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Editor's Note

Dear Readers,

Welcome to the latest edition of Teletimes International.

This edition of Teletimes features exclusive interviews with Shunli Wang, President of Public Affairs and Corporate Communication, Huawei Middle East, Zarrar Hasham Khan, SEVP, PTCL, Haider Bokhari, Group CEO, Cloud Tribe and Frank Dai, President of Huawei Cloud Middle East and Central Asia.

The edition also includes a feature on Huawei's recently released overall report and financial results for 2022 with the company seeing steady growth in its carrier business and a total revenue of $92.37bn. Huawei's annual expenditure on R&D reached $23.22bn in 2022, accounting for 25.1% of the company's annual revenue, bringing its total R&D expenditure over the past 10 years to more than $140.55bn. This focus on R&D is highly commendable and is visible in many of the Huawei products around the globe. With external restrictions still in place, Huawei stated that 2023 will be a crucial year for the company as they continue promoting the commercial deployment of 5.5G technologies.

As we move forward, 2023 is presenting various economic and geopolitical challenges, including capital challenges, 5G advancement, net neutrality, sustainability, and cybersecurity. We feel that spectrum allocation, net neutrality and 5.5G will be important topics in the near future and will be providing more content focused on these subjects moving forward. In fact, if you wish to be a contributor to our content, please reach out at info@teletimesinternational.com

As always, you will find the latest news and insights from all major players in this edition of Teletimes International.

Enjoy Reading!

Khalid Athar
Chief Editor

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*World's least developed countries threatened
by deepening digital divide*

ITU data in special edition of 'Facts and Figures' show a decade of halting progress on connectivity for the world's poorest

The digital connectivity divide separating the globe's least developed countries (LDCs) from the world as a whole shows no sign of narrowing. In fact, it is widening on key factors, according to ITU's Facts and Figures: Focus on Least Developed Countries.

While the share of the population in LDCs using the Internet has increased since 2011 from 4 per cent to 36 per cent, about two-thirds of the LDC population remains offline. LDCs also still face numerous barriers to meaningful connectivity, including lack of infrastructure, affordability, and skills. Although no single figure can capture all aspects and complexities of the digital divide, the gap between LDCs and the world in the share of people using the Internet has actually increased from 27 percentage points in 2011 to 30 percentage points in 2022.

"The path to prosperity for the world's least developed countries runs through digital development," said ITU Secretary-General Doreen Bogdan-Martin. "This special edition of ITU's Facts and Figures highlights the challenges confronting LDCs and should help strengthen commitments between the least developed countries and their development partners."

The ITU study, prepared ahead of the Fifth United Nations Conference on the Least Developed Countries (LDCs), focuses on trends in digital connectivity in LDCs since 2011, when the UN last held its global conference on least developed countries. According to the research, which uses data from ITU's Facts and Figures 2022, an estimated 407 million people in LDCs were using the Internet in 2022. The 720 million people still offline in LDCs represent 27 per cent of the global offline population,

Cosmas Zavazava - Director, ITU's Telecommunication Development Bureau

even though the LDC population accounts for only 14 per cent of world population.

The study highlights that only 83 per cent of the combined LDC population is covered by a mobile broadband signal 3G or above, the main way to connect to the Internet in most developing countries. This compares with 95 per cent coverage for the overall world population.

The latest edition of Facts and Figures, ITU's annual overview on the state of digital connectivity, found that the cost of using Internet services inched downward across the globe in 2022. The special ITU analysis produced for LDCs highlights that accessing the Internet is more costly in LDCs than anywhere else in the world.

According to ITU, the challenge of getting communities online has also become more complex over the last decade than just constructing physical connections. For LDCs, the goal of universal and meaningful connectivity – when a safe, satisfying, enriching, productive and affordable online

experience is available to all – remains a distant prospect. Even many of those who can access the Internet do not, because of the barriers ranging from awareness, to skills, to costs.

"The ITU special report reveals the tremendous digital diversity of LDCs, which implies different priorities and calls for different solutions," said Cosmas Zavazava, Director of ITU's Telecommunication Development Bureau. "The world's least developed countries are the planet's greatest untapped resource. Connectivity – in particular meaningful connectivity – can contribute to addressing the challenges faced by LDCs and help them achieve sustainable digital transformation."

Among other findings from Facts and Figures: Focus on Least Developed Countries:

•The digital gender gap in LDCs remains significant and is not narrowing;

•Almost half of young people in LDCs (15-to 24-year-olds) were online in 2022;

•Just over a quarter of the population in rural areas in LDCs was online in 2022.

The UN Conference on LDCs, took place in Doha, Qatar from 5 to 9 March, is a key opportunity to accelerate sustainable development.

During the conference, ITU will highlight the importance of digital cooperation to accelerate the Doha Program of Action and achieve the UN Sustainable Development Goals, particularly through public-private partnerships like the Partner2Connect Digital Coalition which has mobilized more than 600 pledges worth nearly USD 30 billion. **T**

Huawei Cloud approach is all digital, all cloud, AI-driven, and providing Everything-as-a-Service

__Frank Dai__, President, Huawei Cloud Middle East & Central Asia in exclusive interview with Teletimes International

digital economy in the Middle East & discussed how to leverage cloud in order to build and boost a robust digital economy.

Khalid Athar: Huawei recently held the Huawei Cloud Summit Middle East & Africa 2023. Please elaborate.

Frank Dai: We held the Huawei Cloud Summit Middle East & Africa 2023 on March 21 in Dubai, the second time the flagship event for Huawei Cloud in the region is being held. With the theme of "Inspire Innovation with Everything-as-a-Service", the summit gathered industry leaders and included keynote speeches and forums focused on the topics of how cloud tech promotes digital transformation in various industries and the digital economy in the Middle East, the future of Fintech and multiple initiatives to co-build better ecosystems to help startups to innovate and grow, among others. Besides, the event provided a platform for the region's valuable customers to exchange insights based on market opportunities and successful experiences.

Today, the digital economy is at the forefront of the national development plans of many countries in the Middle East. Nations such as Saudi Arabia, United Arab Emirates, Qatar, Kuwait, Oman, Bahrain, among others in the region have not only made the digital economy a cornerstone of their future national development, but also introduced various digital-specific strategies to boost digital transformation and achieve their visions.

During the Huawei Cloud Middle East & Africa Summit that was held in Dubai on Mar 21, Teletimes International had the chance to interview Frank Dai, President of Huawei Cloud Middle East & Central Asia who has been resident in ME for more than 10 years. During the interview, he highlighted how the technology innovation is driving the growth of the

During the summit, a joint launch of the Huawei Cloud Startup Program for Middle East, Central Asia, and Africa was also held. Joining in the launch ceremony were representatives from the UAE Ministry of Economy, Dinarak (a licensed payment services provider from Jordan), Ignite (a VC firm from Pakistan), and Eyon TV (startup representative from Kuwait). Through three key initiatives — innovative cloud platform, entrepreneurship enablement, and business resources — Huawei Cloud will provide lifecycle support for startups in the Middle East, Central Asia, and Africa. Huawei Cloud is committed to building a global startup ecosystem to empower 1,000 local startups to innovate and grow on Huawei Cloud in the next three years.

To make further technological contributions to the implementation

of cloud technologies and the development of the digital potential of the Republic of Uzbekistan, on May 23, 2022, Huawei signed a memorandum of understanding with the E-Government Project Management Center. In August 2022, Huawei also launched a national data center in Uzbekistan for e-gov. At the end of 2022, Huawei and the Ministry of Digital Technologies jointly held the Data Center and Cloud Forum.

K.A: Would you like to talk about the Huawei Cloud strategy for 2023?

F.D: Huawei Cloud approach is all digital, all cloud, AI-driven, and providing Everything-as-a-Service: Infrastructure-as-a-Service, Technology-as-a-Service and Expertise-as-a-Service. Through the 'Everything-as-a-Service' model, Huawei is translating the company's 30-plus years of ICT know-how into cloud innovations.

The Huawei Cloud Everything-as-a-Service proposition envisions a future where all infrastructure and applications will be cloud-based. We encourage enterprises to embrace AI fully and let data play its part in supporting

> **" Huawei is translating the company's 30-plus years of ICT know-how into cloud innovations "**

operational decision-making as part of Technology-as-a-Service. Therefore, as the intelligent world develops, the right strategy should be all-digital, all-cloud, AI-driven, and everything as a service. We are also working to make AI more affordable, accessible, and as available as possible and help cultivate a new, thriving AI ecosystem. In 2023, Huawei Cloud will continue expanding its global presence.

> **" We encourage enterprises to embrace AI fully and let data play its part in supporting operational decision-making as part of Technology-as-a-Service "**

With partners, Huawei Cloud operates 78 Availability Zones in 29 Regions, including UAE and the upcoming Saudi Region, Egypt region. In July of last year, Kuwait's Communication and Information Technology Regulatory Authority (CITRA) permitted Huawei Cloud to offer cloud services in Kuwait as the GCC country pursues a cloud-first policy. Additionally, Huawei Cloud and Omantel are working together to build Oman Cloud to support the country's cloud-first policy in support of Oman Vision 2040.

K.A: How is Huawei Cloud helping to develop the metaverse?

