections - and grow into an all-pervasive entity. The benefits it will bring are astonishing. The metaverse will negate geographical distances, envelop users in deep immersive experiences, enhance social interaction, improve healthcare, education, gaming and generate novel business opportunities through the creation

of virtual economies and currencies. Citi estimated the total addressable market for the metaverse economy could grow to between \$8 trillion and \$13 trillion by 2030. It would also reshape consumer behaviour and industrial production. Not to mention, it will also have a significant positive impact on sustainability practices.

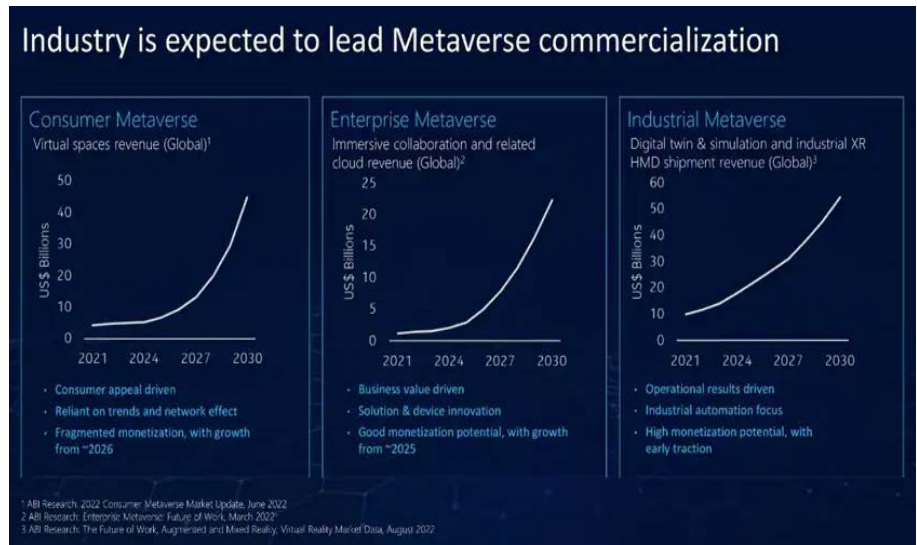
How will the metaverse emerge?

The metaverse will emerge out of two broader trends - human augmentation and the fusion of digital and physical. It will further expand by 2030 as every connectible physical device is connected. The primary objectives of human augmentation are the improvement of human-computer interfaces and the creation of fully immersive experiences. Add-ons such as VR goggles, extended reality (XR) glasses, remote-controlled haptic feedback and brain-machine interfaces will enable users to interact in the metaverse.

Digital-physical fusion entails the creation and manipulation of dynamic representations of real-world objects, systems, and processes in the digital world. Digital twins of vehicles, warehouses, and production lines are already used by modern manufacturing and logistics facilities to increase output, lower costs and improve worker safety. By 2030, this technology will be widely used across businesses. Ubiquitous, next-generation networking will make this happen.

The building blocks to bring the metaverse ecosystem into reality are being put into place. The way it will work is still being defined. Nonetheless there are myriad issues that need to be addressed. For instance, developing the appropriate hardware and software, ensuring interoperability, standardization, preempting legal and commercial bottlenecks and the most vital aspect, deploying a robust and powerful network that will power the metaverse.

While many aspects of the metaverse are still surrounded by much hype and little clarity, the two key technology supersets



that provide the foundational support to the metaverse are Web3 and cloud, especially edge cloud. Cloud computing forms the bedrock for digital transformation across all sectors and the focus, increasingly, is on making network infrastructure wholly cloud native and primed to take advantage of a distributed cloud-based architecture.

Another crucial aspect that needs to be taken into consideration pertains to efficient multimedia distribution without which there will be no metaverse. As content starts taking complex shape and form, the services delivering such experiences like 360-degree video streaming, spatial audio communication and ultra-low latency video applications,



Nishant Batra
CSTO, Nokia

need to be fit for purpose.

Multimedia standards - Moving Picture Experts Group (MPEG) and 3rd Generation Partnership Project (3GPP) - play a major role in enabling interoperability between devices and services. For instance, MPEG-I and versatile video coding (VVC) will pave the way for truly interactive and immersive metaverse experiences.

Not one but many metaverses

Nokia believes there will be multiple metaverses and not one. Each of these will cater to different customers, companies and communities. They fall under three broad categories: industrial, enterprise and consumer.

These metaverses will have commonalities, connect to each other at varying degrees and share technologies, devices and interfaces. Yet they will differ when it comes to applications and business models.

Industrial - Some of the most significant and extensive potentials of the metaverse lie within the industrial sector that serve as the backbone of our economies. Although technologies related to the industrial metaverse are still in their initial stages, it has already become a force of business innovation. The digital twin is one such example that blends digital and physical realities and is revolutionizing many

industries, ushering in cost, productivity, safety and flexibility gains.

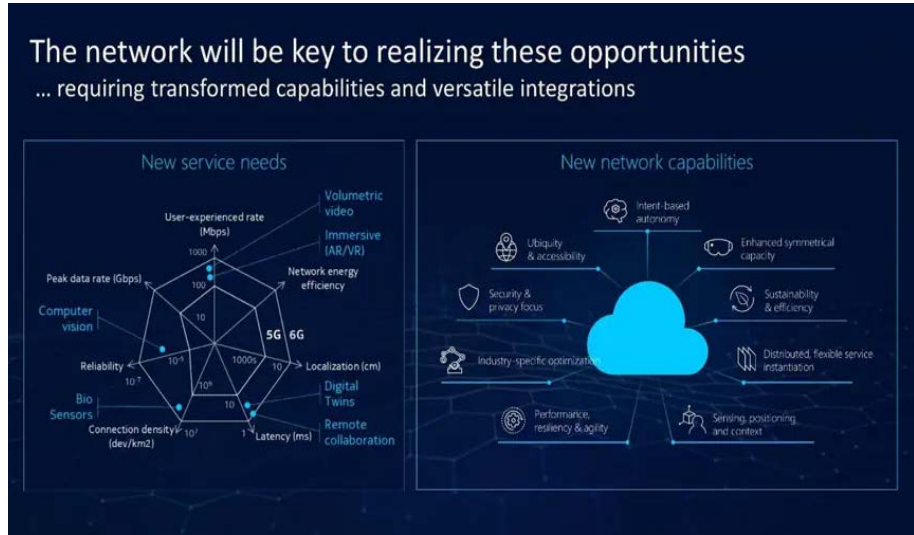
In the next few years, industrial operational technology (OT) systems will begin merging with the metaverse for monitoring and analysis and direct control of operations. Additionally, industries will gain the ability to reconfigure their operations to constantly evolving supply and demand. Industrial and enterprise metaverses will invariably interact. A single product from the same company will pass through both as it moves from the drawing board to the factory floor. As IT systems in headquarters merge with OT on the factory floor, the distinctions between these two business-focused metaverses will blur.

Enterprise -The availability of better communication and collaboration tools along with XR and VR technologies is helping enterprise metaverse to take shape. It is poised to take over core productivity applications that make business function and link up with its industrial peer, merging the IT systems at HQ to the OT systems on the shop floor.

Consumer - There is considerable buzz surrounding the consumer metaverse, but the concept suffers from the dearth of application ideas and business models. Some noteworthy progress in gaming and VR social media is taking place but progress will depend on a host of other considerations, including, the size, form factor and cost of VR headsets and the lack of mobility in XR. These drawbacks could hold back the consumer metaverse from realizing its full potential.

Network driving the metaverse

The metaverse with all its enormous capabilities cannot thrive without a powerful and omnipresent connectivity architecture. Hence, the network will be the decisive enabler of the opportunities we expect the metaverse to deliver. "We need robust, flexible and extremely powerful networks. We need significant advances in latency, bandwidth and speed," says Nishant Batra, Nokia's Chief



Strategy and Technology Officer (CSTO). "We have already laid the connectivity foundation with 5G, but we need a continued network evolution over the next 10 years for the full metaverse ecosystem to thrive," he adds.

The networks of the next decade will need to deliver optimal connectivity and massive capacity and scale if they were to cater to the rising demands of the metaverse. Private specialized wireless, 5G-Advanced and 6G will underpin the metaverse as it expands across all sectors.

Today, 5G gives us a sneak peek into how the metaverse will work by supporting many initial industrial AR use cases with specialized headsets and consumer AR applications over smartphones. The real change will come with the deployment of 5G-Advanced from 2025 when XR is truly unleashed. The sheer power of the network will help free the metaverse from indoor settings. More uplink bandwidth and better latency will mean amplified immersive, near-photorealistic visual overlays and superior responsive interactions. Capacity improvements will support large volumes of simultaneous XR users and facilitate the mapping of larger and more sophisticated digital twins.

Collaboration is key

With the arrival of 6G in 2030, the

metaverse will take a generational leap, granting the ability to directly manipulate the physical world through digital means. 6G will pave the way for enhanced network intelligence and application awareness, as well as increased uplink capacity and reduced latency. As a result, an infinite number of users are exposed to exceptionally immersive holographic metaverse realities, which they experience synchronously and persistently. By 2030, XR will have become ingrained in industry and enterprise, heralding the start of the consumer XR revolution as glasses are mass-produced at low cost. The unique sensing capabilities of 6G will enable the network to create digital twins of every physical aspect in real-time.

All of this leads us to recognize that the metaverse cannot be exclusive. It is a massive undertaking that will necessitate a global effort and ecosystem-wide collaboration. To be successful, the metaverse must be open, safe and secure, environmentally sustainable and all-inclusive, inviting diverse players into a digital community that encourages innovation and translates to more value for all involved.

"No one will be able to own the metaverse. We need collaboration to build it and to ensure it achieves its full potential," says Pekka Lundmark, President and Chief Executive Officer (CEO) of Nokia. **T**

Ooredoo Kuwait and Ericsson upgrade the network's billing system to enable 5G evolution

Ooredoo Kuwait has partnered with Ericsson to implement Ericsson Billing across its network. The billing system upgrade has enabled 5G evolution across Ooredoo Kuwait's network and supported in developing competitive marketing strategies for a variety of 5G products.

Ericsson Billing has significantly improved Ooredoo Kuwait's customer experiences and increased operational efficiency leading to better Lead to Cash (L2C). As the system implements an information security policy with centralized Identity Management (IDM) and transport layer security, it offers best-in-class billing security that is in line with Ooredoo Kuwait's group security policy.

Ericsson Billing offers Ooredoo Kuwait a low-risk, high-reward way to collect and secure revenue streams and capitalize on business possibilities in both traditional telecommunication and digital services, such as 5G and Internet of Things (IoT). It also supports Ooredoo Kuwait in reducing the total cost of ownership by optimizing system performances to increase their self-sufficiency.

Dina Subuh, Director, Technology Capability Management at Ooredoo Kuwait says: "Through Ericsson Billing, we witnessed the leveraging on the flexible real-time billing



capabilities to offer enhanced experiences to our large subscriber base. Evolving our billing system has brought efficient improvements across our network that has supported our ambition to drive 5G innovations and helps us accelerate the nation's digital transformation journey."

Kevin Murphy, Vice President and Head of Ericsson Levant Countries and Global Customer Unit Ooredoo Group at Ericsson Middle East

and Africa, says: "Being able to integrate well into complex Information Technology (IT) environments, the Ericsson Billing ensures smooth product and platform integration with existing components on Ooredoo Kuwait's network. We are happy that the Ericsson Billing system has supported Ooredoo Kuwait evolve its infrastructure to capture and secure new revenue streams while taking advantage of business opportunities from both traditional telecom services as well as digital services like 5G and Internet of Things."

Ericsson Billing is a part of Ericsson's Digital Business Support Systems (BSS) portfolio that is designed to support customer-centric business operations and digital engagement, enabling operators to monetize enhanced customer experiences and support business models for existing or future innovations. Having a longstanding partnership, this latest collaboration sees Ericsson reaffirm its commitment to continue supporting Ooredoo Kuwait capitalize on a variety of digital business prospects and aid the nation's digital transformation journey. ■



Dina Subuh - Director Technology Capability Management, Ooredoo



Kevin Murphy - VP and Head, Ericsson Levant Countries and Global Customer Unit Ooredoo Group at Ericsson MEA

SAMENA holds “Rising for Industry Sustainability & Efficiencies” Conference in Riyadh

The RISE Conference focused on fostering understanding of the complex notion of "ICT sustainability"



Eng. Abdullah Alswaha
MCIT, Saudi Arabia



Eng. Olayan AlWetaid
Group CEO, stc



Doreen Bogdan-Martin
Secretary-General, ITU



Bocar BA
CEO and Board Member of SAMENA Council



Eng. Salman Al Badran
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CEO, Arabsat

In strategic collaboration with stc Group, Mobily, China Mobile International, the Communication, Space & Technology Commission (CSTC) of Saudi Arabia, and the 193 Member States and private-sector driven UN premier ICT agency, the International Telecommunication Union (ITU), SAMENA Telecommunications Council held its Rising for Industry Sustainability & Efficiencies (RISE)

Conference on 11th January 2023 in Riyadh, Saudi Arabia,

The RISE Conference focused on fostering understanding of the complex notion of "ICT sustainability", and on rising to new challenges and making progress as new digital applications, services, platforms, and business and operating models surface, including for

terrestrial and satellite service providers.

RISE, inspired by accelerated digital transformation in Saudi Arabia, which has secured G5 regulatory classification with its progressive policy-making and regulatory approaches, also brought under focus new needs of the businesses, economic sectors and industries, particularly ICT and Financial Services,



and the society at large.

At a time when Saudi Arabia's MCIT, under the leadership of H.E. Eng. Abdullah Alswaha, Minister of Communications and Information Technology, is leading key digitalization efforts across the public sector and when a robust and cutting-edge digital architecture has been created in Saudi Arabia in alignment with the national Vision 2030, the RISE Conference aimed to extend knowledge support on multiple areas.

The Saudi Communication, Space & Technology Commission (CSTC, formerly CITC), led by H.E. Governor Dr. Mohammed Altamimi who delivered a keynote during the opening of RISE, also has been a decisive force that has empowered the Saudi ICT ecosystem to progress and grow in the desired national policy direction. The Commission continues to emphasize on the need for regional regulatory authorities to enhance strategic cooperation in developing the digital economy and is pursuing a long-term vision of digital transformation and sustainability at its heart.