F.D: Gartner predicts that by 2026, 25% of people will spend at least one hour a day working, shopping, studying, socializing, or being entertained through the metaverse. In addition, it expects that 30% of companies and organizations worldwide will have metaverse products and services. Such massive metaverse applications will lead to an explosion in data. Data processing and analysis in centralized data centers cannot meet all service needs and can cause partial network congestion, making it necessary to process metaverse services at the edge. To empower the metaverse, we will therefore work with our carrier partners to build edge data centers (DCs) and networks to inspire immersive experiences for their customers.

Metaverse comes with data explosion, leading to a greater demand for compute capacity. Cloud computing combines both hardware and software, making it the key building block for the metaverse. Metaverse needs computing, storage, machine learning, and

many other capabilities. All of these are on cloud. For example, you need significant compute capacity to model and render buildings in the metaverse, get timely feedback, or reduce game latency. Stronger computing means better user experience. Therefore, metaverse and cloud computing will feed on each other.

K.A: What will be the role of Huawei Cloud when 5.5G starts getting adopted? Are you geared to handle all the data that will be generated through 5.5G?

F.D: At MWC Barcelona 2023, Huawei showcased leading technologies, new business opportunities, and industry progress in the 5.5G era. The company aims to work with carriers and industry partners worldwide to further the evolution of ICT infrastructure, lay the foundation for the 5.5G era, and build on the success of 5G for even greater prosperity. At the event, Huawei presented five major characteristics of the 5.5G era: 10 Gbit/s experience, all-scenario IoT, integrated sensing and communication, Level 4 autonomous driving network, and green ICT.

5.5G will usher in a new era for cloud applications, creating new opportunities for network connectivity as cloud-based and multi-cloud enterprise applications become even more important for enterprises. 5.5G caters to cloud applications' need for real-time, reliable, and easily-accessible connectivity, bringing new opportunities to transmission networks, whether between edge cloud nodes, between edge cloud nodes and central clouds or between enterprises and the cloud.∎

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Huawei returns to business as usual with external restrictions still in place

Eric Xu speaking at the press conference

Huawei generated USD92.37 billion in revenue, out of which carrier business was USD40.84 billion

In a press conference held to release the annual report, Huawei said 2023 will be the first year that it returns to business as usual with external restrictions still in place. It will be a crucial year for the company, therefore, it needs to actively drive progress, keep inspiring passion across the organization, and further hone capabilities.

In the conference, Huawei released its 2022 Annual Report. The company reports steady operations throughout 2022, having generated USD92.37 billion in revenue and USD5.12 billion in net profits. Huawei continues to strengthen investment in R&D, with an annual expenditure of USD23.22 billion in 2022, representing 25.1% of the company's annual revenue and bringing its total R&D expenditure over the past 10 years to more than USD 140.55 billion.

Huawei returns to business as usual with external restrictions still in place. It

has been nearly four years since the US imposed restrictions on Huawei on May 16, 2019, but it seems the company has gotten accustomed to these restrictions and have spent the last several years learning how best to respond to them. Huawei 2022 annual report and financial results released show the company is returning to business as usual prior to the restrictions.

"2023 will be crucial to Huawei's sustainable survival and development," Xu noted. "Plum blossoms tend to grow sweeter from a harsh winter's freeze. Huawei is like a plum blossom. While it's true that we have considerable pressure ahead of us, we have what it takes to come out the other end – with opportunities to grow, a resilient business portfolio, a unique competitive edge, the enduring trust of our customers and partners, and the courage to invest heavily in R&D. We are confident in our ability to rise above any challenge that comes our way, laying a solid foundation

for sustainable survival and development."

In 2022, Huawei carrier business saw steady growth, and its performance was in line with forecast. In this business, Huawei continued to see stable development in 5G, while other business modules like IT network, Huawei Cloud, services, and software all grew rapidly. Both the China Region and regions outside China created momentum for our business growth. In 2022, revenue from Huawei's carrier was USD40.84 billion.

Huawei believes that by investing in 5G, carriers can improve their market competitiveness and achieve business success. Multiple industry reports have drawn the same conclusions. Huawei has seen carriers who were frontrunners in the first round of commercial 5G deployment have generally achieved faster revenue growth than the industry average. The reasons behind this are quite simple. 5G

networks are very energy-efficient and reduce the cost per bit for carriers. So, by quickly migrating users and traffic to 5G networks, carriers can more easily monetize these services. Carriers can also capitalize on their 5G networks through latency guarantees, better uplink experiences, and other novel services.

Huawei has also been working closely with carriers and industry partners around the world to explore new ways to monetize 5G in the consumer, home, and business markets, and ultimately make 5G more successful.

speed. According to the comparisons of 5G performance between the carriers in these 10 cities, Huawei's 5G network delivered the best experience.

Huawei is working with other industry players to verify 5.5G technologies and promote their commercial deployment. Together, we want to help carriers improve network capabilities and find new drivers of business growth. 5.5G will be deployed at scale by 2025, and it is a key milestone on the way to 6G.

According to Huawei, 5.5G is essentially

commercial deployment of 5.5G by 2024 and large-scale deployment by 2025.

Huawei mentioned that the International Telecommunication Union (ITU) is scheduled to complete its vision on 6G in late 2023. We should expect that 6G will become commercially available by 2030.

Present at the event was Sabrina Meng, Huawei's CFO. She noted, "Despite substantial pressure in 2022, our overall business results were in line with forecast. At the end of 2022, our liability ratio was 58.9% and our net cash balance was

> *" In 2022, our total R&D represented 25.1% of our total revenue – among the highest in Huawei's history. In times of pressure, we press on – with confidence "*
>
> *Sabrina Meng speaking at the press conference*

Huawei says by the end of 2022, 5G had entered a stage of rapid development, with over 1 billion 5G users worldwide. 5G user penetration had exceeded 30% for leading carriers in a number of countries, including China, South Korea, Switzerland, Finland, and Kuwait, and over 30% of mobile traffic came from 5G networks. In addition, more than 40% of the world's 5G carriers were providing innovative 5G applications. According to the latest 5G city benchmark report by Ookla, which surveyed 40 representative cities across the globe, Huawei has helped build the 5G networks of the top 10 cities ranked by 5G

a 5G technology, but 5.5G is faster and supports higher levels of automation and intelligence. 5.5G will provide a 10-fold improvement in network capabilities, such as speeds, latency, and positioning. In addition, 5.5G will enable more emerging services and scenarios, such as Passive IoT and harmonized communication and sensing, which will create tremendous new opportunities.

From the perspective of standardization and industry development, there is already an initial consensus on 5.5G. Leading carriers are expected to achieve small-scale

USD25.35 billion. In addition, our balance of total assets reached one trillion yuan, largely composed of current assets such as cash, short-term investments, and operating assets. Our financial position remains solid, with strong resilience and flexibility. In 2022, our total R&D represented 25.1% of our total revenue – among the highest in Huawei's history. In times of pressure, we press on – with confidence."

Huawei 2022 Annual Report financial statements were independently audited by KPMG. ∎

Unleash digital with everything as a service

Huawei Cloud Summit Middle East & Africa 2023 Now Kicks Off

Themed "Unleash Digital with Everything as a Service", the second Huawei Cloud Summit Middle East & Africa kicks off in Dubai on March 21. This event brings together over 300 government officers, cloud native industry experts, and customer representatives from the Middle East, Central Asia, and Africa, with the aim of exploring how to make the best out of cloud and the vital role of cloud in boosting digital economy.

At the event, Zhang Yiming, the Chinese Ambassador to UAE, gave a keynote speech on the significance of cloud computing on digital economy. "China is poised to partner with the UAE and countries in the Middle East and Africa in their digital cloud journey. Together, we will invigorate the industry with innovation, expand pilot projects with partnerships, and promote technical advances with young minds. Together, we will achieve technology and industry development centered on cloud computing, and pave the way for digital transformation and digital enablement," said Zhang.

Jacqueline Shi, President of Huawei Cloud Global Marketing and Sales Service, delivered an opening speech. She shared the latest progress of Huawei Cloud in the Middle East, and stated Huawei Cloud's stance on paving the way to bigger success for local customers and partners, as well as the companies that want to run businesses there. "In 2020, Huawei Cloud established its business departments in the Middle East. This year, we are launching the Saudi Arabia Region. We keep developing. We keep going digital. And we want to share our latest technologies and proven digitalization experience to you. We are always ready to serve you best," said Shi.

Also at this Summit, Frank Dai, President of Huawei Cloud Middle East, delivered a keynote speech "Unleash Digital with Everything as a Service". In his speech, Dai shared the digital transformation trends in the Middle East, and how Huawei Cloud can pave the way to digital success by providing technical innovations, proven expertise, and ecosystem support. He said:

"It has become a consensus that the cloud is the best way to accelerate digitalization. Our responsibility is to help enterprises go cloud, use cloud, and manage cloud better, so we can better deal with challenges such as data security, ROI optimization, and new technology application."

To cultivate local talent and support startups with high potentials, Huawei Cloud launched the Huawei Cloud Startup Program 2023 for Middle East, Central Asia, and Africa. Joining in the launch ceremony were representatives from the UAE Ministry of Economy, Dinarak (a licensed payment services provider from Jordan), Ignite (a VC firm from Pakistan), and Eyon TV (startup representative from Kuwait). Through three key initiatives — innovative cloud platform, entrepreneurship enablement, and business resources — Huawei Cloud will provide lifecycle support for startups in the Middle East, Central Asia, and Africa. Huawei Cloud is committed to building a global startup ecosystem to empower 1,000 local startups to innovate and grow on Huawei Cloud in the next three years.