As UN specialized ICT agency with



Dr. Mohammed Altamimi
Governor, CSTC

focus on ICT development throughout the world, ITU, with Doreen Bogdan-Martin having taken office as the first woman Secretary-General and who also delivered a strong message during RISE as the first main conference of the year 2023, has been promoting the need for collaborations and partnerships, and the necessity to address challenges and opportunities offered by ICTs in the areas of innovation, governance, education, job creation and economic growth.

Furthermore, RISE brought together leading Private-Sector leaders from

across the industries, including from the financial services and terrestrial connectivity providers as well as space ecosystem key players, to further the dialogue on Sustainable ICT Development.

Eng. Olayan AlWetaid, Group CEO of stc and Chairman of the Board of Directors of SAMENA Council, who delivered a welcome message during RISE, had earlier stated that "As the Kingdom's maturity shifts into a world-class digital nation driven by Vision 2030, among the many initiatives now taking place within the Kingdom, the RISE Conference is structured to address the emerging needs and challenges of the digitally transforming businesses, economic sectors, telecom industries and the society at large becoming a platform toward sustainability in investment and improved collaborations."

Eng. Alhamed Alanezi, CEO of ARABSAT and Board Member of SAMENA Council, stated that "The future of sustainable innovation and development in the ICT field has to be anchored on complementarity between the terrestrial and satellite industries with the objective of not only empowering urban communities but to also not leave



anyone behind. Alhamedi added that a robust digital economy is not resilient and sustainable enough without bridging the digital divide.

Eng. Salman Al Badran, CEO of Mobily and Board Member of SAMENA Council, who was among the key partners to make RISE possible, had stated that “We support SAMENA Council's initiative to address ICT sustainability challenges and various other issues.”

Bocar BA, CEO and Board Member of SAMENA Council, expressed that “The RISE Conference aimed to add a new dimension to how key stakeholders from within the ICT Industry, including

terrestrial and satellite segments and beyond, and now also from leading financial institutions, need to work together to overcome the challenge of building next-generation digital infrastructure, which should ensure digital inclusion and sustainability in investments and in ICT development.”

The Conference began with exploring what the future looks like for all stakeholders, including Operators, in a meshed world where economic, social and business activities require advanced, resilient and secure telecom networks. Keynotes and discussion sessions examined various aspects of a sustainable digital future, and the types

of policies, strategies and measures required to ensure, for example, that ICTs are transformed to become greener, enabling a truly sustainable digital future.

RISE is a new flagship leaders-centric industry meeting by SAMENA Council to assist proactive engagement and industry discourse within the SA-ME-NA region as well as among regional policymakers and regulatory authorities. RISE is anticipated to help start the year 2023 with fresh perspectives on ICT sustainability and how ecosystem players should strive forward in meeting both individual and collective digital transformation goals.■

stc Group to continue Chairmanship of SAMENA

SAMENA Telecommunications Council has announced that its Board of Directors will continue to be spearheaded by stc Group; a Founding Member of the Council.

In strategic collaboration with stc Group, Mobily, China Mobile International, the Communication, Space & Technology Commission (CSTC) of Saudi Arabia, and the 193 Member States and private-sector driven UN premier ICT agency, the International Telecommunication Union

(ITU), SAMENA Telecommunications Council held its Rising for Industry Sustainability & Efficiencies (RISE) Conference on 11th January 2023 in Riyadh, Saudi Arabia. Following the RISE conference, the Board of Directors of SAMENA Council congregated at Fairmont Riyadh, preceded by General Assembly of the other Members of the Council.

Through consensus, Chairmanship of stc, represented by Eng. Olayan

Alwetaid, Group CEO of stc, was renewed for the 2023-2024 term. The Board indicated confidence in stc's leadership, and Chairman Alwetaid expressed his commitment to deliver on the expectations of the Board and the SAMENA Council.

From Saudi Arabia, Eng. Salman Al Badran, CEO of Mobily and Eng. Alhamedi Alanezi, CEO of Arabsat, are also among the Board Members of SAMENA Council.■

Huawei's Rotating Chairman confirms company's steady overall development in 2022, ensures continued sustainable survival in 2023

In a new year message shared with public, Huawei's Rotating Chairman Eric Xu confirmed that the company had successfully pulled out of crisis mode in 2022 and managed to get back to business as usual. The company expects to round off the year with a total revenue of 636.9 billion yuan, which is in line with forecast.

"It's been all hands-on deck for the past year, with every single member of the Huawei team working hard to navigate challenges and improve the quality of our operations." Xu said in the new year message. "We are also immensely proud of the Huawei team: We've managed to keep our heads above the water because we fought together, united as one. This is especially true of our frontline staff outside of China – those who have held the fort to serve our customers despite the adverse impacts of COVID-19 and external restrictions."

Xu noted that Huawei's ICT infrastructure business maintained steady growth during this year, and the decline in the device business has abated. Further Huawei achieved rapid growth in digital power and Huawei Cloud, and took the competitiveness and user experience of its intelligent automotive components to new heights.

According to the company's Rotating Chairman, 2023 will be the first year that Huawei returns to business as usual with external restrictions still in place, and hence, the priorities for Huawei looking ahead to 2023 will be proactive about improving the business environment and more effectively managing risks, stay focused and double down on commitment to building the foundations of the digital economy and driving green and sustainable development. This will lead to creating greater value for Huawei customers, partners, and society at large. In



"It's been all hands-on deck for the past year, with every single member of the Huawei team working hard to navigate challenges and improve the quality of our operations."

Eric Xu - Rotating Chairman, Huawei



specific, this includes:

Maintaining heavy investment in R&D– Huawei aims to fully commit to future-oriented basic research and open innovation, and focus its limited resources on value-creating domains. In addition, to upholding open collaboration across the value chain to guarantee its supply continuity and resilience.

Securing victory through quality– External restrictions are a fact of life these days, so it's more important than ever that we make Huawei aims to make the company name synonymous with high quality in the ICT industry, and secure victory through quality. To continuously create value for customers, Huawei will enhance total quality management based on ISO 9000 standards, and implement a strategy-driven, all-hands, and full-process quality management system across its entire value chain in order to deliver high quality to its customers in alignment with their needs.

Commit to progress and seize opportunities to grow the harvest– Huawei will work towards unearthing digital opportunities in various industries to drive effective growth. Huawei Cloud needs to become the foundation – and enabler – of digital transformation for both Huawei itself and vertical industries. In digital power, Huawei aims at investing in strategic opportunities, making its products more competitive. In device business, all domains need to put the product at the center of everything they do and concentrate resources on developing best-in-class products that truly shine.

Press ahead with transformation to inject vitality into the organization and motivate everyone to forge ahead– Huawei aims to cultivate local teams to its long-term survival and development in local markets outside of China, in order to actively build out and manage its local workforce.

"2023 will be an extraordinary year. Forge ahead and rise above the challenges that come our way. Let's put in the work to carve out our long-term, sustainable survival", concluded Xu. ■

(ISC)² UAE Chapter and Huawei to jointly accelerate UAE cybersecurity capability and ecosystem

(ISC)² UAE Chapter, a non-profit professional cybersecurity organization involved in cybersecurity training and certifications signed a Memorandum of Understanding (MoU) with Huawei to promote cybersecurity awareness, professional training and certification. The initiative supports knowledge transfer and education towards a robust talent pool for cybersecurity capacity building in the UAE. It will also help create and maintain a strong and vibrant cybersecurity local ecosystem to position the UAE as a regional and global trusted digital hub. Moreover, the initiative aims to harness the power of collaboration between the tech industry and other key sectors in the UAE to elevate cybersecurity and privacy protection.

Anumod Xavier, (ISC)² UAE Chapter spokesperson said: "UAE's cyber safety and digital security strategy aims to protect citizens and residents' cyberspace as well as reinforce digital trust. As the leading global organization involved in cybersecurity training and certifications, we support this mission by empowering UAE cybersecurity professionals with the skills and competencies to safeguard the country's digital economy. Our partnership with Huawei significantly expands our capabilities, leveraging the company's decades-long experience and expertise in protecting some



of the world's most critical assets."

Aloysius Cheang, Chief Security Officer, Huawei UAE said: "The agreement between (ISC)² UAE Chapter and Huawei marks a major milestone in the development of a strong and vibrant local cybersecurity ecosystem. Cyber threats are constantly changing, and this agreement will go a long way in nurturing a cybersecurity ecosystem with talented and professional cybersecurity participants. Additionally, the partnership demonstrates both parties' long-term commitment to sustainable development in the UAE as a leading global digital hub."

The joint efforts of an international cybersecurity professional association and a global digital leader constitute a

significant step in establishing a more secure, trustworthy, and prosperous cyber oasis in UAE. Both parties will promote cybersecurity awareness, professional training and certification for cybersecurity participants in UAE while facilitating UAE's cybersecurity knowledge transfer and education. Those efforts will ultimately nurture a strong cybersecurity talent pool to enhance the UAE cybersecurity capacity building.

A global shortage of cybersecurity experts continues to exert pressure on the industry and puts organizations at risk of cyber threats. Data shows that 57% of organizations have unfilled cybersecurity positions, and the global cybersecurity workforce was short some 3.5 million workers in 2021. Such partnership efforts will help reduce the talent gap in the UAE.

Maintaining cybersecurity over the long term has been an indispensable 11th pillar in the UAE "Principles for the 50". It is thus even more imperative to enrich the whole cybersecurity ecosystem to make sure that all stakeholders can well support the nation's cybersecurity development. This MoU signing is an excellent first step in establishing collaboration between key industry actors and professional associations in UAE. In the near future, such collaboration could also encourage more organizations to join in to further build the ecosystem. ■



Aloysius Cheang
Chief Security Officer, Huawei UAE



Anumod Xavier
(ISC)² UAE Chapter spokesperson

Huawei collaborates with local partners to launch Huawei Cloud Startup Program in Kuwait

Huawei inaugurated the first edition of the Huawei Cloud Startup Program in Kuwait on 20 December 2022. The program was launched in collaboration with local partners, including the Central Agency for Information Technology, Rasameel Investment Company, Youth Assembly of Kuwait, and eWTP Arabia Capital.

The program calls on Kuwait startups in the fields of Financial Services & Insurance, Healthcare, Education, Telecommunications, eCommerce/Internet, Media & Gaming, and Mobile applications to compete for a chance to enter the Huawei Accelerator program. The program offers startups the opportunity to elevate their businesses by leveraging Huawei's leading technology expertise and through exclusive mentoring sessions, networking support, and technical training.

During the event, Dr. Ammar Al Husaini, Acting Director General of CAIT; Rico Lin, CEO of Huawei Kuwait; Dakhil AlDakhil, CEO of Rasameel Company; Jessica Wong, Founder and Managing Partner of eWTP Arabic Capital delivered speeches and shared their opinions on enabling digital transformation and supporting the startup ecosystem.

The event received support from members of the youth assembly like Jamila Al Otaibi and Saleh Al Shamari. Local influential entrepreneurs such as Abdulaziz Al Loughani, CEO of Floward; Sulaiman Al



Tarrah, CEO of Bleems, and Eng. Ashwaq Al Mudhaf, CEO of Accelerate Incubator, also shared their experience within multiple SME domains.

Dr. Ammar Al Husaini, Acting Director General of CAIT, said: "The Huawei Cloud Startup Program seeks to encourage youth entrepreneurship in Kuwait, unlocking the path of promising opportunities for startups to access the technology and market knowledge from Asia. It also supports accelerating the digitalization of SMEs, which will contribute to the country's digital transformation."

Rico Lin, CEO of Huawei Kuwait, said: "Huawei will devote technological and human resources, leverage its complete business portfolio in the cloud-plus-cloud collaboration space to foster technological

innovation, global and local services and business ecosystems to accelerate the growth of startups. We will utilize the startup program to offer Kuwaiti entrepreneurs access to capital, technology, and the market."

Startups can register via the website until 31 January 2023. In addition to the training and technology support, branding opportunities, joint expansions, and solution support, the program features three levels of benefits, the first level encompasses a voucher for \$5,000, the second level will include a voucher for \$8,000 and the third level comprises a voucher for \$15,000. The program will culminate with a pitch and migration at the end of March 2023. The top 10 finalists will pitch live in front of a jury panel, followed by the migration of the startup solutions to the cloud.

The Huawei Cloud Startup program aims to support innovations by the youth, the digitalization of local SMEs and accelerating their business growth. HUAWEI CLOUD runs the initiative in partnership with local venture capital firms and local governments. The program has proved highly successful around the globe and is now available in Kuwait for the first time to support the local startup scene and provide them with technical and business support. **T**



Telecom Egypt partners with Huawei Technologies to implement Africa's first Green Tower

Telecom Egypt in cooperation with Huawei Technologies has announced the implementation of the first eco-friendly, integrated solution to provide mobile networks via utilizing environmentally friendly tower made of Fiber Reinforced Polymer (FRP), with wireless availability.

Through this cooperation, Telecom Egypt will become the first operator in Egypt and Africa to install this green tower which will serve as the optimum steel alternative, which causes high emissions of carbon dioxide. The tower is approximately 18m high, with a special camouflage fence made of environmentally friendly materials, supported by integrated wireless access solutions and a green solar energy system. The tower is characterized by its high resistance in severe environmental conditions, such as corrosion due to the exposure to chemicals and high temperatures.

Managing Director and CEO of Telecom Egypt, Adel Hamed, said that the implementation of this type of mobile site in Egypt is unprecedented and has also underscored the efforts done by all those in charge of the project, and their capability of implementing the entire site in a timely manner and a systematic way, as per the best international quality standards that have to do with the green concept solutions.

Adel Hamed further explained that Telecom Egypt's green external sites also depend on modern technologies for wireless access devices, such as the technology of antennas integrated with signal amplifiers, which contribute to reducing the energy consumption of one site by about 40%, if compared to traditional sites.

According to Adel Hamed, these modern technologies also contribute to improving the signal quality by about 20%, when



Adel Hamed
MD and CEO, Telecom Egypt

compared to regular antennas, which will further result in reducing the number of stations to be installed, enhancing the preservation of the environment, and hence achieving the aimed-for sustainable development.

He also added that Telecom Egypt relies on state-of-the-art versions of operating software that support the latest features, pertinent to energy saving, such as the feature of turning off signal amplifiers for some frequencies during low load hours, which helps in reducing energy consumption by an average of 24%.

Jim Liu, CEO of Huawei Egypt confirmed that the company dedicated great attention to developing the infrastructure of Information and Communication Technology in Egypt which is why they have joined hands with Telecom Egypt, the leader in the telecommunications market in Egypt and the Middle East.

He added that Huawei is keen on harnessing all the necessary, innovative technologies to save energy to build a sustainable future, which certainly generates zero carbon emissions. He also pointed out that recent studies have shown that FRP poles produce 43% less carbon dioxide emissions, compared to steel, and reduce



Jim Liu
CEO, Huawei Egypt

E2E energy consumption by nearly half for manufacturers and related transportation.

He also explained that energy solutions for green outdoor sites depend on passive cooling, which eliminates the need for air conditioning and thus leads to a 47% reduction in energy consumption compared to sites with indoor rooms for devices. He also clarified that the process depends on the integration of solar energy with the main electricity network, with relative dependence on green energy, namely the solar one, as the solar panels will provide about two kilowatts, which will lead to a reduction of carbon dioxide emissions by 20%.

It is worth mentioning that the goal of developing an environmentally friendly green site is to use smart materials instead of the traditional ones that were previously used in mobile terminals. For instance, reverting to FRP in manufacturing leads to minimizing steel sections up to 95%, which results in minimal pollution to the environment. Moreover, it is smarter to use integrated Radio Access Network (RAN) equipment, which has bandwidth carrier dynamic shutdown and time domain deep code shutdown, which will reduce power consumption by about 24% in a low traffic period. ■



Huawei Datacom named a leader in the 2022 Gartner® Magic Quadrant™ for Enterprise Wired and Wireless LAN Infrastructure

Huawei has announced that it was named a Leader in the 2022 Gartner® Magic Quadrant™ for Enterprise Wired and Wireless LAN Infrastructure, the only non-North American vendor positioned in the Leaders Quadrant. Huawei takes it as a milestone and believes it is yet another testament to the global recognition of Huawei's full lineup of network offerings. Huawei's wide range of solutions include the CloudCampus 3.0 Solution, CloudEngine series switches, AirEngine Wi-Fi Access Points (APs), and iMaster NCE automatic and intelligent network management platform.

Enterprise Wired and Wireless LAN Infrastructure market, Huawei has a holistic set of Enterprise Wired and Wireless LAN Infrastructure offerings. Featured products and solutions include the end-to-end CloudCampus Solution across LANs, WLANs, and WANs, feature-rich CloudEngine series switches,

award-winning AirEngine Wi-Fi APs, and field-proven iMaster NCE automatic and intelligent network management platform. To date, these products and solutions have served millions of customers worldwide across industries, gaining high praise in the process.

Huawei remains committed to the global enterprise market, and constantly innovates to set the benchmark for enterprise networks in terms of simplified network architecture, best-in-class hardware design, agile software delivery, and flexible business models.

More specifically, Huawei simplifies the campus network architecture from three layers to two with its solution consisting of the central switch and Remote Units (RUs). Keeping hardware innovation in mind, Huawei has unveiled innovative third-generation Wi-Fi 6 smart antennas and a range of brand-new CloudEngine

switches and AirEngine APs. With regard to software innovation, Huawei stands out with the powerful iMaster NCE automatic and intelligent network management platform that underpins the industry's first L3 autonomous driving network for campuses. When it comes to innovative business models, Huawei differentiates itself from other vendors by launching a leasable and salable cloud management platform model, as well as flexible deployment options, including on-premises, Huawei public cloud, and MSP-owned cloud.

To date, Huawei's campus network offerings have been widely used by customers in over 170 countries and regions across sectors such as public service, education, healthcare, manufacturing, finance, and energy, helping them build a solid digital bedrock for their digital transformation journey. **■**

stc is the most valuable telecom brand in the Middle East with a value of \$12.3 billion: Brand Finance

For the third consecutive year, stc Group has been able to hold onto the top spot as the Middle East's most valuable brand in the telecommunications sector, according to Brand Finance's worldwide 500 2023 study.

Thanks to the group's success, continuous expansion, and growth since the "Dare" strategy launch in 2017. Over the last five years, the brand's value has increased by almost 100%, from \$6.2 billion in 2017 to \$12.3 billion in 2022. This achievement results from the brand's outstanding performance in maintaining its leadership position and enhancing its commercial strength in KSA and the region.

In addition to being the most valuable

brand, stc Group ranked among the fastest-growing brands in the region with a growth rate of 16.7%. stc Bank also increased by 27.5%, climbed 25 places in the Global 500 ranking, the most by any Middle Eastern brand in the study, profiting from the robust



future growth given its dominance in its home market.

The "Brand Finance" report also classifies

brands worldwide by measuring brands' strength globally, using the "Brands Strength" index, external factors, and business performance. It also includes an evaluation of all companies' activities regionally and internationally. stc Group is considered to be the strongest brand in the Kingdom of Saudi Arabia, Bahrain, and Kuwait.

It is worth noting that, Brand Finance is a world leader in brand valuation, and every year it ranks the strongest and most valuable brands. It evaluates more than 5,000 brands in all sectors and regions every year. Moreover, the report "Brand Finance Global 500 2023" includes the 500 most valuable brands worldwide. **■**

iot squared and Dahua Technology partner to advance digital transformation using IoT in Saudi Arabia

iot squared and Dahua Technology has signed a new partnership agreement to advance digital transformation in the Kingdom of Saudi Arabia in support of Vision 2030. The agreement which was signed at the iot squared headquarters in Riyadh, will see the two tech companies collaborate to enrich IoT security and develop new smart surveillance offerings for smart cities.

Speaking on the agreement announcement, Othman Al Dahash, CEO of iot squared, said, "At iot squared, our vision is to provide organizations within the public and private sector with best-in-class cutting-edge IoT solutions that deliver real-time insights for critical decision-making and intelligent operations. IoT brings machines, cloud computing, analytics, and people together to improve the performance and productivity of processes, helping customers digitize processes, transform business models, and improve performance and productivity, while decreasing waste."

"With the support of our new partners



Dahua Technology, we will leverage our deep expertise and technical know-how to support Saudi Arabia's digital transformation efforts, helping businesses to drive cost efficiencies, improve customer experiences, and promote sustainability. With the advancement of IoT said to increase economic productivity by as much as 0.2% of GDP, we look forward to working with our new partner in support of a thriving and dynamic economy," Al Dahash added.

Gari Li, General Manager of Dahua Technology said: "At Dahua Technology, we aim to continue to contribute to the realization of key Saudi Vision 2030 objectives that are concerned with smart cities, Industry 4.0, and IoT. We are delighted to partner with iot squared to enable both of our expertise in the adoption of IoT technologies in various industries in support of our nation's ambitions to have a diverse economy". **■**

stc and SkyFive sign MoU to introduce broadband inflight connectivity to MENA

stc Group and SkyFive Arabia, the leading provider of Air-to-Ground (A2G) based solutions and services has announced the signing of a Memorandum of Understanding (MoU) to introduce inflight connectivity (IFC) through A2G-based solutions to airlines in Saudi Arabia. With plans to further expand across the entire MENA region in the near future, the partnership will deliver unparalleled connectivity that will enrich passengers' travel experience.

Through the MoU, stc aims to contribute towards the Kingdom's digital transformation while providing unrivaled connectivity, be it on the ground or in-air.

Inflight connectivity through A2G-based solutions will enhance airline passengers' experience, who will benefit from access to high-speed connectivity, allowing them to experience high-quality (up to 4K) video-streaming, web browsing, and social media usage.

Eng. Mohannad Makki, VP of Carrier and Wholesale at stc, said: "Having seen Saudis' internet usage rocket by more than 92% in 2021 versus 2020, we know that our customers want to stay connected no matter where they are. Our partnership with SkyFive Arabia is the latest in a series of investments geared towards meeting the rapidly growing demand for high-speed and superior-quality connection services, by introducing innovative technologies



that elevate the user experience. As the Kingdom's digital transformation accelerates, stc is paving the way for our customers and business partners to connect in more ways than ever."

Eng. Hazem Bahy, VP of Sales and Head of Business Saudi Arabia at SkyFive Arabia, said: "We are pleased to partner with stc for this milestone that will benefit the Kingdom's aviation industry and beyond. Air-to-Ground brings broadband connectivity to the skies, providing airline passengers with an unmatched data experience. This unique

service differentiator and digital enabler will undoubtedly enhance passengers' experience so that they can enjoy the same great services in-air as on-ground."

stc and SkyFive Arabia have already tested this state-of-the-art technology on a flight between Riyadh and Jeddah, in collaboration with the Communications, Space and Technology Commission (CSTC) and a leading airline company. Following this, the service is expected to be launched across all deployed routes in the Kingdom and the region by 2025.

The MoU follows the CSTC's earlier announcement of stc as the auction winner for a 15-year license for both spectrum blocks - A2G-based network and mobile satellite services (MSS). The win supports stc's ongoing contribution towards the Kingdom's digital transformation, in alignment with the CSTC's mission to enable innovative NTN (Non-Terrestrial Network) technologies, provide end users with the latest generation of satellite technology, and to cover rural and remote areas in the Kingdom and beyond with the best telecom services. **T**





Cybersecurity in the spotlight at Intersec 2023 supported by Government Partners DESC and UAE Cybersecurity Council

The Dubai Electronic Security Centre (DESC), which works to ensure the emirate becomes a leader in cybersecurity and the protection of information from external cyber threats, has become the official government partner of Intersec 2023, the world's leading trade fair for safety, security and fire protection that will run over 47,000sqm at Dubai World Trade Centre from January 17-19.

Intersec's Cybersecurity sector will host cyber solutions experts, from national leaders to public and private sector professionals, cyber connoisseurs to

advisors, cyber economists to corporate buyers. Among the high-profile exhibitors will be NX Digital Technology, a leading Middle East Artificial Intelligence & Cybersecurity service provider, the UDA's FM Approvals, and Israel's Cellebrite GmbH.

"Intersec brings the entire security supply chain to Dubai," said Alex Nicholl, Show Director at Intersec organiser Messe Frankfurt. "Cybersecurity is an integral part of that, and its importance continues to grow. The biggest names in Cybersecurity in the Middle East and from further afield will gather at Intersec 2023, creating an

unmissable three days for global CTO's, CISO's, Heads of Cybersecurity and System Integrators, among others. It is an honour to have DESC and the UAE Cybersecurity Council as Government partners, emphasising the importance of this burgeoning sector."

DESC will be holding one-of-a-kind cybersecurity awareness session under the initiative Cybernode, developed in partnership between DESC and Thales. Cybernode was launched under DCIPark, which aims to up-skill the cyber workforce in the UAE and beyond, towards achieving a safer cyberspace. DCIPark provides world-class cybersecurity training, crash courses and advanced scenarios.

"Considering today's advancing technology, cybersecurity is an absolute necessity for businesses, especially with remote working culture and digital transformation," said Dr Bushra Al Blooshi, DESC's Head of Research & Innovation. "A recent global study shows that cyber fundamentals fails to exist in certain organizations and processes, which

“ Considering today's advancing technology, cybersecurity is an absolute necessity for businesses, especially with remote working culture and digital transformation ”

can cause major security and financial challenges. Attendees at Intersec 2023 will be able to learn how to prevent this through essential cybersecurity measures, including the Five Pillars of Cybersecurity Hygiene, at these exclusive Cybernode sessions.”

DESC will also press the case on advancing the digital economy when Dr Al Blooshi delivers a second day keynote address entitled Pioneering Digital Economy: Integrated & Innovative Smart Secured Services Ecosystem at Intersec’s invite-

grow by making technologies in their own countries and exporting to others.”

Support for Intersec also comes from Government Partner the UAE Cybersecurity Council. In November 2020, the UAE Cabinet agreed to establish the UAE Cybersecurity Council with the aim of developing a comprehensive cybersecurity strategy and creating a safe and strong cyberinfrastructure in the UAE. The Council, chaired by the Head of Cybersecurity for the UAE Government, contributes to creating

security policing, national security, cyber resilience, blockchain, and smart cities.

“The conference will explore the latest trends, drivers, challenges, and successful case studies across industries that are playing a substantial role in shaping the cybersecurity industry’s growth,” added Nicholl.

Crucial panel discussions include ‘Security Battle in a Converging IT/OT World: Improving Critical Infrastructure Resilience’,



Dr. Mohamed Al-Kuwaiti
Head of the Cybersecurity Council, UAE

only Security Leaders’ Summit, one of four conference tracks running under the theme ‘Integrated Tech For Global Security: Protection, Disruption, Sustainability.’

“To reap the immense rewards of the digital economy, we need to pioneer an integrated and innovative smart secured services ecosystem,” said Dr Al Blooshi. “By collaborating on this aim, I believe communities and countries will always



Dr Bushra Al Blooshi
Head of Research & Innovation, DESC

a legal and regulatory framework that covers all types of cybercrimes, securing existing and emerging technologies, and establishing a robust ‘National Cyber Incident Response Plan’ to enable a swift and coordinated response to cyber incidents in the country.

These two Government Partners will also be leading Intersec’s three-day Cybersecurity Conference, which will deep-dive into cyber-



Alex Nicholl
Show Director, Intersec

‘Enabling Innovation’, and ‘Zero-Trust’ and will feature insights from global, regional, and local industry leaders and experts. The conference will also address new age talent with Talal Alasmi, Director of Information Security – Department of Electronic Information Security at Oman’s Ministry of Education, presenting on the theme ‘Creating Cyber Minds.’

“We are delighted to once again host the Cyber Conference at Intersec 2023,” said His Excellency Dr. Mohamed Al-Kuwaiti, Head of the UAE Cybersecurity Council. “The UAE CyberSECURITY Council will encourage local and international government attendance, promote and highlight local initiatives, and contribute to the three-day dedicated conference program. Cybersecurity and protection of digital assets is top of the agenda globally and our partnership with Intersec reinforces the importance of keeping the UAE safe and secure from cybercrime.”