Huawei Cloud is poised to become part of the growth engine for the local economy. Huawei Cloud launched the UAE Region in 2021, providing seamless cloud experience to local users. An investment commitment of 400 million USD was announced for the next 5 years to build a cloud Region in Saudi Arabia, extending quality, secure cloud services to local customers for them to stay competitive.

In recent years, Middle East has been a major destination of business opportunities for many Chinese enterprises. Huawei Cloud's "Go Cloud, Go Global" program helps Chinese enterprises expand into the Middle East. In this Summit, Huawei Cloud invited more than 50 decision-makers from over 40 Chinese enterprises for business exchanges with local organizations in

Frank Dai delivers his speech

Saudi Arabia and UAE. These visits are the channels for Chinese enterprises to understand better the local policy support as well as the local business environment and development. Huawei Cloud aims to build a cloud foundation for an intelligent

Jacqueline Shi delivers her opening speech

world with Everything as a Service. Looking ahead, Huawei Cloud will continue to expand its global cloud infrastructure and provide customers, partners, and developers with stable, secure, and sustainable cloud services.▪

Huawei holds latest Saudi IP Club showcasing its most advanced Network products and solutions

Huawei held its latest IP Club Saudi Arabia in Riyadh and showcased its most advanced network products and solutions. The new products offer simplified network solutions in four domains that help enterprises build a solid network foundation. Further, the solutions will help nurture a sustainable, open and intelligent world. Meanwhile, Huawei was recently named a Leader in the 2022 Gartner® Magic Quadrant™ for Enterprise Wired and Wireless LAN Infrastructure, the only non-North American vendor in the Leaders Quadrant.

Aiming to provide the ultimate user experience for digital office, production, and transformation, Huawei launched 10 flagship products, including the new enterprise core switch CloudEngine S16700, CloudEngine 16800-X series——the first data center switch with diversified computing power, and AirEngine 8771-X1T, the industry's first enterprise-class Wi-Fi 7 AP. The company has also upgraded the cloud campus network CloudCampus 3.0 and the Easy CloudFabric data center network solution to take the lead to achieve

Tang Xinbing
CTO, Huawei IP Product Line

L3.5+ autonomous driving.

Tang Xinbing, Huawei IP Product Line CTO, said, "Every day, thousands of customers rely on Huawei network solutions to drive digital transformation, attain operational excellence and transform the customer experience. This is especially true for Saudi

Arabia, where digital transformation is at the heart of the Kingdom's economic transformation agenda. Huawei will continue our never-stop innovation, bringing better user experience and improving network O&M efficiency and unleashing the computing potential, to help our customers accelerate digital transformation." Meanwhile, Huawei is planning to increase its investments in the SME market to help its partners achieve business success. To do so, the company is supporting them as they systematize capabilities in R&D, marketing, sales, supply, and services.

Under the theme of "Simplified Networks, Building a Digital Foundation for the Ultimate Experience" the Huawei IP Club aims to build an open, free, friendly thought-sharing platform for IP technical supervisors, engineers, industry analysts, and key opinion leaders. Through IP Club small circle activities, Huawei experts guided customers through the numerous benefits of the latest network solutions. ▪

Yahsat and Cobham SATCOM complete critical design review for Thuraya's Next Generation Broadband products and service platform

Al Yah Satellite Communications Company PJSC (Yahsat) has announced the successful completion of the Critical Design Review (CDR) for Thuraya 4-NGS Programme's Next Generation Service Platform and Broadband Products, further adding to the company's extensive portfolio of solutions. As part of the ongoing transformational programme, Thuraya 4-NGS, the platform and new products are integral to Yahsat's growth strategy and the advancement of Yahsat's mobility satcom business across Africa, Europe, Central Asia and the Middle East.
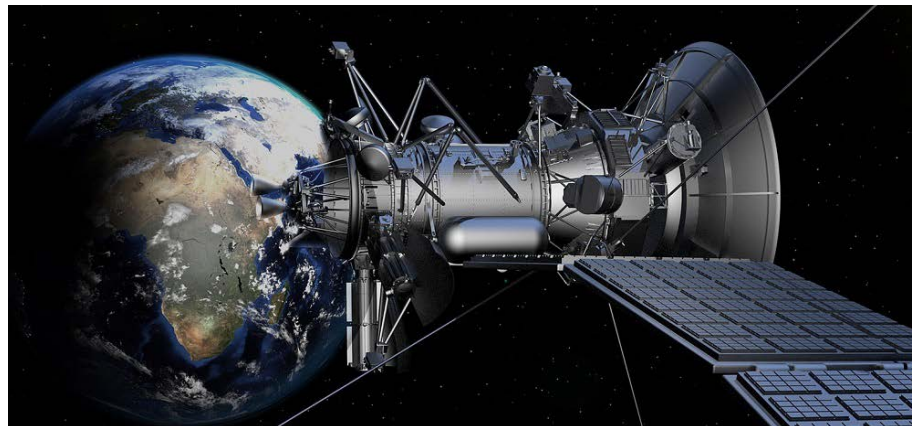
The Next Generation Broadband Products consists of an extensive and largescale product portfolio that supports increasingly important operational applications in aero, land and maritime environments. These

Government, Maritime, Enterprise, Energy, Aero, NGOs and Relief Organizations, these new innovative solutions will deliver numerous advantages that include higher performance

Adnan Al Muhairi - CTO, Yahsat

Christophe Duret - CEO, Cobham Satcom

products are designed in co-operation with Cobham Satcom to ensure delivery of a wide spectrum of services including broadband data, push-to-talk, and voice-over LTE. The Next Generation Service Platform will further ensure support of the new product portfolio with higher performance, higher reliability and security.

Offering advanced satellite communication capabilities to key verticals including

(data rates of up to 1 Mbps), enhanced capabilities and additional features.

Commenting on the completion, Adnan Al Muhairi, Chief Technology Officer, Yahsat said: "We are delighted to announce that the CDR review stage for these solutions has been successfully completed and we remain on track to deliver the programme according to schedule. This is a testament to the exceptional talent, skill

and innovative technology Yahsat brings to the table on a wide range of solutions that are aimed to meet the needs of users across diverse operational scenarios. The completion of this milestone, in partnership with Cobham Satcom, re-affirms our current product development program, which is in line with Yahsat's wider growth strategy and product expansion plans."

Christophe Duret, CEO at Cobham Satcom, added: "The completion of the CDR not only marks an important milestone in the roll out of the Thuraya 4-NGS enabled portfolio, but also reinforces the strategic partnership we have built with Yahsat. As a leading MSS infrastructure and terminal provider, we are committed to the success of this ongoing transformational program as it will enable us to continue delivering the best products and solutions to our extensive distribution channels and client portfolio." The Next Generation Broadband Products will be showcased for the first time at IDEX 2023, which took place from February 20-24 in Abu Dhabi, UAE. The $550 million transformational programme, Thuraya 4-NGS, is scheduled to commence operations in the first half of 2025, with a significant proportion of the solutions to be available and operational over existing assets.∎

PCTV scales up Video services across Latin America with multi-year agreement on EUTELSAT 117 West A satellite

PCTV has once again boosted its capacity on Eutelsat Communications' EUTELSAT 117 West A satellite through a multi-year agreement. Further strengthening a decade-long partnership between PCTV and Eutelsat, this new agreement expands PCTV's Video services from Mexico to countries across the entire Latin American region.

PCTV is an innovative content producer and distributor, offering a wide range of integrated media solutions to accompany their clients. The company operates a Video distribution platform at 117° West, delivering TV channels to cable head-ends in Mexico and across Latin America. The new resources on EUTELSAT 117 West A will allow PCTV to provide a broader range of Video services, extending their current reach by accessing new and untapped markets.

Eutelsat's 117° West location is the premium TV neighbourhood for Latin America, offering pan-regional distribution of major networks and content providers. With an extremely strong cable head-end penetration, over 92% of the top pay-TV operators in Latin America receive their content from 117° West. Around 400 TV channels, 80 in HD, are currently distributed to over 45 million TV homes. 117° West is also a growing free-to-air TV neighbourhood with 100 TV channels broadcasting in the clear, including channels from key regional public and private broadcasters.

Commenting on the contract, José Ignacio González-Núñez, Eutelsat Americas Video SVP, said: "Drawing on the ongoing success of our partnership with one of our most prominent clients in Mexico, Eutelsat is committed to further consolidating such relationships not only through satellite services, but also with more comprehensive, tailored solutions leveraging PCTV's experience as a performant cable operator throughout Latin America. We are proud of PCTV's continued trust in our fleet and service."

Jorge Alejandro Tanaka, PCTV's CEO and Head of Content Generation and Marketing at Grupo Megacable, added: "The partnership between PCTV and Eutelsat sets a clear roadmap for us to stay at the forefront of our industry by providing us with access to their extensive, reliable and performant content delivery solutions, including state-of-the-art satellites in the region. With this deal, PCTV pairs its innovative video teleport with Eutelsat product portfolio, and I am sure this will maintain our market leadership and assure that our Video distribution and contribution services exceed customer needs in every targeted sector."∎

Transforming the humanitarian response:

Satcom in action

IEC Telecom is bringing a revolutionary connectivity solution to the market to transform the humanitarian response. Powered by high-speed Starlink connectivity and enhanced by a resilient L-band back-up by Thuraya, the Xpand Portfolio by IEC Telecom enables a range of advanced features for humanitarian activities and mobile missions operating in areas where there is limited Global System for Mobile communication (GSM) coverage.

The new system will become an invaluable asset to humanitarian corporations stationed in the MENA region. The solution was unveiled at the 19th Dubai International Humanitarian Aid & Development (DIHAD) Exhibition, taking place this week at the Dubai World Trade Centre.

Global adoption of digital services has increased tremendously over the past decade. According to the latest research by Meltwater, currently, over 5 billion people have access to the internet worldwide, which is around 64% of the global population. The "unconnected" 2.85 billion are based predominantly in Southern & Eastern Asia and Africa, regions heavily dependent on humanitarian support. Lack of infrastructure not only hinders digital progress in developing communities but also affects the effectiveness of aid operations managed by global non-profit organisations (NGOs).

Nabil Ben Soussia, CCO, IEC Telecom Group, explained: "IEC Telecom has been serving the humanitarian sector for nearly three decades. We have witnessed the digital transformation of aid operations first-hand. While requirements differ from case to case, the objective remains the same. Connectivity means better coordination of humanitarian efforts, the safety of remote

workers, the security of NGO's assets and the sustainability of long-term operations. It is also the sole gateway to closing the digital divide for vulnerable communities. Introducing the Xpand Portfolio will significantly impact humanitarian operations, enabling major aid agencies to expand their reach as well as multiply the scope of services delivered within existing areas of dislocation."

Powered by the Starlink network, the Xpand Portfolio offers network connectivity of up to 350Mbps, a speed comparable to an average internet browsing experience over GSM. Further enhanced by the OneGate network management system by IEC Telecom, the new solution can be monitored, maintained, and up-scaled remotely. Also, the Xpand Portfolio is backed by Thuraya WE, an L-band terminal by Thuraya, the mobility business arm of Yahsat, that enables clear communications and uninterrupted coverage across two-thirds of the globe by MSS. Thuraya's mobile solutions provide reliable security and business continuity for critical operations. Thuraya's L-band backup satellite connectivity will keep first responders connected and operational at all times.

Sulaiman Al Ali, Chief Executive Officer of Thuraya, said: "We are proud to be supporting IEC Telecom Group in launching the Xpand Portfolio as a key connectivity solution aiding the humanitarian corporations based in the MENA region. The L-band network by Thuraya has proven its resilience in different environments. Our terminals have been deployed to assist first responders, support humanitarian operations, and serve as a backbone for search and rescue teams. Thuraya's extensive satellite network provides coverage in the most remote locations
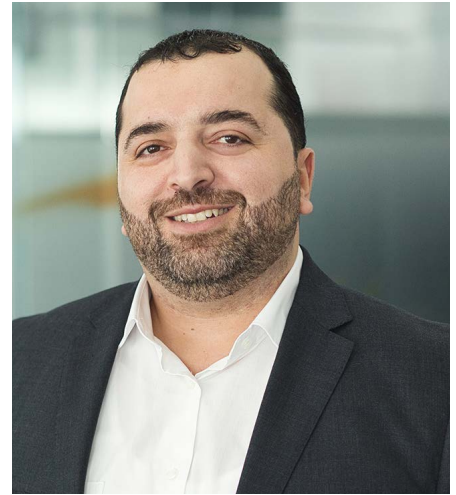
Nabil Ben Soussia - CCO, IEC Telecom Group

and our Dynamic Resource Allocation assigns capacity automatically, assuring dependable connectivity for humanitarian response."

Not only will the Xpand Portfolio increase the operational efficiency of humanitarian NGOs, but it will also significantly decrease consumption rates. The solution is equipped with a set of applications by IEC Telecom, optimised to consume up to 10 times less bandwidth than popular software. From videoconferencing and telemedicine to drone surveillance and remote maintenance, humanitarian teams are well-equipped to serve their noble mission with the Xpand Portfolio.

Xpand Portfolio is available for stationary set-up and vehicular use, covering the entire cycle of humanitarian response. As such, possible use cases stretch far beyond NGO deployments. This innovation can empower far-away schools and hospitals with subject matter experts based remotely. It can also enable e-government services over mobile trucks, servicing underserved communities.

"The future is unfolding today. Affordable and dependable connectivity is now available. The network coverage is growing every month. Soon, I hope, we shall all witness a day when access to connectivity will no longer be a privilege but a human right in action," says Ben Soussia. **T**

Space Data Association appoints new Directors: Alex Cacioni of Immarsat, and Charles Law of SES

The Space Data Association (SDA) has announced that Alex Cacioni has replaced Mark Dickinson as Inmarsat representative, and Charles Law has replaced Pascal Wauthier as SES representative, on the SDA Board of Directors.

Alex Cacioni has been involved in the space industry for 30 years working on all aspects of geostationary satellite operations. At Immarsat, he is responsible for orbital positioning and manoeuvre planning of the Inmarsat satellites. He is also part of ISO TC20/SC14 WG7 for the Developments of Standards for Orbital Debris Mitigation.

Charles Law leads a team of Flight Dynamics Engineers at SES responsible for manoeuvre planning and orbital control of SES's fleet of 20 O3b (MEO) and 51 GEO satellites. This includes conjunction assessment and collision avoidance manoeuvre planning during initial transfer orbit, on-station and during the disposal phase.

Formed in 2009, the SDA is an international organization that aims to enhance safety of flight via sharing of operational data and promotion of best practices across the industry. It brings together satellite operators to support the controlled, reliable, and efficient sharing of data critical to the safety and integrity of the space environment.

Mark Dickinson, Immarsat, added "Alex Cacioni is committed to the mission of flight safety and preservation of the space environment. He brings a wealth of knowledge and experience with him to his new role on the SDA board, and I would like to give him a very warm welcome."

Pascal Wauthier, SES, commented: "I welcome the appointment of Charles Law as SES representative on the SDA board.

Mark Dickinson (left) shaking hands with Alex Cacioni (right)

Charles Law (left) shaking hands with Pascal Wauthier (right)

With his extensive knowledge, Charles will be a valuable addition to the board, helping it in its mission to achieve a safer space environment".

Joe Chan, Chairman, the Space Data Association, commented: "As the space environment gets ever more complex, the need to enhance the safety of space flight through sharing of knowledge and data is only going to become more important. The SDA plays a key role in achieving this. Both Alex and Charles have already been active members of the SDA, so I look forward to further involvement from them as Directors."∎

Intelsat expands global reach for Deutsche Telekom IoT

Intelsat has announced that Deutsche Telekom IoT (DT IoT) intends to integrate Intelsat FlexEnterprise into its cloud-based Internet of Things (IoT) offering to extend powerful, easy-to-use IoT solutions to locations regardless of the availability of fiber or cellular connectivity options.

IoT services are increasingly used across a diverse array of businesses – collecting data from thousands of devices to analyze that data in a way that helps organizations increase system efficiency, reduce waste, monitor delicate environments, and provide new insights into processes and operations. By using FlexEnterprise to complement cellular connectivity, DT can extend the reach and effectiveness of its solution and drive better results for its customers.

"Satellite connectivity allows IoT to connect physical objects and devices from anywhere on the globe to the virtual world to enhance real-time data collection, analysis and decision making," said Brian Jakins, Intelsat Networks General Manager. "With FlexEnterprise, DT expands the usefulness of its IoT offering, especially for widely distributed applications like renewable energy infrastructure and green IoT environmental monitoring."

"By integrating satellite connectivity into our DT IoT offering, we connect everything everywhere and reshape the future of global IoT networking," said Dennis Nikles, CEO of Deutsche Telekom IoT GmbH. "Our customers now have a single point of contact, as well as a 'network of networks' with simple and ubiquitous connectivity that enables completely new possibilities."

FlexEnterprise is a ready-to-deploy, enterprise-grade connectivity service integrating satellite and terrestrial networks to extend internet, cloud, and private networks. The global FlexEnterprise

Brian Jakins
GM, Intelsat Networks

Dennis Nikles
CEO, Deutsche Telekom IoT GmbH

infrastructure is managed by Intelsat, eliminating the need for customers to maintain their own satellite infrastructure and expertise. Intelsat will deliver FlexEnterprise to DT as a satellite-as-a-service offering, further reducing the time and cost of operating new services.

The Intelsat FlexEnterprise satellite

platform allows mobile network operators to offer services similar to terrestrial networks regardless of geographic location. For example, industrial IoT customers can connect devices in hard-to-reach places, such as to control mountain-top or offshore wind turbines or assess flood risks by monitoring water levels in remote locations. ∎

Tusass selects NOVELSAT

for major capacity network in Greenland

NOVELSAT in content has announced that Tusass, Greenland's leading communications provider, has selected NOVELSAT's products and technology for a major capacity network in Greenland that will provide high-speed broadband services to remote and underserved communities in Greenland.