Cybersecurity and protection of digital assets is top of the agenda globally and our partnership with Intersec reinforces the importance of keeping the UAE safe and secure from cybercrime

Cybercriminals eye passwords and cloud vulnerabilities with a sharp rise in attacks expected in 2023

The cybercriminal is relentless, often sophisticated, and extremely persistent. In a constantly evolving threat landscape in which cloud adoption continues to grow and passwords are highly coveted by nefarious actors, attacks are expected to increase sharply in the coming year. However, this is being met with incredible advancement and innovation from the cybersecurity industry, says Carey van Vlaanderen, CEO of ESET South Africa.

Microsoft published its Digital Defense Report for 2022 which found a 74% increase in password attacks, resulting in approximately 921 attacks per second. "Passwords remain an easy win for threat actors but that is often down to users lending this attack vector to them on a plate. Attackers are cleverly compromising business networks prior to their phishing campaigns in order to look authentic and even when victims believe they are carrying out their due diligence on a site, they can still be duped into believing they are in communication with the real deal," van Vlaanderen explains.

While nearly 1,000 attacks per second is an astonishing amount, there is much more people and businesses can do to reduce this number. "Passwords continue to be something of an inconvenience in people's lives, which is often down to not knowing or even trusting the free security layers on offer. Implementing password managers on personal and work devices can help force unique and strong passwords for all accounts applicable. Most importantly, introducing two-factor authentication on every account will help reduce the impact of phishing campaigns hugely," she adds.

The past year has seen a tremendous increase in businesses and consumers embracing cloud and in 2023 this space will yet again be the target of cybercriminals.



Carey van Vlaanderen
CEO, ESET South Africa

Van Vlaanderen says the seismic shift from traditional on-prem to cloud hosting applications and infrastructure elevates cybersecurity risk.

While cloud services offer incredible benefits, it's imperative that from a risk mitigation perspective, to assign thought and attention to:

- Using a reputable cloud service provider – a fundamental first step
- Optimising and configuration using best practices
- Making use of best-of-breed cybersecurity software
- Multi-factor authentication (which should be standard)
- Encryption (which should be employed wherever possible)
- Strong password policies
- Assigning credentials and rights only to those that require access
- Redundancy is essential, backup and a disaster recovery plan should be enforced

- Test for vulnerabilities timeously

In 2022 spoof emails and ransomware defined the year and look set to remain a leading concern for people, businesses, and cybersecurity teams in 2023. "The damage caused by emails sent by cybercriminals that convincingly look like they originate from people within an organisation is real and extensive. These types of fraud usually try to create a sense of urgency or employ scare tactics to coerce the victim into complying with the attacker's requests. Emails with requests for quick payment should be handled with caution using as emails can be spoofed with legitimate invoices but with cybercriminal banking details," says van Vlaanderen.

Despite ransomware reaching record levels this year, van Vlaanderen says; Many organizations still do not understand where their most valuable data and systems lie, and therefore, have inadequate data and protection. "A good place to start then is to build an understanding of exactly all the data points that exists in your business, enabling a clear strategy to be formulated on the data that is collected and stored. Irrespective of the size of your organization, data protection is a must and can be in the form of staff training, following compliance guidelines, utilizing appropriate software, as well as ensuring data storage is secure and backed up, and that there is a data or disaster recovery strategy in place."

Van Vlaanderen predicts the continued innovation and adoption of smart technologies, IoT devices, car connectivity and infotainment, will also present new attack vectors for cybercriminals in 2023. "Given the reality of attacks becoming more sophisticated and personalized, people and organizations can't afford to be without some form of a protective solution in place, regardless of where the infrastructure is located or what device it is on." ■

stc maintains ISO Certification in Information Security, Quality Management and Business Continuity

stc has announced that it has successfully completed a certification exercise for Quality Management System (ISO 9001:2015), in addition to a surveillance audit of its existing Information Security Management System (ISO 27001:2013) and Business Continuity Management System (ISO 22301:2019). The certification comes after a thorough and vigorous auditing process performed by Top-Certifier, one of the leading consultation firms in ISO certifications.

stc indicated in a statement that the certification process was headed by the Quality Assurance, Cyber Security and Business Continuity Team, and involved several other departments within the company. The process revealed that the practices and procedures implemented within the Company are as per its Quality Management, Business Continuity & Information Security plans. During the evaluation process, the team presented the necessary requirements requested by the international ISO standard in details, while confirming the adherence of internal policies and procedures. The requirements and



Fahad Abdulrahman Al Ali
CTO, stc Kuwait

documented procedures were delivered to the independent auditing team at Top-Certifier for verification prior to the submission.

The ISO Certification in Quality Management, Information Security and Business Continuity comes as a testament to the diligent approach taken by stc to implement policies and guidelines to maintain all business-related operations. While the continuity plan goes beyond any restrictive measures, the team at stc developed a comprehensive management system to effectively control such

incidents in case they occur. Through active monitoring and continuous system enhancements, stc managed to safely continue its operations for customers and stakeholders while abiding to the guidelines imposed by the government.

stc Chief Technology Officer, Engineer Fahad Abdulrahman Al Ali, said, "Maintaining our ISO certifications confirms and demonstrates our commitment to implement robust Quality Management, Information Security and Business Continuity Systems that are adaptable to different circumstances and resilient during times of uncertainty. At stc, we continuously search for new ways to enhance the offerings and solutions we provide to our customers. To maintain the same quality of services to our customers, it is critical that we provide our employees with access to the necessary resources they need through a streamlined and documented process."

He added, "Our focus is to uphold the highest international standards when delivering our digital solutions to customers, while simultaneously implementing our digital transformation strategy. We are committed to supporting our customers and the Kuwaiti community by delivering our range of solutions interruptions-free. We identified the challenges that appeared in our path and transformed them into opportunities to elevate the user experience. This enabled us to introduce new-to-market products that leveraged the strength of our strong 5G network, while revamping our solutions to provide greater access to our individual and corporate customers. Moving forward, we aim to further enhance our offerings and expand our spectrum of digital solutions to cater to the needs of our diverse customer base." In his words of appreciation, Al Ali thanked the team at stc and all those who participated in achieving this great achievement for the Company. ■

certificate

stc maintains ISO certification

**in Information Security,
Quality Management and Business Continuity**



ISO / IEC 27001:2013
ISO 22301: 2019
ISO 9001: 2015



stc, Nokia and MediaTek first to switch on 5G 4 Component Carrier Aggregation (4CC-CA) in the MEA

stc, Nokia, and MediaTek has announced that their successful verification of 4 Component Carrier Aggregation (4CC-CA) in the 5G Standalone (SA) network within the city of Makkah for the first time in the Middle East and Africa. Carrier Aggregation (CA) allows mobile operators to reach higher throughputs by combining different spectrum assets efficiently to enhance the 5G user experience. CA will also allow stc to deliver leading 5G services to its customers, and achieve a faster time to market for new 5G use cases.

The companies used the combination of two FDD carriers (700MHz, 2100 MHz) and two TDD Sub-6GHz band carriers (2300MHz, 3500MHz) using FDD-TDD CA technology. Nokia used its commercial Air-Scale Baseband, massive MIMO, and RRH products, powered by its Reef-shark chipset on stc's live network. MediaTek provided its 5G mobile platform featuring its Release-16 ready, M80 modem.

Bader Allhieb, Infrastructure Sector VP at stc, said: "The region-first trial of 4CC-CA in 5G SA mode reiterates our commitment to provide a world-class experience to our



Bader Allhieb
Infrastructure Sector
Vice President, stc

subscribers."

Ibrahim Al-Abbas, Head of the stc Customer Business Team at Nokia, said: "Carrier aggregation allows service providers to make optimal use of spectrum without impacting the network performance. Nokia is at the forefront of developing 5G CA and other technologies that support service providers in maximizing the use of available resources."



Rami Osman
Director, Business Development Middle East
and Africa, MediaTek

Rami Osman, Director, Business Development Middle East and Africa at MediaTek, said: "MediaTek has become the largest global supplier of Smartphones and 5G CPE chipsets. Our co-work here with stc and Nokia help stc leverage the maximum data throughput from each and every megahertz of its precious spectrum assets by implementing their required band support into our RF chipset." 

stc pay appoints Nizar Abdulaziz Altwaijri as CEO


stc pay's Board of Directors announced the appointment of Nizar Abdulaziz Altwaijri as CEO of stc pay, starting from January 1, 2023.

Nizar Altwaijri has 25 years of experience in the financial and banking sector in which he has assumed various leadership positions, the most recent was Deputy Managing Director at the Arab National Bank since February 2021.

Altwaijri is one of the distinguished



experts in the Kingdom's banking sector. Throughout his career, he gained a rich experience in strategy & business development. At the same, Altwaijri has attained a comprehensive vision in the financial technology and investment fields.

Altwaijri holds a Master's degree in Business Administration (General Administration) from University of Maine, USA and a Bachelor's degree in Information Systems from King Saud University, Riyadh. 

stc partners with dawrat to provide meaningful online education to the community

stc has announced dawrat as a strategic educational online partner through the 'Weyak' initiative – season 2. dawrat is an online learning and educational platform that provides diverse rich content targeting various sectors and subjects.

A ceremony was held to launch the strategic partnership at the Chairman's Club in KIPCO Tower, which was attended by Engineer Maziad Alharbi, Chief Executive Officer of stc, Mohammad Al Surayea, CEO of dawrat, as well as executives from both companies. During the ceremony, Alharbi delivered a motivational speech to the audience who consisted of entrepreneurs and SMEs. He expressed his happiness in witnessing the energy of young aspiring entrepreneurs within this sector, as well as the important role in supporting SMEs and the great value they can add to the community. Alharbi also pointed out that stc has become an enabler of digital transformation in Kuwait, whereas the Company has contributed in various ways to the SME sector, including launching new-to-market cost-efficient solutions.

Through this strategic partnership that aims to support the community through sustainable education, stc and dawrat will organize several learning initiatives that include online workshops, courses, and specialized sessions. The objective of the initiative is to cover a range of topics throughout the sessions that include photography and videography, cooking, sports and fitness, as well as traveling and creating Vlogs.

The event also included a panel discussion moderated by Ahmed Al Nowaibet, Manager of Public Relations and Social Media. Panelists included Al Surayea, CEO of dawrat; Danah AlJasem, General Manager of Corporate Communications at stc, and Engineer Farah Al-Humaidi, who shared their views on the role of the private sector in supporting and backing SMEs by enabling digital transformation.



stc indicated in a statement that the new formed collaboration comes as an additional initiative organized under the Company's CSR program, focusing primarily on education, one of the key pillars of stc's CSR strategy. To spread a wider impact on the key messages and tips mentioned during the workshops, stc will be posting content on all its social media channels, throughout the year. This will enable the Company to spread educational knowledge on various subjects to its wide following base, possibly enhanced their lifestyle choices within the mentioned topics.

The collaboration builds on stc's existing corporate social responsibility (CSR) program and falls in line with the Weyak initiative – season 2. The online activations and activities organized through the partnership also fall in line with the Company's digital transformation strategy. The Weyak initiative launched by stc aims to support and empower local SMEs that have been creating a positive impact in the community. The Company has supported the SME segment in the past in various ways, including providing easier access to a range of tools that can stimulate organic growth in cost-efficient ways.

Commenting on the partnership, Danah AlJasem, General Manager of Corporate Communications at stc, said, "We are proud to partner with an educational pioneer that thrives on educating the public in creative and impactful ways. In line with the objective set under our own digital transformation

strategy, we highly support the use of technology, in its various forms, as a key platform to spread knowledge and educate the public. Online educational tools serve a key purpose for those who face difficulties in attending on-site sessions. Through this long-term partnership, we are excited for what is yet to come and hope that it will provide attendees with a well-rounded learning experience that can enrich their lifestyles."

AlJasem added, "Our objective through this collaboration is to provide participants with an educational platform that can add value to their lives. In line with our commitment to support the community, we believe that it is essential to have accessible educational platforms that can allow participants to explore new interests or improve their backgrounds in existing ones. The selection of highly qualified instructors appointed for each session will surely provide participants with valuable knowledge and key pointers that will assist them in enriching their lifestyle choices within the covered topics."

Throughout the years of implementing its multidimensional CSR strategy, AlJasem expressed that stc focused on supporting the community by building long-term relationships with various entities to support the core mission behind its program. stc partnered with leading entities within Kuwait and throughout the region to spread awareness and a positive impact within the community. **■**

e& named MEA's most valuable portfolio of telecom brands by Brand Finance

e& has consolidated its position as the most valuable portfolio of telecom brands in the Middle East and Africa (MEA), according to the 2023 Brand Finance Global 500 Report released at the World Economic Forum (WEF) in Davos.

etisalat by e& also retained its position as the strongest telecom brands across all categories in the MEA region, achieving a score of 89.1 out of 100 and a AAA rating, according to the report. It was also rated one of the top three telecom brands in the world, due to its market reach, operational capabilities, and outstanding customer service record.

Hatem Dowidar, GCEO of e&, said that the Group's endorsement by the Brand Finance was both humbling and a worthy reflection of the UAE's unstinting commitment to unlock economic growth and potential through its investment in state-of-the-art infrastructure and digital transformation.

"We will continue to earn the trust of our customers and stakeholders by developing and innovating cutting-edge products and services that meet the needs of our 162 million subscribers in 16 countries across the Middle East, Asia and Africa," Dowidar added.



Hatem Dowidar - Group CEO, e&



Shaping A More Sustainable Digital Future

Dowidar said that e& had made significant strides in Artificial Intelligence (AI), blockchain, Virtual Reality (VR), Augmented Reality (AR), the Internet of Things (IoT), cloud computing, and technologies supporting the emergence of the metaverse.

"As we help usher in the next wave of digital tech transformation, we will continue exploring new business models in the digital space. Our strategic priority is to drive new

partnerships and investment opportunities that will accelerate the growth of all our business verticals."

"With sustainability at the heart of everything we do, the e& ESG framework has become an integral part of the Group's business model. We have successfully created an ecosystem in which we operate, communicate and deliver our products and services to stakeholders and customers, enabling us to be a key player in the search for clean and green solutions. The Group's efforts were recently crowned by the declaration of e&'s net zero targets by 2030, marking a further step in confirming our commitment to reduce carbon emissions across our business and to step up our efforts for global climate action."