The network will be powered by NOVELSAT's Xnet, a high-capacity dynamic SCPC solution with advanced dynamic resource allocation. The Xnet hub will be installed in Maspalomas, Gran Canaria, providing very high-capacity connectivity to multiple locations in Greenland, including Qaanaaq, Upernavik, Nuuk, Ittoqqortoormiit, and Tasiilaq.

Designed to support the highest needs of network operators, NOVELSAT's Xnet optimizes and maximizes both performance and usage of satellite and network resources. Utilizing NOVELSAT's advanced technology for dynamic allocation of network resources along with the most bandwidth-efficient waveform, NOVELSAT NS4™, significantly enhances network economics.

"We are pleased to be working with NOVELSAT on this important project," said Jonas Hasselriis, CTO of Tusass. "Their Xnet solution offers the flexibility and scalability we need to provide our customers with high-quality, reliable connectivity they demand, even in the most challenging locations. We look forward to deploying this network to meet the growing demand for communication services in Greenland."

"We are excited to have been chosen by Tusass to provide this major capacity network in Greenland," said Gary Drutin, CEO of NOVELSAT. "Our Xnet solution is ideally suited to meet the unique needs of Greenland's arctic locations. We are confident that the combination of our technology and Tusass's expertise will provide a reliable and high-quality network that will benefit customers across the region."∎

Gary Drutin - CEO, NOVELSAT

Jonas Hasselriis - *CTO, Tusass*

Aftab Raza Khan

Eutelsat and Intelsat sign Multi-Orbit Contract Enhancing Connectivity with OneWeb Services

Eutelsat Communications has signed a multi-orbit agreement with Intelsat to enhance connectivity solutions over Europe, the Middle East, and the Pacific, including OneWeb services.

Under this new seven-year multi-million-euro capacity agreement with a progressive roll-out of assets over 2023, leveraging Eutelsat's High-throughput satellites (HTS) in the Ku-band including the recently launched EUTELSAT 10B satellite and OneWeb's constellation, Intelsat will be able to offer connectivity solutions for air, land and sea.

This deal cements a proposed deal previously announced on the EUTELSAT 10B satellite in October 2019 between Eutelsat and Gogo Commercial Aviation,

acquired by Intelsat in 2020. The new capacity agreement adds OneWeb's LEO (low-Earth orbit) solution to a larger portion of Eutelsat's HTS GEO (geostationary orbit) assets (EUTELSAT 172B, the coming EUTELSAT 10B, and the future Flexsat), creating a unique hybrid offer that provides Intelsat with enhanced connectivity capacities. Customers worldwide will be able to benefit from a seamless ubiquitous connectivity service enabled by the combination of the GEO and LEO assets of the three entities: Eutelsat's and Intelsat's GEO fleets coupled with OneWeb's ground-

breaking LEO network.

Cyril Dujardin, General Manager of the Connectivity Business Unit of Eutelsat and Ben Griffin, Vice President, Mobility at OneWeb, said: "Eutelsat and OneWeb are proud to collaborate to provide Intelsat with the best connectivity solutions. This truly hybrid approach paves the way for thorough connectivity solutions for all stakeholders, be it in the air, at sea, or on the ground. In all, it will deliver customers the best of both worlds in an integrated seamless approach." **T**

Azerbaijani winners of the Grand Prix of the International ActInSpace hackaton visited Azercosmos

The NEXUS team from Azerbaijan, who won the Air Zero G Grand Prize at the 5th edition of the ActInSpace international hackathon, visited Space Agency of Azerbaijan Azercosmos.

These young talents, students of the Azerbaijan – French University, won the ActInSpace 2022, which was held in Baku in partnership with Azercosmos in November 2022.

During their visit, winners talked about the preparation stage for the project they presented at the international hackathon, the development of the proposed idea and the possibilities of turning it into a product.

"ActInSpace" is an international hackathon organized by the French National Center for Space Research (CNES) and the European Space Agency (ESA), which envisages the use

of space technologies for society. This year, about 1000 teams representing 66 cities of 35 countries took part in the competition.

During the meeting, the winning team was invited to the International Astronautics Congress, which will be held in Baku this year, to learn more about the possibilities of space. UFAZ officials exchanged views on future cooperation prospects between Azercosmos and Azerbaijan-French University.

Chairman of the Space Agency Samaddin Asadov congratulated the winning team and the representatives of UFAZ University and wished them success in their future activities. It was emphasized that the high level of training of young people in the field of space in Azerbaijan is always in the center of attention, and the participation of young people in local and international competitions will be supported from now on.**T**

If we don't allocate the right frequency now, it can cost us more money and time later

Shunli Wang

President of Public Affairs & Corporate Communications, Huawei Middle East & Central Asia, talks to Teletimes at MWC Barcelona

Interview Gulraiz Khalid

Gulraiz Khalid: What is your top message to your regulatory partners?

Shunli Wang: We, as a responsible supplier in every country we operate, prioritize being a socially responsible citizen. Our first policy principle is to share the best practices we've learned from around the world to define and benefit our customers and final consumers. Our second policy principle is that our business model is driven by two factors: technology innovation and customer needs. All of the technical solutions we provide are geared towards these two factors. We are always looking for ways to improve and contribute to the ecosystem. One example of how policy is important not just for the ICT sector, but for many sectors is frequency allocation. For instance, in relation to the 1.2 Ghz bandwidth in 6 Ghz frequency - it's becoming popular for Wi-Fi around the world, however, the GSMA and ITU among others also recommended it for IMT identification. The different approaches towards technology and certain items require continuous open dialogue and a need to quickly align on standardization.

G.K: What are some of the key concerns from a regulatory perspective in your opinion?

S.W: We need to think about who and what can bring more value to society and contribute more to local countries' digital economic growth. Spectrum allocation is a key issue: if we don't allocate the right frequency now, it can cost us more money and time later. The C band, for instance, was designed over 10 years ago and can be shared by the whole industry, including equipment and device providers. Policy alignment and agreement from different industries are crucial in ensuring we allocate frequencies carefully and correctly. Understanding the different opinions and concerns is important and more important is bringing everyone together to a single platform. For example, from Huawei, GSMA, and ITU's perspective, we recommend 6 Ghz for IMT use, especially

for the near future of 5.5G.

G.K: Why is standardization more important right now than ever before?

S.W: Alignment on key aspects is crucial at this point, especially when we talk about 5.5G. Ultra-broadband 5.5G will be a key milestone on our path to what we call "intelligent world". To hit this milestone, all industry players, including standards organizations, regulators, operators, and equipment vendors, will need to work together.

It is all worth the effort though. With 5.5G, broadband speeds can reach 10 Gbit/s, marking a huge improvement compared to the current 1 Gbit/s experience. Currently, homes have an average of 5 to 20 devices connected to their Wi-Fi networks. However, this is set to change as smart home devices see broad adoption, which will drive this number up to 150 to 200. It will therefore be essential that fiber-equivalents can reach every room of every home. Even a single light bulb, a window pane, or a single switch will be a new connection and we need to prepare now so that we have the infrastructure ready for these connections.

The industry must collectively move forward to reach ultra-broadband 5.5G starting with defining next-gen standards and reaching consensus across the industry; jointly promoting the rapid adoption of standards across entire product lifecycles, from technological breakthroughs to product development, deployment, and operations.

G.K: What does Huawei bring to the table that goes beyond connectivity?

> *The different approaches towards technology require continuous open dialogue and a need to quickly align on standardization*

S.W: I'd like to discuss three sectors with you. Firstly, as a leading provider of ICT solutions, we offer the latest technical knowledge and solutions to help our customers succeed in every local market. ICT is already the engine that drives industry development in every country, and our technical knowledge and solutions are essential for digital economic growth. We see ourselves as an innovation driver, particularly in the ICT sector.

Secondly, we provide expertise and best practices for digital transformation in every sector, including government. For example, we help governments become more accessible by making information available to every citizen in a user-friendly way. This saves citizens time and effort when dealing with government processes.

Thirdly, as a solutions provider, we also take on social responsibility and contribute to

> *Policy alignment and agreement from different industries are crucial in ensuring we allocate frequencies carefully and correctly*

the entire ICT ecosystem, especially in talent development. In the Middle Eastern region alone, we have set up over 186 ICT academies and have trained more than 150,000 students. Every year, we have the capacity to train more than 150,000 students, with over 2.2 million students already participating in our Seeds for the Future program. Additionally, our Huawei ICT Academy globally can train over 220,000 students and provide them with valuable Huawei certification, which is a recognized professional certification in the ICT sector and can help their career development.

In summary, our focus is on technology innovation, digital transformation, and building a strong ICT talent ecosystem. **T**

> *As a solutions provider, we also take on social responsibility and contribute to the entire ICT ecosystem, especially in talent development*

Zain Group 2022 Revenue soars 14% to reach USD 5.6 billion (KD 1.7 billion)

Net profit grows 6% to reach USD 640m (KD 196m)

Zain Group has announced its consolidated financial results for the full-year 2022, and fourth quarter ended 31 December, 2022. The Group ended the year with a customer base of 52.4 million, an annual increase of 7%, reflecting an addition of 3.5 million customers. For the full-year 2022, Zain Group generated consolidated revenue of KD 1.7 billion (USD 5.6 billion), a year-on-year (Y-o-Y) increase of 14%. Consolidated EBITDA for the period increased by 7% Y-o-Y, to reach KD 673 million (USD 2.2 billion), reflecting an EBITDA margin of 39%. Consolidated net income reached KD 196 million (USD 640 million), up 6% Y-o-Y and reflecting earnings per share of 45 fils (USD 0.15).