David Haigh - CEO & Chairman, Brand Finance

Commenting on e&'s ranking in this year's report, David Haigh, CEO and Chairman of Brand Finance, said: "As the telecommunication industry faces commoditization, e& has taken bold steps to reposition its brand identity to unlock new opportunities. This transformation has enhanced the competences of e& to provide innovative digital-centric services that add to its journey as a global brand." **T**

2023 Technology Predictions from Cloudflare

By: John Engates, Field CTO at Cloudflare

The Rise of Chief Zero Trust Officer

Over the last several years, ransomware, data breaches, and other cyber campaigns have been hugely disruptive and cost organizations and governments millions. In response, the Biden administration issued an executive order in May of 2021 to implement a Zero Trust security architecture across the federal government. While recent reports from the US Government Accountability Office (GAO) show some agencies are on track, others appear to be falling behind. When governments need to move quickly and cut across organizational boundaries, they often appoint a czar to take charge of a particular program and see it through to implementation or execution.

As private sector organizations embrace digital transformation and move their operations to the cloud, they too are looking to zero trust to help provide a robust and secure network infrastructure. Secure Access Service Edge (SASE) has emerged as a cloud-delivered convergence of network access and security services and is a common approach for enterprise zero trust adoption. The challenge however is that in many organizations, responsibility for networking and security live in different parts of the organization and these groups often rely on different vendors in their respective areas. Breaking down the silos between security and networking teams and choosing the right tools, products, and vendors to align with desired business outcomes is critical to implement zero trust in larger enterprises.

As pressure to implement zero trust intensifies, I predict that a role analogous to a "Chief Zero Trust Officer" will emerge within some large organizations. This person will be the zero trust czar for the enterprise and will be the individual responsible for driving a company on its zero trust journey. Their job will be to bring together siloed organizations and vendors and ensure that all teams and departments are aligned and working toward the same goal. If resistance is encountered, the zero trust czar



should have the backing of senior leadership (CIO, CISO, CEO, Board of Directors) to make decisions quickly and cut across organizational boundaries to keep the process moving ahead. Whether the very bold title of Chief Zero Trust Officer becomes reality or not, an empowered individual with a clear mandate and a singular focus may just be the key to getting zero trust across the finish line in 2023.

2023 Sees the Death of "The Password"

Phishing attacks continue to be a significant problem for companies around the world. Even with regular security awareness training, users will eventually click a wrong link and fall victim to an attack. And unfortunately most cyber attacks begin with a phishing email.

Cloudflare itself was attacked this year by a sophisticated, targeted SMS-based phishing attack. A total of 76 Cloudflare employees received the phishing link in text messages on their phones. Three employees fell for the attack and clicked the link and entered their credentials. But unphishable, multi-factor authentication in the form of FIDO2-compliant security keys in conjunction with zero trust access prevented the attacker from breaching our systems. Other companies that used less secure time-based one-time passwords (TOTP) weren't as lucky, and many were breached by the same attackers.

Username and password authentication

even when combined with common forms of multi-factor authentication is just not enough anymore. Enterprises can enable stronger FIDO2-compliant security keys along with zero trust access today if they're using a system like Cloudflare's to make it much tougher on attackers.

But the best way to protect most users and their credentials may be to remove the burden on the end user altogether. The FIDO alliance envisions passwordless sign-in everywhere. Logins will use your face or fingerprint instead of the old username-password combo. A FIDO sign-in credential, sometimes called a "passkey", will make it easier on users and harder on the attackers. If there's no password to steal, hackers won't be able to harvest credentials to carry out their attacks. We predict many websites and applications will adopt passwordless login using the FIDO Alliance passkey standard beginning in 2023.

The Cloud Takes on Compliance

Governments around the world are rolling out new privacy regulations. In Europe, the General Data Protection Regulation (GDPR) which became enforceable in 2018 gives individuals more control over their personal data and how it's used. Other countries worldwide are following suit and using GDPR as a model. In the US, there are five states with new consumer privacy laws that take effect in 2023 and more states are considering legislation. And at the federal level, lawmakers are slowly putting forward their own privacy regulations with the American Data and Privacy Protection Act ("ADPPA") which is an online privacy bill that aims to regulate the gathering and storing of consumer data.

Companies must now understand and comply with this patchwork of regulations as they do business globally. How can organizations hope to stay current and build compliance into their applications and IT systems?

We believe the majority of cloud services will

soon come with compliance features built in. The cloud itself should take the compliance burden off companies. Developers shouldn't be required to know exactly how and where their data can be legally stored or processed. The burden of compliance should largely be handled by the cloud services and tools developers are building with. Networking services should route traffic efficiently and securely while complying with all data sovereignty laws. Storage services should inherently comply with data residency regulations. And processing should adhere to relevant data localization standards.

Remote Browsers Resolve Device Complaints

Security policies, privacy laws, and regulations require all companies to protect their sensitive data; from where it's stored and processed, to where it's consumed in end-user applications. In the past, it was relatively straightforward to fully control end-user devices because they were often issued by and dedicated to company use only. But with the increasing

use of personal smartphones and tablets, the bring-your-own-device (BYOD) trend has been picking up steam for several years and was even more readily embraced during the various stages of the global pandemic.

Looking ahead, it's our belief that this pendulum of BYOD will swing back toward tighter security and more control by the IT organization. The need to consistently enforce security policies and privacy controls will begin to outweigh the sense of urgency and demand for convenience we encountered during the last few years. But because so much of our digital lives live in a web browser, this control may take a different form than in the past. This new form will mean more control for IT administrators AND a better user experience for employees.

Browser Isolation is a clever piece of technology that essentially provides security through physical isolation. This technique creates a "gap" between a user's web browser and the endpoint device thereby protecting

the device (and the enterprise network) from exploits and attacks. Remote browser isolation (RBI) takes this a step further by moving the browser to a remote service in the cloud. Cloud-based remote browsing isolates the end-user device from the enterprise's network while fully enabling IT control and compliance solutions.

Some say in this remote browsing model that "the browser is the device." Instead of BYOD, it might be appropriate to call this "BYOB" or Bring Your Own Browser. Most companies are looking to better balance the security and privacy needs of the company with the user experience and convenience for employees. At Cloudflare, we use our remote browser isolation in conjunction with zero trust access to protect our users and devices. It's completely transparent to users and strikes a perfect balance between security and user experience. We believe remote browser isolation will be embraced broadly as IT leaders become more aware of the benefit and just how well it works. ■

INTEGRASYS unveils new corporate identity and logo as part of the next generation strategy

As part of the continued development of the company's identity, INTEGRASYS is pleased to announce the introduction of the new company logo and rebranding.

Over the 33 years since its inception, the company has evolved from being a turnkey project company to a software systems leader within the satellite industry. INTEGRASYS' product portfolio ranges from Satellite Network Design tools to Electronic Warfare & Cybersecurity software. Therefore, due to the company's evolution, adaptation to the new ecosystems, and expansion into a global presence with nine offices around the world; it was time for the image to be aligned with these disruptive changes. The logo has been updated to better represent the company as it is today, as well as its bright and dynamic future.

INTEGRASYS chose this logo to align



with its slogan "Building Success from Innovation" which clearly represents its strategy. The company chose to maintain a cool color palette with a combination of blues, similar to the old logo, but with a clear evolution and adapting to new design trends. The favicon on the left side of the logo represents the new wave of satellite

constellations initiatives.

As part of the rebranding process, the company has implemented clear guidelines for all communications, collateral materials, and internal processes to align with the company's mission, vision, and values. ■

AXESS Networks and Es'hailSat join forces in Qatar

Sign Multi-year, Multi-service Agreement for providing Teleport & VSAT services in Qatar and across the Gulf & MENA region



AXESS Networks and Es'hailSat has announced the Strategic Partnership Agreement to provide Teleport and VSAT services for multiple sectors in the Middle East and North Africa (MENA) region.

AXESS Networks (AXESS) offers teleport and satellite communications services globally to customers in a broad range of industries including oil & gas, mining, maritime, telco, corporate, government and NGOs. AXESS manages the entire satellite communications value chain including strong VSAT networks, up/downlink services, satellite capacities, hosting, internet via satellite services.

Es'hailSat is a communications satellite operator and service provider headquartered in Doha, Qatar, delivering services to broadcasters, enterprises and governments in the MENA region and beyond. With the goal to become a world class satellite operator and foremost service provider in the MENA region, Es'hailSat

currently operates two GEO satellites and a state of the art teleport in Doha from where it provides independent, high-quality, advanced satellite services in the region.

To grow its operations in Qatar and in the Gulf & MENA region, AXESS has entered a strategic partnership agreement with Es'hailSat. The common goal of both partners is to expand their business, widen their customer base and upgrade the service quality. This multi-year, multi-service agreement will have Es'hailSat catering to AXESS' VSAT networking requirements along with professional and high-quality services. The partnership is indeed a win-win situation: while AXESS will provide satellite communications services and acquire new business in Qatar and in the region, Es'hailSat will contribute with local services needed for the extension of AXESS' operations. Es'hailSat will furthermore benefit from AXESS infrastructure and services to expand its own reach beyond the region

and in particular the Maritime sector.

"Es'hailSat is happy to enter in to this partnership with AXESS to provide Teleport and VSAT services for customers across the region" said Ali Ahmed Al-Kuwari, President and CEO, Es'hailSat. "We believe that the highly robust and reliable data services offered by us at Es'hailSat provide the strong network base that AXESS needs to build services for customers in the region."

"Qatar is the perfect location for further engagement in the Gulf and MENA region", says Mauricio Segovia, CEO at AXESS. "In Es'hailSat, we found the ideal partner for our operations, and we look forward to joining forces. Our engineering and sales teams are ready to support the operations with our broad end-to-end managed solutions and with 24/7 NOC support."

The multi-year agreement came into effect in December 2022. 📌

Iridium and Qualcomm collaborate to support Satellite Messaging in Smartphones

Iridium Communications Inc. has announced it has entered into an agreement with Qualcomm Technologies, Inc. to enable satellite messaging and emergency services in smartphones powered by Snapdragon® Mobile Platforms. Qualcomm Technologies' new Snapdragon® Satellite solution is supported by the fully operational Iridium® satellite constellation. Emergency messaging using Snapdragon Satellite is expected to debut starting in the second half of 2023 in premium Android smartphones launched in select regions.

As opposed to selecting a single smartphone manufacturer, Iridium's collaboration with Qualcomm Technologies is aimed to support satellite services into a variety of smartphone brands and has the potential to expand to other consumer devices in the future.

"While some have been expecting we would be integrating our system into a specific smartphone, what we've done is so much bigger," said Matt Desch, CEO, Iridium. "Working with a mobile technology leader such as Qualcomm Technologies and their powerful Snapdragon platforms allows



Matt Desch
CEO, Iridium



Iridium to serve the smartphone industry horizontally – and offers us an opportunity to enable other consumer and vehicular applications in the future. This supports our larger vision of connecting people and things on the move, anywhere!"

Beyond smartphones, Iridium® satellite connections can enable similar applications for vehicles, and other personal consumer and IoT devices.

"Qualcomm Technologies is rooted in a



Durga Malladi - SVP & MG, Cellular Modems and Infrastructure, Qualcomm Technologies, Inc.

vision for engineering human progress and pushing the boundaries of what is possible with premium smartphones and the next generation of connected smart devices across industries." said Durga Malladi, Senior Vice President and General Manager, Cellular Modems and Infrastructure, Qualcomm Technologies, Inc. "Snapdragon Satellite is another step in achieving our vision, enabling OEMs and other service providers with global coverage and satellite messaging capabilities."

With approximately 85% of the world surface without cellular coverage, Snapdragon Satellite-equipped smartphones will be capable of accessing global coverage, sending emergency messages and texting with friends and family from anywhere on the planet with a view of open sky.

Iridium operates the world's only truly global, weather-resilient satellite constellation, ensuring users can stay connected in even the most inclement environments. The company goes to market through an ecosystem of more than 450 partners that build Iridium Connected® products and provide service to approximately two million customers around the world. **T**

Open Broadcast Systems and MSTV partner to innovate with Starlink, 5G and cloud technologies



Open Broadcast Systems and MSTV have announced a partnership to develop new products and solutions around innovative IP technologies, such as Starlink, 5G and cloud distribution. The partnership is a result of a need for MSTV to find a flexible way to contribute and distribute high quality sports content, at very short notice, to and from anywhere in the world.

Open Broadcast Systems is a leading-edge manufacturer of encoding and decoding for B2B video contribution and distribution. MSTV is a full-scale multi-camera live sports TV production company, providing global coverage of a wide range of sports events.

The nature of MSTV's broadcasts means its crews can be asked to produce a sporting event with only a few days notice, anywhere in the world. In addition, it often needs to deliver to many platforms such as web,

satellite or BT Tower at the same time. The short timescales involved mean traditional fibre or satellite vehicles are not an option. In order to address these challenges, MSTV has looked to new technologies such as cloud distribution, bonded 5G and Starlink to contribute and distribute its sporting content.

As broadcasters of these sporting events may be located anywhere and the world, MSTV needed a vendor-neutral solution for encoding and transporting broadcast-quality transport streams to web, satellite uplink facilities or broadcasters directly.

Krunoslav Petric, Head of Operations, MSTV, commented: "We have found that existing walled-garden cellular bonding solutions lack the flexibility and quality for high-quality sports transmissions. Open Broadcast Systems has helped us create a much more flexible workflow that will meet the demanding needs of

our clients."

As a result, MSTV partnered with Open Broadcast Systems to develop a solution for transporting high quality contribution video from anywhere in the world, and, using the cloud, subsequently processing this video into appropriate delivery formats.

Kieran Kunhya, Founder and CEO of Open Broadcast Systems, added: "MSTV is in a new country every week, and the level of iteration on its broadcasts is incredible. Every week there is a new improvement to the workflow to meet the needs of broadcasters. I have been astounded by MSTV's speed of innovation".