The Board of Directors of Zain recommended a cash dividend of 25 fils per share for the second half (H2) of 2022.This dividend follows the semi-annual dividend of 10 fils distributed earlier in 2022, totaling 35 fils per share for the year and reflecting a 78% payout ratio, one of the highest of listed entities in the region. Furthermore, the Board made another recommendation to implement a minimum semi-annual and annual cash dividend policy of 35 fils in total, for the forthcoming three years, both recommendations are subject to Annual General Assembly and statutory approvals. It is worth noting that the total recommended cash dividends of 25 fils for H2, 2022 and 35 fils each year for the next three years, will total 130 fils in cash dividends. This expected distribution based on the current share price of Zain as of 13 March 2023, will reflect an average annual yield of approximately 8% for entitled shareholders for the three-year period.

For the fourth quarter (Q4) of 2022, Zain Group generated consolidated revenue of KD 458 million (USD 1.5 billion), up 20% Y-o-Y. EBITDA for the quarter amounted to KD 182 million (USD 591 million), up 22% Y-o-Y, reflecting an EBITDA margin of 40%. Net income for the period amounted to KD 44 million (USD 143

Bader Al Kharafi
Vice Chairman and Group CEO, Zain

million), representing earnings per share of 10 fils (USD 0.03).

Key Operational Notes for 4th quarter and 12 months ended 31 December 2022

1.Throughout 2022, Zain Group invested USD 936 million in CAPEX reflecting 17% of revenue, mainly on 4G and 5G rollouts as well as expansion of Fiber-to-the-Home infrastructure and spectrum license fees

2.Notable 7% customer growth of 3.5 million; and consolidated data revenue growth of 5% to reach USD 2.2 billion, representing 40% of the Group's revenue for the year

3.Zain KSA completes sale of 8,069 towers for USD 807 million to the Public Investment Fund, to transfer at least 3,000 towers in January 2023, remaining towers to be transferred over 18 months

4.In January 2023, Zain Iraq entered into a definitive 15-year agreement with TASC Towers to sell and leaseback, plus the management rights of its 4,968 tower portfolio for USD 180 million

Ahmed Al Tahous
Group Chairman, Zain

5.Zain fintech across the group attract 1 million customers, a 64% Y-o-Y increase, with revenue up 241% Y-o-Y and having transactions value of USD 3.6 billion in 2022

6.ZainTech completes acquisition of BIOS Middle East, a leading managed cloud service provider; Groupwide B2B revenues grow 28% as a result of new dynamic and lucrative ICT services

7.Digital services groupwide witness revenue growth of 52% Y-o-Y, inclusive of Dizlee (API) platform offering 51 live services, and having over 191 million API transactions since launch in mid-2018

8.The growth of Zain Esports saw it hold 28 tournaments in 2022, with over 30,000 gamers, more than 70 million social media impressions and 15 million engagements on social media channels

9.Zain maintains region's highest A- rating on the 'CDP Score Report–Climate Change 2022', among the leaders globally; commits to Science-Based Targets initiative emission guidance

10. Zain named Best Telecom Brand in MENA for 2022 by Telecom Review, and as having the Best Diversity & Inclusion strategy and Best Women Development & Leadership Program by Informa

11. Zain brand valuation grows 14% to USD 2.74 billion according to Brand Finance 2022 rankings

Commenting on the 2022 full year results, the Chairman of the Board of Directors of Zain Group, Ahmed Al Tahous said, "A challenging year where the Board and management focused on operational efficiency, ESG initiatives, and the development of lucrative business verticals to drive shareholder value among many other key initiatives. I would like to recognize the government bodies and regulatory authorities in Kuwait and across our markets for their foresight in creating a conducive environment that supports the telecom sector and empowers Zain to provide meaningful connectivity to the communities, businesses, and governments we serve."

Zain Vice-Chairman and Group CEO, Bader Al-Kharafi commented, "The impressive results for the 4th quarter and full-year of 2022 are a culmination of many cost optimization, digital innovation, and data monetization initiatives executed, bolstered by 5G network upgrades, lucrative enterprise deals, tower sales, proactive regulatory and sustainability practices implemented across our footprint in accordance with our 4Sight strategy, all of which are combining to future-proof the company."

"The Board's recommendation of 25 fils per share dividend for H2 2022, in addition to the earlier semi-annual 10 fils dividend, totaling 35 fils for the year, reflects a 2 fils increase on the previous three years and a 78% payout ratio, one of the highest in the region. This improved dividend, along with the Board's minimum 35 fils recommendation for the forthcoming three years, provides a clear indication of the strong operational performance and strength of our financial solvency as we methodically grow the business and manage the continuing socio-economic challenges that several of our markets present." "Similar to previous completed transactions in Kuwait and Jordan,

the recent sale and leaseback of our passive tower infrastructure in Saudi Arabia and Iraq for a combined value of approximately USD 1 billion, creates significant value for shareholders. By injecting the sale proceeds into the business, it gives both operations greater flexibility to invest in network upgrades and ICT technologies to meet the ever-increasing demand for reliable and high-speed broadband. Moreover, the deal enhances operational efficiencies and enables a laser focus on offering new services and providing customers a better mobile and data experience."

"The impressive growth of several digital entities that were recently launched is a key part of the Zain's financial performance and brand strength in recent years. One million customers are now benefiting from the numerous dynamic fintech solutions across several operations, recording over USD 3.6 billion worth of transactions in 2022. We will nurture this ever-growing demand and plan to extend much needed fintech offerings across all operations in the near future." "The impressive 52% growth of our Group-wide digital services revenue reflects the many data monetization initiatives maximizing our 5G, FTTH and 4G networks. The Dizlee API platform continues to attract more partners offering sort-after digital content and gaming solutions, resulting in profitable growth on multiple levels. Zain Esports' tie-up with PLAYHERA MENA to offer a new tournament platform with e-commerce across the Zain footprint is driving gamers to us and cementing Zain as a leading regional gaming powerhouse."

"ZainTech's acquisition of managed cloud provider BIOS Middle East is a major milestone in our drive to transform Zain into a leading ICT and digital lifestyle provider. This strategic acquisition is set to supercharge our capabilities in hybrid and multi-cloud managed services and enable us to provide the best suite of digital and ICT transformation services in the region to organizations and government entities. The 28% annual growth in B2B revenues across our footprint reflects the sound cooperative business model between ZainTech and our local operations' B2B teams." "Our wholesale division, 'Global

Connect' focus on managing capacity, voice, roaming and cable business across the region witnessed the obtaining of approvals for the cable landing station in Sudan through the Africa1 submarine cable landing station. This follows Global Connect's first investment in a portion of the state-of-the-art PEACE subsea cable, connecting the Middle East with Europe through the J2M (Jeddah, Saudi Arabia to Marseille, France) submarine cable system, that will offer Zain full operational independence. This is a critical factor for Zain operations to foster digital transformation initiatives in their markets, particularly for cloud and IoT services, that will accordingly contribute positively to increasing revenues and reducing operational costs."

"The A- ranking that Zain maintained in the latest 'CDP Score Report–Climate Change 2022', positioned us first in the region and among leaders globally. We have recently committed to setting emissions targets in line with the Science-Based Targets initiative (SBTi) guidance to halve carbon emissions before 2030 and achieve Net-Zero carbon emissions by 2050, highlighting our mission to foster sustainable systemic change and provide meaningful connectivity by integrating technologies to generate safe energy to help reduce global warming. Protection of our planet should be a key priority for every organization and individual." "The multiple recognitions we received during 2022, which include the Best Telecom Brand, the Best Diversity, Equity & Inclusion (DEI) strategy, as well as the Best Women Development & Leadership Program in the region, solidify our reputation as one of the most exciting, progressive, and inclusive companies to work for. Zain is proactively embedding its shared values into its DNA to drive our business, sustainability, and DEI agenda, enriching our purpose for being as an organization."

Al-Kharafi concluded, "As we enter 2023 on the back of these impressive 2022 results, Zain is primed to further execute on its 4Sight strategy, building on and maximizing the many opportunities within the core telecom business while diversifying into new lucrative business verticals in the ICT, digital infrastructure, fintech, and digital services arenas." **T**

"There is a huge market share to capture when it comes to cloud computing"

Haider Bokhari
Group CEO, Cloud Tribe

H.B: I am the group CEO and the current CEO of Cloud Tribe. I studied law and business in the UK and started my corporate journey there, working in some top corporate entities in Central London.

Cloud Tribe is run in a startup environment, and my job is to ensure that Cloud Tribe has the best coverage, reputation, and technically gives the best services in the market, which is the claim that we make publicly. We want to provide the best cloud services within Pakistan so that people who are currently using international cloud companies don't feel like they are getting inferior service from a local public cloud service provider.

TT: Please tell us about the vision and

> " *Our data centers are certified to an international standard, and our cloud software is also GDPR compliant. We are constantly complying with international standards of data center care and optimization* "

mission of the HB Group.

H.B: HB Group's ultimate mission and vision are to serve the country of Pakistan and to ensure that Pakistan is a key player in the global economy. That is why we have always been pioneers with the latest and cutting-edge technology in Pakistan. For example, when we were running Wi-Tribe, we were the first telecom company in Southeast Asia to bring 4.5G LTE-A. We believed the people of Pakistan needed high-speed internet to serve their purposes.

That is also the reason why we have launched Cloud Tribe, which is an international standard company within the borders of Pakistan.

TT: Mr. Hassan Bokhari recently received the pride of performance award from the President of Pakistan - would you like to share some of the efforts and

> " *One of our first clients was a very well-known airline, so it was a pleasant surprise for us to see that Cloud Tribe had immense potential in the market, not just with SME's but other big entities as well* "

achievements that went behind this award?

H.B: It is quite funny because when we sit with senior executives and VP's of some of the biggest companies in the world and we share stories with them, they always laugh and say they have never met someone quite like my father, Hassan Bokhari.

He has been a one-man army through most of his career, and his goal is always for the benefit of Pakistan, before he starts any work. He has received no financial assistance, bank loan, or any investments from any other company; rather, he has self-funded this huge success from beginning to end, and that is what makes him so unique.

However, business aside, the real reason I believe he won an award from the President of Pakistan is because of his philanthropic work. He has not shared this with many people, but he runs schools and many other charitable organizations that are funded by the revenues of our companies. For example, he looks after thousands of children worldwide and sponsors many people's education. He also sponsors food drives in four different countries on a weekly basis.

TT: Please tell us about the vision behind Cloud-Tribe and what it's set out to achieve.

H.B: The vision of Cloud Tribe is quite simple; keep Pakistani data and dollars within the borders of Pakistan.

TT: Some of our readers would be interested in the name "Cloud-Tribe" - please tell us about the idea behind this name and the overall brand?

H.B: Cloud Tribe is like a phoenix that rose from the ashes of Wi-Tribe, the internet service provider company that we own.

Unfortunately, Wi-Tribe ran into some issues in recent years due to some issues with the regulatory body and some other disputes with third-party organizations.

We are really fond of the word "tribe" because it depicts our thoughts exactly. We alone cannot change the dynamics of the market alone; it requires a tribe to work together. That is why we are partnering with so many amazing national and international technology companies, so we can help each other penetrate the market.

TT: What market segments are you looking to target?

H.B: Initially, when we

launched, we felt that we would target SME's. However, we were overwhelmed by the response that we received from the market, seeing as we only did a soft launch in 2021.

Dozens of organizations, be they banks or other companies in the financial sector,

to the point that even government entities began contacting us for a local cloud solution.

One of our first clients was a very well-known airline, so it was a pleasant surprise for us to see that Cloud Tribe had immense potential in the market, not just with SME's but other big entities as well.

TT: Can you tell us a little bit about the services you will be offering?

H.B: For us to gain credibility in the
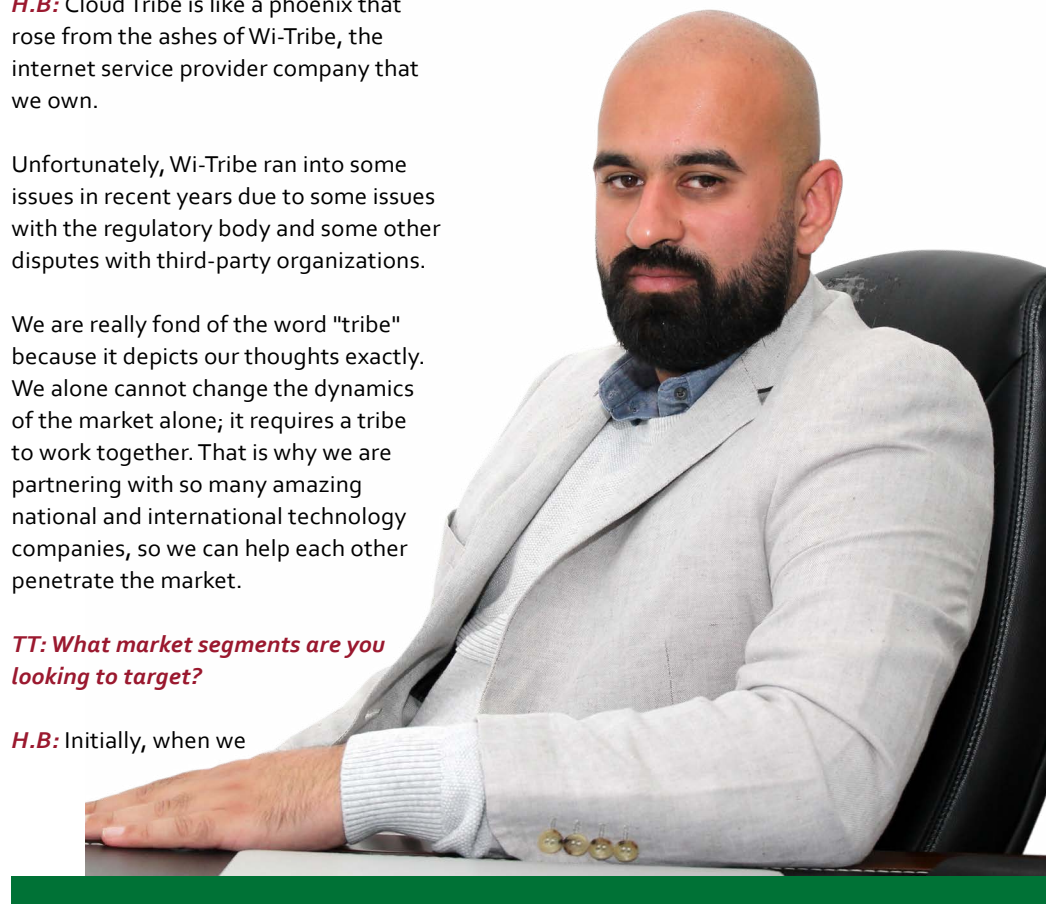
(DRaaS), and backups (BaaS).

Now that we have gained the trust of the market, we have built a SaaS marketplace where we onboard amazing Pakistani software alongside international SaaS solutions. This gives the end customer an easy way to subscribe to any software they may need in their business and allows us to work in a true partnership model with our SaaS partners.

Other services we offer are migration services, where we handle the end-to-end migration to Cloud-Tribe. We also started offering

looking to expand globally?

H.B: Currently, we are in the process of expanding outside of Pakistan to the GCC region. Very soon, we will launch in the UAE, and further along in our road map, we would like to target KSA as well.

TT: There are a few cloud service providers already in the market - how does Cloud-Tribe differentiate from its competitors? Especially on a technical level.

H.B: Ultimately, there is a huge market share to capture when it comes to cloud computing. Not every organization wants to use hyperscalers like AWS or Microsoft Azure. Cloud-Tribe would like to offer a capable and cost-effective alternative to the hyperscalers, with an emphasis on great customer service.

Our platform is relatively straightforward and easy to manage by companies' existing IT teams.

In the context of Pakistan as well, our data centers are certified to an international standard, and our cloud software is also GDPR compliant. We are constantly complying with international standards of data center care and optimization.

TT: What kind of targets are you looking to achieve by the end of 2023?

H.B: By the end of 2023, Cloud Tribe would like to cement its footprint in the Pakistani market by catering to a large market share of Pakistani businesses. And by catering, we mean to give our partners zero headaches for their infrastructure, so they can focus on their main business activities.

We would also like to expand into at least the UAE next, as HB Group has already been settled in Dubai for the last 10 years. We have an existing network of potential partners already here. KSA and Turkey would be our targets for 2024.**T**

> **We would like to expand into the UAE next, as HB Group has already been settled in Dubai for the last 10 years. We have an existing network of potential partners already here. KSA and Turkey would be our targets for 2024**

market, we decided to offer basic infrastructure services and show our credibility from a technical perspective. Our main services in this were infrastructure (IaaS), disaster recovery

security as a service for homes, alongside unique services like Smart Home!

TT: From a geographical point of view, will you focus only on Pakistan or are

> " To successfully bring 5G to Pakistan, the government, mobile operators, and society in general must first define a problem that can only be solved by 5G, or that can be solved most effectively by 5G "

Interview: Gulraiz Khalid

We know we can't solve every problem at once, so we're focusing on specific issues

Zarrar Hasham Khan - *SEVP (Enterprise & Wholesale) & Chief Business Services Officer, PTCL*

Zarrar Hasham Khan, SEVP (Enterprise & Wholesale) & Chief Business Services Officer, PTCL Group talks about the role ICT can play in solving many of the countries critical problems during an interview with Teletimes International in MWC Barcelona

Gulraiz Khalid: Would you like to talk a little bit about MWC and how it has evolved over the past years?

Z.H: I have attended a lot of MWC events and the first one was probably in 2004. The conference has changed a lot over

the years. In the past, it used to be smaller and held at a section of Fira. However, the growth and evolution of the Mobile World Congress (MWC) reflects the changes in technology, especially in mobile operations.

In the early days, the focus was on connectivity. When 3G arrived in 2007, the emphasis shifted to the internet, and with the introduction of 4G in 2011, apps became the main focus. The adoption of the iPhone in 2010-11 and the widespread use of 4G completely changed the direction of the mobile industry.