This partnership will pave the way for further innovation to jointly develop products for flexible and scalable broadcast contribution. **T**

e& enterprise recognized as a leader by IDC in business and industrial IoT

e& enterprise was recognised by International Data Corporation, a premier global provider of market intelligence, for its positioning in the 'Leaders' category of the GCC IDC marketscape for business and industrial IoT (Internet of Things) consulting and system integration services.

This industry-wide acknowledgement was mainly for its capabilities that are in line with global counterparts and its unique approach to delivering IoT services and solutions to enterprises and government customers by bringing 5G connectivity and IoT/AI capabilities to offer end-to-end solutions.

e& enterprise offers IoT solutions and services through the newly formed company e& enterprise IoT & AI (previously known as Smartworld). e& enterprise IoT & AI brings the combination of Internet of Things and artificial technologies to transform companies into data driven organizations in order to make better decisions, offer efficient services, and remain sustainable.

"We are honored to be recognized in the global leadership quadrant and attribute this success to our customers and partners who play a critical role in encouraging us to push the boundaries of innovation and success. Thanks to our team of experts, having both technical and business knowledge across various industries and verticals, who enabled us to accelerate growth and become validation of our vision, strategy and solutions in the IoT



Alberto Araque
CEO, e& enterprise IoT & AI

segment," said Alberto Araque, CEO, e& enterprise IoT & AI.

"This is also in line with our commitment to providing our customers with innovative services to adapt and navigate a changing business environment. We have continued to invest significantly in our people and resources to be well equipped to provide this impactful growth, now and into the future."

The company's IoT solutions include connected assets, surveillance, smart and sustainable cities, retail and payments, smart and safe home, Industry 4.0, and digital health solutions.

"e& enterprise has created the necessary tools to automate some of its delivery processes, along with methodologies and frameworks to deliver end-to-end



Krishna Chinta - Programme Manager,
Telecommunications and IoT, IDC MEA

IoT projects. It is implementing a plan to significantly increase its capabilities around data analytics and AI, and to improve its user interface development and delivery capabilities. Additionally, the company plans to venture into new markets through both organic and inorganic means to deepen its capabilities and increase its footprint across the wider MEA region. Due to the relative strengths of its delivery capabilities and its strategic vision, the company is positioned in the "Leaders" category of GCC IDC MarketScape for business and industrial IoT consulting and systems integration services vendor analysis, 2022." Krishna Chinta, Programme Manager, Telecommunications and IoT, IDC Middle East and Africa.

The company also has an IoT partner program to bring new partners into its ecosystem to co-create IoT solutions and explore joint sales opportunities. e& enterprise has opened innovation centers and co-creation labs in Dubai and Abu Dhabi to showcase its digital services delivery capabilities and co-create IoT solutions with its customers. The company is differentiating itself by offering a variety of pricing models, including OPEX models and joint-investment models with customers. ■



eVision launches 24/7 'GolfLife' channel to broadcast live golf action in the region

eVision has announced the launch of 'GolfLife' a dedicated 24/7 channel for all golf fans in the region capturing all the best live and exclusive action of golf's most competitive tours and team competitions in Middle East and North Africa.

The channel owned and operated by eVision will also broadcast ancillary golf programming and become a platform to showcase golf activities/initiatives from across the region.

In line with this vision to bring the latest in sports, eVision has acquired exclusive broadcasting rights across the Middle East and North Africa (MENA) region for professional golf from PGA TOUR and DP World Tour events in 2023 and 2024 with special rights to broadcast the 2023 Ryder Cup in Rome and 2024 Presidents Cup in Montreal, Quebec, Canada.

Speaking about the new broadcast partnership Olivier Bramly, CEO of eVision said: "Golf as a sport is experiencing a boom in popularity across the MENA region and the new GolfLife channel will give fans unparalleled and exclusive access to the sport they love via eLife, Switch TV and STARZPLAY packages and platforms.

"The channel will also be made available to other operators across the region to ensure we can reach as many fans as possible. We are entering a big year for golf with the Ryder Cup taking place in September and the PGA TOUR returning to a calendar-year schedule that showcases the best players in the world, which makes this the perfect time to launch this brand new dedicated golf channel in the region," added Bramly

Keith Pelley, Chief Executive of the European Tour group, added: "With our season long 'Race to Dubai Rankings' in partnership with Rolex, the Middle East continues to be a core focal point for the DP World Tour and home to three of our



Rolex Series events. With the launch of a new channel dedicated to world class golf in time for a busy year that includes the Ryder Cup, I know that eVision will be an excellent partner and provide a first-class broadcast experience to fans across the region."



Olivier Bramly - CEO, eVision

"The PGA TOUR is excited to partner with eVision and reach fans in the MENA region on eLife, Switch TV and STARZPLAY," said Rick Anderson, PGA TOUR Chief Media Officer. "Fans can expect an exciting year as the PGA TOUR moves towards a calendar-year schedule that features top players competing more often and heightened importance on positioning for the Race for the FedExCup. We look forward to showcasing the best players and biggest moments in golf to fans in the Middle East and North Africa."

At the time of launch, GolfLife will be available in the sports and premium packages on eLife IPTV as well as on sports packages on Switch TV, its OTT (over-the-top) platform in the UAE. GolfLife will also be distributed across the MENA region through STARZPLAY, a leading on-demand streaming service that is available directly to consumers. **T**

etisalat by e& collaborates with Huawei to introduce Anywhere, Anytime Mobile Portable Private Network Connectivity

etisalat by e& has announced successful deployment and testing of 5G Portable Private Network MEC (Multi-access Edge Computing) functionality as part of a collaboration with global ICT leader Huawei Technologies.

This successful showcase is part of Stand-Alone 5G and MEC commercialisation programme and enables etisalat by e& to offer a 5G-based replacement for traditional VPN, enhancing remote work experience (reach workspace anywhere, anytime) for UAE enterprises. Remote work and long-distance learning represent global trends with significant implications for accessibility, network reliability and user experience. Urban and rural communities also depend on highly accessible networks for high-speed connectivity to public resources, from health care to social services. Both accessible and convenient, a 5G Portable Private Network solution enables seamless switching between public and private networks to accelerate data delivery and boost security for services in every area of the economy.

Khaled Al Suwaidi, SVP of Core Networks and Platforms, of etisalat by e&, said: "This deployment and testing will play a crucial role in providing a seamless experience for consumers and enterprises by enabling new and innovative 5G services in public safety, gaming, education and healthcare among others. This is in line with our long term vision to ramp up digital services, elevate a digital-first lifestyle at the same time enable the digital transformation of governments, large enterprises and corporates. The partnership with Huawei Technologies and our investments in standalone 5G earlier this year has supported our vision to enable and empower the enterprise digitalisation ecosystem enabler and facilitator."

Gavin Wang, Head of Etisalat Key Account



at Huawei Technologies, said: "Huawei is pleased to be an entrusted 5G SA vendor of etisalat by e& and to be able to demonstrate what this latest 3GPP Rel-16 technology has to offer. We are proud to continue supporting etisalat by e& to realise its digital transformation objectives and, in particular, its vision to bring the best in smart connectivity and innovative digitalised solutions to its customers."

Traditional networks exchange data back and forth across the Internet and face various problems. Moreover, remote users typically encounter latencies and bandwidth limitations that impede processing and cause delays and interruptions. Remote access using 5G Portable Private Network

avoids the time-consuming detour through the Internet and eliminates those latencies and performance drawbacks. Once a 5G Portable Private Network is in place, remote end users can seamlessly access corporate intranets from anywhere, at any point in time. They can enjoy increased reliability and excellent online experiences because they can avoid repeated logins, connection latencies and data risks. These users also have the freedom to use their personal devices for improved, faster connections, enhancing productivity while protecting data exchanges.

The technology offers a plethora of benefits for students and faculty in education. For example, unlike the expense related to opening individual Portable Private Network accounts and associated vulnerabilities, students who use a mobile Portable Private Network no longer require authorization. Since the 5G Portable Private Network dedicated network is interconnected with the institution's network, these users can depend on airtight security via the campus intranet to perform a multitude of tasks remotely. These include accessing online teaching applications, checking exam results, choosing classes and conducting research. These sessions eliminate repeated logins allowing both students and teachers to switch between the Internet and internal networks seamlessly. ■



Khaled Al Suwaidi - SVP, Core Networks and Platforms, etisalat by e&

etisalat

Nokia and etisalat by e& show first 100 Gbps fiber broadband in Middle East and Africa

Nokia has announced that the company in collaboration with etisalat by e& has demonstrated the fastest passive optical network (PON) speed in the Middle East and Africa region. Nokia Bell Lab's PON proof of concept (PoC) demonstration achieved speeds up to 100 gigabits per second (Gb/s) on a single wavelength -- four times faster than the most advanced networks available today.

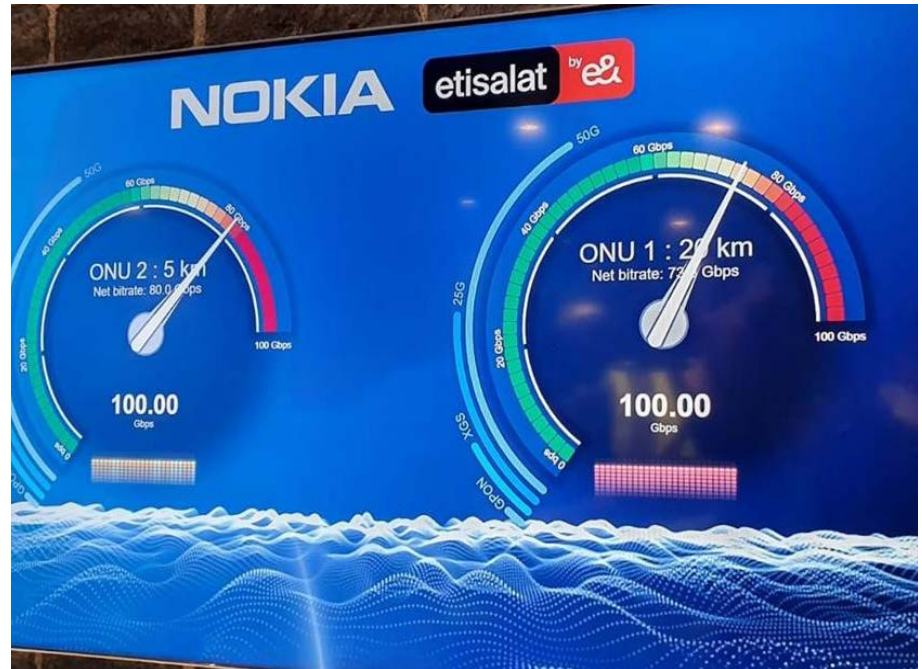
In the long-standing partnership between both the technology leaders, they have achieved multiple industry-firsts, including the world's first single-carrier terabit-per-second field trial, setting optical transmission capacity record over etisalat by e&'s fiber network in the UAE.

To achieve 100 Gb/s on a single wavelength, Nokia Bell Labs used pioneering digital signal processing (DSP) techniques. Once advanced DSP is adopted, the steps to 50G and 100G are straightforward and 100G could be commercially available in the 2030s.

The Nokia Bell Labs 100G PON prototype is the world's first application of flexible rate transmission in a PON network. Flexible rate transmission works by



Marwan Bin Shakar
Senior VP/Access Network
Development, etisalat by e&



grouping fiber modems (ONUs) that exhibit similar physical network characteristics (e.g., loss or dispersion) and makes data transmission more efficient. Using flexible rate transmission results in lower latency on a PON and cuts power consumption in half -- two essential characteristics for fiber networks that have a rapidly growing role in the massive delivery of fixed and mobile broadband services.

The PoC is Nokia's most recent industry-first in fiber access, following XGS-PON, TWDM-PON, and 25G PON. 100G PON could be commercially available in the 2030s.

Marwan Bin Shakar, Senior Vice President/ Access Network Development, etisalat by e& said: "Fiber networks are fast evolving into becoming the backbone of the entire telecommunications sector as they play an important role in delivering any service to any end point, including residences, businesses, and cell sites. As their use case evolves, they must become quicker, smarter, and more cost-effective. We are

thrilled to have showcased a working prototype for 100G PON with Nokia. Our partnership with Nokia is a demonstration of our commitment to maximise value for our customers and bring positive change to their lives in the age of digitalisation. Through our partnership, we are looking forward to continuing our efforts in bringing in the best-in-class solutions to our customers and enabling the adoption of innovative technological solutions within the UAE and the region."

Samer Makke, Head of the Customer Team for etisalat by e&, UAE, at Nokia, said: "etisalat by e& is a pioneering operator in the region and we are proud to have demonstrated our industry-first prototype technology with the company. Fiber broadband continues to evolve and will play a critical role in enabling services for enterprise customers, premium consumers, and supporting 5G rollouts. 10G XGS-PON is now mainstream; the first 25G city is a reality; and 50G and 100G are being developed. This just shows the unlimited potential of fiber broadband." **T**

Telecom Egypt and Grid Telecom to build subsea system connecting Egypt and Greece

Telecom Egypt, Egypt's first integrated telecom operator and one of the largest subsea cables operators in the region, and Grid Telecom, a wholly owned subsidiary of the Independent Power Transmission Operator (IPTO) in Greece, signed a collaboration agreement to build a subsea system connecting Egypt and Greece. Egypt's Minister of Telecommunications and Information Technology, Dr. Amr Talaat, witnessed the signing ceremony held in Cairo, Egypt. The Managing Director and CEO of Telecom Egypt, Adel Hamed, and the Chairman and CEO of IPTO, Manos Manousakis, signed the agreement.

This agreement is a testimony of the strategic cooperation between Telecom Egypt and Grid Telecom. It comes in line with Telecom Egypt's strategy of strengthening its infrastructure, expanding its international network, and increasing its entry points to Europe by providing an eastern gateway via Greece through the new subsea system. The system will connect Port Said in Egypt to Crete island--making it the shortest, lowest latency, Mediterranean path between Egypt and Europe, extending northwards to the Balkans region and adjacent important destinations in Central and Western Europe, and southwards to the Arabian Peninsula and other regions in Africa and Asia. This also reinforces Egypt's strategic position as an international telecommunications hub linking the East and West.

Earlier this year, Telecom Egypt and Grid Telecom signed a strategic Memorandum of Understanding, which set the ground for the exploration of different connectivity options between Greece and Egypt--through existing and future optical fiber links. This was followed by the signing of a Heads of Agreement to build this new subsea system extending the mutual international reach to neighboring countries.

Minister of Communications and



Information Technology of Egypt, Dr. Amr Talaat, stated that "This significant agreement, which intends to create a new subsea system connecting Egypt and Greece across the Mediterranean Sea, strengthens Egypt's strategic capacity in the realm of international subsea cables by opening a new landing site in eastern Europe on the Greek coast. It also provides a strategic advantage, particularly given that more than 90% of the data flow between East and West passes via Egyptian territorial waters and lands." He further added that the signing of this agreement is the culmination of ten months of hard work since the start of the negotiations during his February visit to Greece where he witnessed the signing of a Memorandum of Understanding between Telecom Egypt and Grid Telecom with the aim of connecting the two countries using subsea cable systems.

Managing Director and CEO of Telecom Egypt, Adel Hamed, commented: "Telecom Egypt is continuously developing and extending its international infrastructure. Our collaboration with Grid Telecom will add explicit value to our robust reach

worldwide to more than 140 destinations in over 60 countries. Our investments in new systems and solutions reiterate our leading position thanks to the multiple layers of our infrastructure diversity, which include establishing new subsea landing stations and crossing routes that will cater for the rising global demand for international capacities."

Chairman and CEO of IPTO, Manos Manousakis, stated: "IPTO Group is taking the initiative to transform Greece into a critical energy and data hub of high geopolitical value at the crossroads of Europe, Africa and Asia. In this context, the fact that Egypt is a key international telecommunications hub for all subsea cables from East to West, creates strong synergies and win-win business opportunities. We are very pleased that the cooperation between IPTO's subsidiary Grid Telecom and Telecom Egypt has culminated in building this subsea system, bringing a new international route that will enhance the strategic role of Crete island as a neutral open-access connectivity node in the wider Balkans – Mediterranean region." 

Kcell completes the transition to unified billing with the help of Nexign

Kcell Joint Stock Company and Nexign, have completed project of unifying billing systems on a single Nexign Converged BSS digital platform. During the transition, data of more than eight million subscribers of two brands, Kcell and activ, were migrated to the new environment. Transferring to a single converged billing platform will help Kcell reduce the total cost of ownership (TCO), accelerate new product launches, and increase monetization opportunities for various types of services, including 5G and eSIM. Modernization and consolidation of systems will also allow the operator to ensure the continuity of services and improve the customer service quality.

With Nexign Converged BSS, Kcell will support the key processes of online charging, converged billing, product and partner service management on a single platform. As part of the implementation, a unified product model was also designed to streamline the development of new services and reduce the time to market (TTM). At the same time, Nexign Converged BSS compliance with 3GPP and TM Forum's Open APIs specifications helped minimize the cost of integrating more than 50 operator subsystems onto the platform.

"Kcell won 5G frequency auctions held on December 22 and 23. In the next five years,



the operator will build more than 3,500 base stations and cover 75% of major cities and 60% of regional centers with 5G technology. The development of the fifth-generation network in Kazakhstan will also lead to new technological products and services requiring 5G speeds, especially in the segment of smart IoT devices. At the same time, the scalable architecture of the converged billing system will ensure business growth while reducing capital costs. The new billing will also reduce the time to market (TTM) and implement flexible marketing strategies by providing a competitive advantage for the company," comments Nurzipa Kariboztegi, Digital BSS Director at Kcell.

The project started in April 2021. The transition to the new platform was carried out in several stages while the operation of the previous billing solutions continued. Migration of B2C and B2B segments took place simultaneously – more than 140 active rate plans and about 1000 Kcell product offers were transferred to the new platform with prepaid and postpaid customers on a single stack. The project implementation approach allowed the operator to seamlessly transition to new tools and processes for sales and service management.

"Considering the scale and timing of migration, our project with Kcell is one of

the largest digital projects in the telecom market of Kazakhstan. A joint team of Kcell and Nexign worked on its implementation. Thanks to their efforts, it was possible to complete a comprehensive technical transformation of the operator's systems with a phased migration of subscribers on time. One of the key features of the project was the ability to select a migration segment up to a tariff or even a product offer. It made the entire transition to a new platform smooth to subscribers. We are confident that the consolidation of BSS will help Kcell significantly improve the efficiency of many business processes, increase subscriber loyalty, and boost return on investment in new areas of development," comments Michael Matyushin, Chief Technology Officer of Nexign.

During the implementation, technologies for development and testing processes automation, along with the Configuration-as-Code approach, were used. The CI/CD practices also helped successfully combine the process of commercial operation with system configuration and migration of the entire subscriber base to a new platform. At the same time, in the future, the open architecture and the DevOps approach will allow Kcell to continue leveraging all modern automated processes required for system operation with minimal vendor involvement. **T**



Michael Matyushin - CTO, Nexign

Hughes recognized as a leader in managed SD-WAN Services by Frost & Sullivan for fourth consecutive year

Frost & Sullivan has recognized Hughes Network Systems, LLC (HUGHES), as a Leader in its Frost Radar™: North American Managed SD-WAN Services Market report for the fourth consecutive year. The Frost Radar report highlights innovations in customer service technology and strong partnerships with technology providers among the company's strengths.

"Hughes leads with a clear focus on improving the customer experience in everything they do," said Steve Thomas, Senior Industry Director, Frost & Sullivan. "Paired with a technology-rich service and state-of-the-art automation capabilities, the Hughes approach to managed SD-WAN is appealing to businesses looking for

optimized and secure connectivity."

"We're proud that Frost & Sullivan recognizes our commitment to exceptional customer service," said Dan Rasmussen, Senior Vice President, Enterprise Division, Hughes, "At Hughes, we work to build true partnerships with our clients, assuming their strategic priorities as our own and making complex network management as seamless and turnkey as possible so they can focus on their business growth."

In its report, Frost noted recent enhancements Hughes has made to network installation and repair processes, including a tool that applies machine learning to assess installations remotely and

zero touch provisioning across equipment from vendors such as VMware, Fortinet and Cradlepoint. The Frost report further highlights the company's relationships with these providers as partners in its managed SD-WAN solutions.

A global leader in managed SD-WAN for enterprise, Hughes manages 52,000 SD-WAN locations for over 100 customers spanning retail, healthcare, banking, petroleum, restaurant and government sectors. For each customer, Hughes finds the optimal combination of transport types to ensure superior performance in all sites, integrating and managing broadband access nationwide via wireline, wireless and satellite. **T**

G42 Cloud and Dell Technologies sign MoU to accelerate UAE customers' Digital Transformation Efforts

Dell Technologies and G42 Cloud have signed a Memorandum of Understanding (MoU) to help customers in the UAE accelerate their digital transformation drive by collaborating on cloud, security and IT and managed services.

The memorandum was signed by Walid Yehia, General Manager - UAE, Dell Technologies and Talal Al Kaissi, CEO of G42 Cloud at the Dell Technologies Forum 2022.

The two companies will work together across various areas including Private Cloud Solutions, as well as Consulting, Residency and Managed services. This collaboration aims to serve the UAE by enabling customers manage their day-to-day business operations and accelerate digital transformation with a more secure and consistent cloud experience. The agreement will allow the two companies' customers to leverage the best-of-breed features and performance, including computing, data storage, and data protection needs. It aims to assist customers unlock and capitalize on cloud experiences and drive innovation.

Walid Yehia, General Manager - UAE, Dell Technologies, said: "To succeed in an increasingly digital economy, businesses need agile and scalable solutions that allow them to innovate and transform



their operations. At Dell Technologies, we aim to simplify this journey with our comprehensive portfolio of solutions and services. We are happy to work with G42 Cloud in its efforts to encourage organizations build a robust digital future."

Talal Al Kaissi, CEO of G42 Cloud, said: "I am particularly excited and proud of signing this strategic agreement with Dell Technologies and of the opportunities we plan to unlock together, domestically and abroad. Cloud technologies today are helping economies expand and meet new market demands. G42 Cloud is focused on driving value and helping businesses to succeed in a digital-first world. The MoU allows us to explore both companies' wide range of offerings and support our customers to maximize their business outcomes." **T**

Yahsat wins best Marine Satellite Technology accolade at Middle East Technology Excellence Awards 2022



The UAE's flagship satellite solutions provider, Yahsat has won the Best Marine Satellite Technology of the Year award at Middle East Technology Excellence Awards 2022 for Thuraya MarineStar, the integrated voice and data communications solution from its mobility arm, Thuraya. The accolade recognizes MarineStar's innovative value-based technology and the impact it has had on maritime safety and sustainable fishing globally. The solution proved to be exceptionally effective during the COVID-19 pandemic when it provided stranded seafarers an affordable means to communicate amid heightened travel restrictions. The award was received by Thuraya's Chief Strategy and Marketing Officer, Jassem Nasser.

Commenting on the win, Yahsat's Chief Commercial Officer, Sulaiman Al Ali stated, "We are delighted to have won the award, as it is a fitting endorsement of our commitment to developing sustainable solutions for crew safety and preserving marine life. Thuraya MarineStar's feature-rich design and flexible pricing model provide regional fishing operators a strong competitive advantage, making it their go-to solution for affordable communications at sea. With vessel operators prioritizing crew communications, MarineStar has become a critical component of crew welfare. Its tracking and monitoring capabilities enable seafarers to follow maritime safety and fishing regulations without incurring unwanted costs.

Currently, no other entry-level maritime solution offers a similar value proposition."

Thuraya MarineStar is the preferred maritime solution in its asset class, having won the Mobile Satellite Users Association's (MSUA) ESG Impact Innovation Award earlier this year. Built to high standards and resilient to harsh environments, it increases productivity and efficiency by digitalizing critical applications such as SOS, fish catch reporting, vessel tracking and monitoring. Its performance is further enhanced when combined with Thuraya's low-cost turnkey web-based tracking and monitoring service, SatTrack for Marine. SatTrack provides an easy-to-use online dashboard that displays data from Thuraya MarineStar terminals and enables fish catch reporting, which is critical for sustainable fisheries.

The nature of Yahsat's business as an integrated satellite communications solutions provider brings with it the potential to create positive social and environmental impacts. Reliable maritime voice and data solutions from Thuraya, ranging from low-cost basic devices to high-end broadband data terminals help vessel owners improve onboard safety, environmental sustainability, compliance and crisis communications during emergencies. **T**



Sulaiman Al Ali - Chief Commercial Officer, Yahsat



Jassem Nasser - Chief Strategy and Marketing Officer, Thuraya

Eutelsat successfully decommissions EUTELSAT 5 West A satellite



Initially designed for a 15-year lifetime, the EUTELSAT 5 West A satellite has retired after an impressive 20+ years of fruitful in-orbit operation. The satellite was successfully re-orbited as planned to more than 400km above the geostationary arc, the propulsion system depressurised and the electrical equipment on board passivated. The final operation to deactivate the remaining Radio Frequency source (telemetry transmitter) was performed from the Issy-les-Moulineaux Satellite Control Centre.

The End-of-Life activities operated by mission control teams placed the satellite in safe conditions with an orbit and configuration fully compliant with French Space Law and international Space Traffic Management recommendations.

Based on a Spacebus 3000B3 platform manufactured by the then Alcatel Alenia Space (now Thales Alenia Space), the satellite was originally built on behalf of Stellat. Shortly after its launch in July 2002, the satellite was bought by Eutelsat and renamed Atlantic Bird-3, operating from the 5° West orbital position where it remained for its entire operational life. It was given the name EUTELSAT 5 West A in 2012 and

operated in an inclined orbit since the end of 2019, which enabled an extended lifespan of the satellite.

A progressive transfer of services to the new EUTELSAT 5 West B satellite, as well as other satellites of the Eutelsat fleet, was started in January 2020, ensuring seamless continuity of operations for customers. The EUTELSAT 5 West A continued to operate until its decommissioning, notably providing maritime connectivity.



Eva Berneke - CEO, Eutelsat

A disruptive satellite for the Group, EUTELSAT 5 West A enabled the transition to digital television, notably in France in the early 2000s, when analogue television technology was converted to and replaced by digital broadcasting.

Eva Berneke, Eutelsat Chief Executive Officer, commented: "The impressive extended lifespan of EUTELSAT 5 West A showcases the first-rate satellite control expertise of the Eutelsat teams. The satellite provided an overall service availability of 99.999%, a figure that stands as a testament to the hard work and dedication of all the Eutelsat teams who have worked together throughout the years on this mission."

James Matthews, Eutelsat CSR Director, added: "The decommissioning of EUTELSAT 5 West A satellite is a perfect example of our commitment to the responsible use of space, a fundamental element of the Group's CSR mission. This operation shows how the Space Traffic Management expertise of Eutelsat is being used to mitigate the risk of space debris for both security and environmental concerns, ensuring the long-term sustainability of space for all operators".



Aftab Raza Khan

Eutelsat statement on the suspension of broadcasting activities with respect to certain channels in Russia and Iran

Eutelsat Communications has implemented all restrictive measures on broadcasting activities adopted by the competent French and European Union regulatory bodies in line with its commitments. In this context, and as on 21 December 2022, Eutelsat has enforced the following:

With respect to Russia:

- Pursuant to the decision of the French Regulatory Authority for Audiovisual and Digital Communication (ARCOM) dated 14 December 2022, Eutelsat has ended all involvement in the broadcast of three channels, Rossiya One, Pervyi Kanal and NTV, within the prescribed 7-day compliance period.

- Pursuant to the Council of the European Union (EU) Regulation 2022/2474 of 16 December 2022, these three channels as

well as a fourth, RenTV, will be subject to sanctions if so confirmed by the Council by 1 February 2023, in accordance with the notice 2022/C 481 I/04 released by the Council on 19 December 2022.

- In the process of implementing or preparing for the implementation of the aforementioned measures, Eutelsat has also ensured that it is not involved in the broadcasting of RT News in Russia. Moreover, Eutelsat reviews on a regular basis its distribution partners globally to ensure that the provisions of Article 2(f) of EU Regulation 2014/833 on the broadcasting prohibition of certain Russian channels are fully respected.

- Pursuant to the Council of the EU Regulation 2022/2428 dated 12 December 2022, Eutelsat has ceased all Islamic Republic of Iran Broadcasting (IRIB)-related broadcasting activity.

With respect to Iran:

For FY 2022-2023, the implementation of these measures is estimated to have a negative combined impact of between 10 and 15 million euros on Group Revenues, and of between 15 and 20 million euros on EBITDA, taking account of related collection costs and risks. The estimated impact on the Group's Adjusted Discretionary Free Cash Flow for FY 2022-2023 is c. 10 million euros.

The Group's objective for revenues from the five Operating Verticals for FY 2022-23 is mechanically adjusted to take account of these impacts and is now expected between 1,135-1,165 million euros (based on a EUR/USD rate of 1.00). The objective of Adjusted Discretionary Free Cash Flow expected at an average of 420 million euros per year for FY 2022-23 and FY 2023-24 (based on a EUR/USD rate of 1.00) is confirmed. **1**

European Space Agency joins forces with Euroconsult to support budding space entrepreneurs

European Space Agency (ESA) has announced a partnership with Euroconsult to empower entrepreneurship and the development of innovative space solutions. Focusing on European space start-ups incubated in the ESA BIC network, the collaboration will provide incubated companies and alumni with an exclusive rate for market intelligence and insights, as well as valuable networking opportunities, leveraging Euroconsult's extensive experience across the entire space sector.



The European Space Agency has signed a letter of intent on behalf of its network of business incubation centers to boost its offering for space start-ups with high growth potential, through the provision of market analysis and networking opportunities. Leading global strategy consulting and market intelligence firm Euroconsult, who specialise in the space sector and satellite-enabled verticals, has signed this letter of intent to supply dedicated insight and connection opportunities that aim to enhance knowledge and access to business opportunities for the incubated companies.

ESA Business Incubation Centers (ESA BICs), an initiative launched in 2003 by the European Space Agency's Technology Transfer Program Office, have grown to become the largest network of space incubators in Europe. More than 25 Centers have been established to date in some 80 locations across all the ESA Member States, each hosting a selection of young, local companies working within the space sector value chain. Incubated companies can remain on the program for up to two years before graduating and benefit from funding, coaching, technical advice and a global network of industry and research contacts, with more than 1200 companies making up the prestigious list of alumni/incubated companies to date.

Euroconsult are set to augment the ESA BIC benefits for both incubated companies and alumni, through a new collaboration that will offer access to industry leading market intelligence reports at a preferred rate. Furthermore, Euroconsult will also deliver a series of webinars, offering valuable insight into multiple segments across the global space value chain, beginning with a dedicated showcase of their much anticipated 2022 Space Economy report.


In addition, the collaboration will provide prominent space sector entrepreneurs with networking opportunities at all of Euroconsult's events, including the chance to rub shoulders with top level executives from major established space companies at Euroconsult's flagship annual conference, World Satellite Business Week in Paris.

ESA Director General, Josef Aschbacher stated, "this partnership between Euroconsult and our Business Incubation Centers emphasizes the priority we give to space commercialisation and to the development of high-potential space startups. Through this partnership, we will complement the technical and market intelligence support we already provide to our BIC startups with additional intelligence and networking opportunities, further supporting them in their journey to scaling-up. This partnership is to be seen in the

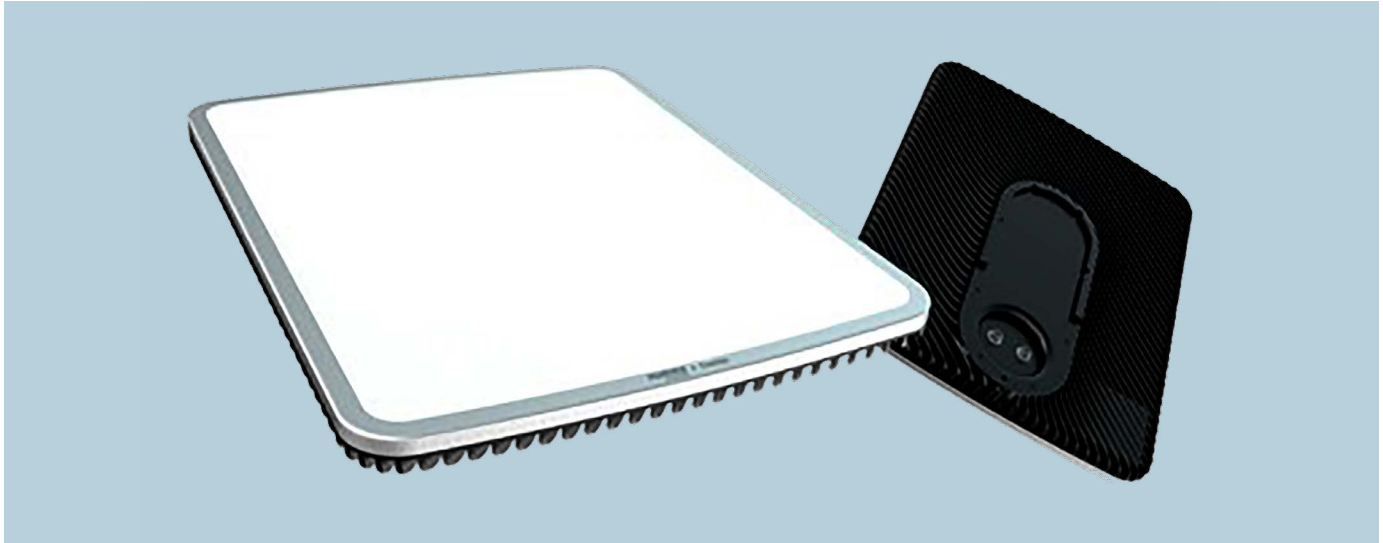
frame of our ScaleUp program proposed to European Ministers for subscription in ESA's next Ministerial Council this November."

The main objective of the ESA BIC program is to support entrepreneurs with space-based business ideas, catalysing regional clusters of space related start-ups across Europe. Each ESA BIC is managed locally by organizations that connect the ESA BICs to private industry, academia, research bodies and investment communities within the homegrown space ecosystem, whilst ensuring links to the wider national and international business landscape.

Pacôme Révillon, Chief Executive Officer of Euroconsult, said, "We are delighted to announce this exciting partnership and look forward to supporting the European Space Agency and leading space entrepreneurs of tomorrow. Euroconsult's specialist brand of market intelligence, analysis and insight into the latest trends and opportunities will help to empower entrepreneurship and contribute to the development of innovative commercial space solutions for an industry that continues to go from strength to strength."

The collaboration between ESA BIC and Euroconsult is set to commence with immediate effect, with the first webinar and the exclusive preview of the 2022 Space Economy report on 19th January. 

OneWeb acquires 10,000 Hughes LEO Terminals to enable low latency, broadband connectivity worldwide



Hughes Network Systems, LLC has announced that OneWeb has ordered 10,000 Hughes LEO Terminals to enable networking services for enterprise and government customers. Engineered and manufactured by Hughes, the terminals (model number HL1100) include the Hughes electronically steered antenna and compact indoor and outdoor equipment necessary to activate high-speed, low latency broadband service on the OneWeb constellation.

Massimiliano Ladovaz, CTO at OneWeb, said: "We are excited about the capabilities in the Hughes flat panel and the unique benefits we can extend to our customers. These terminals will enable our partners to optimize the low latency, high speed benefits of our network with a turnkey, easy to install and operate terminal. Hughes continues to be an important and excellent partner to OneWeb and we are delighted with this next collaboration and what it means for delivering more connectivity

choices to our customers."

John Corrigan, Senior Vice President, Hughes, said: "The ground-breaking Hughes LEO Terminal combines decades of engineering capability and intellectual property with our intimate understanding of the OneWeb system as their ground network technology partner. We are pleased that OneWeb has chosen to offer their customers this innovative, high performance solution for low-latency satellite service that can be employed for government and business applications as easily as plugging in two cables."



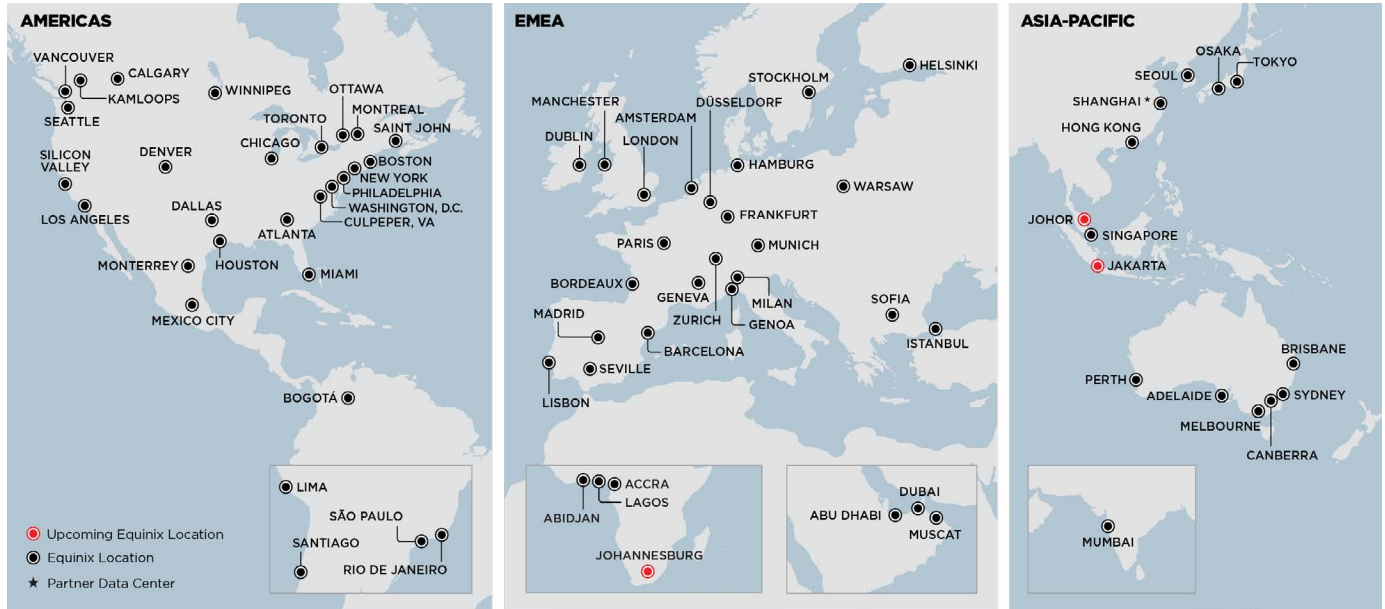
Massimiliano Ladovaz - CTO at OneWeb



John Corrigan - Senior VP, Hughes

Constructed with a solid and durable aluminum chassis, the Hughes LEO Terminal works right "out of the box," with a compact indoor (IDU) and outdoor unit (ODU) self-pointing to the OneWeb constellation. The terminal is compact, easy to install, and will make optimal use of the OneWeb system capabilities for low latency and speeds up to 195 Mbps down and 32 Mbps up. With prototypes available and testing already underway, Hughes will start production of the LEO terminals for OneWeb in the second half of 2023. **1**

Equinix to enter South Africa with US\$160M Data Center Investment in Johannesburg



Equinix, Inc. has announced plans to enter the South African market with a US\$160 million data center investment in Johannesburg that augments its current footprint on the African continent in Nigeria, Ghana and Côte d'Ivoire. The new data center is expected to open mid-2024.

With its South Africa expansion, Equinix is entering one of the largest and most digitally developed nations on the African continent. Already a strategically important connectivity hub for digital networks, South Africa boasts a significant network of submarine communications cables. These strategic links between countries and continents are established at several points across the country's 2,850 kilometres of coastline.

"We entered the African continent earlier this year with the acquisition of MainOne, the leading West African data center and connectivity solutions provider with presence in Nigeria, Ghana and Côte d'Ivoire," said Eugène Bergen, President, EMEA, Equinix. "This investment will give both South African

businesses the opportunity to expand internationally and global businesses to expand into South Africa. Both will be able to accelerate their growth by rapidly scaling their infrastructure, easily adopting hybrid multicloud architectures and interconnecting with business partners through the Platform Equinix ecosystem of more than 10,000 customers."

At Equinix, "We seek to be good stewards of the environment and of the resources we consume. We design, build and operate sustainable data centers planned holistically to reduce our consumption of all resources and maximize efficiency. We were the first company in the data center industry to set a science-based emission reduction target and commit to become climate neutral globally by 2030, aligned to the Paris Accord 1.5-degree scenario. We have a long-term goal of sourcing 100% clean and renewable energy for our global platform. Equinix's renewable energy coverage in 2021 was 95% and has been over 90% since 2018."

"Equinix is seeking out sustainable and reliable sources of energy for this new data center as is customary when

we enter a new market. While the exploration for sustainable and reliable sources of energy continues, this new facility is expected to feature many unique sustainable attributes including hyper-efficient cooling with outside air economization using minimal water, allowing us to limit our carbon footprint and maintain energy efficient operations with industry leading PUEs."

The announcement is the latest in a series of strategic and significant market entries for the world's digital infrastructure company. Following the acquisition of MainOne in April 2022, Equinix has announced two expansions into ASEAN (the Association of Southeast Asian Nations) following the recently announced plans to expand into Indonesia and Malaysia. Prior to this, the company also announced growth in the South American market with its acquisition of five Entel data centers to accelerate digital transformation opportunities for local businesses and multinational companies in Peru and Chile. The company has also continued to invest in organic expansion with 46 major builds underway in 31 markets. **■**

GLOBAL ICT, TELECOM & SATCOM EVENTS 2023

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07-09 May 2023



Manama, Bahrain

28-30 June 2023



Shanghai, China

23-25 February 2023




Islamabad, Pakistan

15-17 May 2023



Austin, Texas

15-18 September 2023



Amsterdam, Netherlands

27-02 February - March 2023



Barcelona, Spain

16-18 May 2023



Dubai, UAE

16-20 October 2023



Dubai, UAE

07-09 March 2023



Dubai, UAE

30-31 May 2023



Dubai, UAE

14-16 November 2023



Cape Town, SA

13-16 March 2023



Washington, DC

06 June 2023



Singapore

15-16 November 2023



Bangkok, Thailand

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