The app providers became the ones creating more value, and customers started feeling more connected to applications than to service providers. With the arrival of 5G in 2018, the focus shifted again, and it was seen as a gateway to the Fourth Industrial Revolution and a societal shift. Now, we're seeing the maturity of the 5G concept and the Fourth Industrial Revolution.

G.K: How far is your home market (Pakistan) from 5G adoption?

Z.H: The first element is understanding

why we need 5G in Pakistan. It's important to identify the problem that 5G can solve in Pakistan, rather than simply viewing 5G as a technology to be adopted. For example, having access to 100 Mbps or 1 Gbps may not be a practical solution in a country where affordability and mobile ARPU are low.

To successfully bring 5G to Pakistan, the government, mobile operators, and society in general must first define a problem that can only be solved by 5G, or that can be solved most effectively by 5G. Once we have identified the problem, we can start to work towards bringing 5G to Pakistan. However, it's worth noting that mobile operators are currently facing economic challenges, so bringing in 5G may be difficult.

In summary, to bring 5G to Pakistan, we need to identify a specific problem that can be solved by 5G and work towards solving it. This will ensure that 5G adoption in Pakistan is practical, effective, and sustainable.

G.K: Would you like to talk about some key issues in Pakistan which the existing ICT infrastructure can address?

Z.H: I would like to talk about PTCL and Ufone in particular since I am the Enterprise Chief for both. Pakistan is facing four to five critical problems that need to be addressed. Firstly, the country is in a challenging economic situation with a current account deficit and fiscal deficit. We need to leverage technology to find solutions to these problems.

Secondly, agricultural productivity is low, and we need to use telecommunication technology, such as IoT, to increase productivity in this sector.

Thirdly, education is another area that needs improvement. Pakistan has some of the lowest education and child learning indicators in the region. We need to use technology, such as e-learning and providing smartphones and tablets, to accelerate learning and improve education

outcomes.

Fourthly, healthcare is a significant issue in Pakistan, with high rates of child and infant mortality, as well as low average lifespans. We need to use technology, such as telehealth, smart hospitals, and remote diagnostics, to address these problems.

As the PTCL group, we are individually focusing on solving these problems for Pakistani society, and leveraging technology to find practical and effective solutions.

G.K: Some of our readers would be interested in the role ICT can play towards the agriculture sector of Pakistan?

Z.H: There are multiple aspects that need to be addressed. The first one is related to Pakistan's water scarcity issue. Currently, flood irrigation is being used instead of smart irrigation, which means there is a need to adopt technology that only irrigates when necessary and in the required amount. This doesn't necessarily mean expensive drip irrigation technology, but rather sensors that can be placed in the soil to monitor the moisture level.

The second use case is related to the high cost of fertilizer. It is crucial to use the optimal amount and type of fertilizer at the right time. Therefore, sensor technology can be used to determine the exact time when fertilizer is needed.

Another area that requires attention is agricultural credit. Currently, farmers have to pay higher interest rates, and we need to make it more accessible to them. Also, almost 50% of perishable crops go to waste due to low agri-productivity, which can be improved through the use of technology like cold storage, smart logistics, and direct farm-to-market procurement.

G.K: What about the education sector? Is PTCL working directly on any initiatives in that regard?

Z.H: We're taking on the role of a system integrator and working with our partners and the government to explore different opportunities. We know we can't solve every problem at once, so we're focusing on specific issues.

Regarding education, we're striving for inclusive connectivity, particularly in rural areas of Pakistan, which has one of the largest rural populations. Huawei has been championing the education cause.

We're taking two approaches to improve education. First, we're collaborating closely with partners to turn universities into smart institutions. PTCL has already successfully executed some of the largest smart university projects in Pakistan. Second, we're working extensively with the Ministry of Education on the E-learning side. We won the branded e-learning tender of the World Bank, which was awarded to PTCL. We're executing app-based learning and will soon launch OTT-based education that provides needed education to those who cannot physically attend school. We also have our own learning management system. We're working with our partners to reduce the complexity and cost of adopting technology in the education sector.

G.K: Finally, please tell us about the role of USF and how it sets an example for other markets?

Z.H: The USF (Universal Service Fund) has a crucial role in providing connectivity to areas where it's not economically feasible for providers to do so, like FATA and areas in the Balochistan province. This connectivity has a positive impact on various sectors, including education, healthcare, and financial institutions. USF is subsidizing these providers to make this possible, and their work in this area is commendable. The role that USF provides enables many solutions and provides connectivity to remote communities increasing the standard of life on many fronts all across the country. For this, we are all in appreciation of them.∎

Industry wide Dialogue on Digital Competence, Secure Cyberspace, Sustainable & Green ICTs

Emerging Digital Ecosystems across Economies to Ensue on May 15th at the SAMENA Council Leaders' Summit 2023 in the UAE

SAMENA Telecommunications Council has announced that the annual congregation of the global and regional leaders, the SAMENA Council Leaders' Summit, bringing market and government-sector representation from multiple continents, will be held in Dubai on May 15th.

To be held under the theme "Sustainable Connectivity and Emerging Ecosystems in Digital Economy", at Atlantis – The Palm, Dubai, the annual international industry leadership will bring renowned regional and global private-sector players to delve in discussions centered on ICT Infrastructure Requirements in Emerging Markets, SA-ME-NA Digital Services Landscape & New Digital Enablers; Multi-Dimensional Approaches in Cybersecurity; Evolution of 5G Digital Technologies, Future Mobile and Metaverse based Life and Business, a need for New Frequency Allocations for Telecom Operators, Non-Terrestrial Network Integration, and overall Value-Creation, among other important matters.

Officially announcing the Leaders' Summit 2023 to the Industry and inviting industry stakeholders to mark May 15th on their calendar, Bocar BA, CEO & Board Member, stated: "For over a decade, the Leaders' Summit has positioned issues, the Industry's needs, private-sector players, and leaders in influential and productive ways achievable. The 2023 edition of the

Bocar BA - CEO & Board Member
SAMENA Telecommunications Council

Leaders' Summit aims to contribute to the global advocacy momentum on addressing digital transformation challenges, including those related to partnerships, collaboration, security, sustainability, and investment. Moreover, Leaders' Summit 2023 serves as a progress-measuring tool with respect to work being done regionwide on the 17 SDGs, building secure ICT infrastructure across emerging markets, revisiting multilateral international approaches and stakeholder inclusion, trust-building, creating an enabling environment, and facilitating the ICT sector players by advocating for the right incentives and resources to deliver on a complex set of expectations."

The Leaders' Summit 2023 encompasses dialogue, debate, and discourse-based engagement among cross-industry stakeholders, globally-renowned technology firms, emerging digital ecosystem leaders, policy-making bodies, advocacy institutions, change-drivers, and digital economy enablers and decision-makers on industries issues, real-life problems and challenges, seeking implementable solutions and supporting the fulfillment of objectives of the Member States, the ITU, the UN Broadband Commission, and the Private Sector, at large.

Since 2018 the SAMENA Council's Leaders' Summit has been focused on 5G, which has catalyzed positive impact on 5G planning and development in the region, empowered cross-industry participation, as well as supported policy and regulatory consideration. The Summit has provided the SA-ME-NA region's stakeholders visibility on what to expect and prepare for in the new Digital Age. In 2023, the Council aims to address evolution of 5G digital technologies and 5.5G ecosystem development requirements, building 21st century financial and telecom synergies, enabling digital competence and boost to the region's digital economy, and supporting constructive enablement of a secure Cyberspace. **T**

Dr. Mohamed Hamad Al-Kuwaiti recognized for outstanding contributions in advancing global cybersecurity

Dr. Mohamed Hamad Al-Kuwaiti, Head of the UAE Cybersecurity Council was recognised and celebrated by hundreds of cyber leaders from across the world for his outstanding contributions towards advancing global cybersecurity and digital transformation.

Dr. Al-Kuwaiti, who is also the Head of Cybersecurity for the UAE Government, was presented with the Cybersecurity Excellence Awards' Global Leadership Award at GISEC Global 2023, the Middle East's largest cybersecurity event, in recognition of his bold mission to spread cyber awareness and culture, develop cyber talent, empower cross-border collaboration, and position the UAE at the forefront of international cyber resilience.

Since taking on the mantle as the UAE's Head of Cybersecurity two years ago, Dr. Al-Kuwaiti has spearheaded several key initiatives, including the UAE Cybersecurity Council's award-winning Cyber Pulse initiative, which provides cyber culture awareness on a national level, helping UAE citizens understand the impact of cyber-attacks and providing guidance to protect themselves and their families from digital threats. In a dual-award winning week, Cyber Pulse also won the International Telecommunication Union's Ethical Dimensions of the Information Society award for its "outstanding contributions towards strengthening the implementation of the World Summit on the Information Society outcomes" in Geneva, Switzerland.

Over the past 10 years, Dr. Al-Kuwaiti has been actively involved in more than 500 cyber security lectures, workshops and conferences, as a keynote speaker and thought leader, impacting more than five million beneficiaries through social networks, conferences and more. Under his leadership, the UAE has advanced 42 positions in the United Nation's Global Cyber Security Index, rising to 5th place globally in 2020 from 47th place in 2017.

Dr. Al-Kuwaiti's timely and pro-active intervention played a key role in lowering the

exposure of UAE to cyber-attacks during the global pandemic, and there was a marked reduction in phishing attacks, identity thefts, social engineering scams and other common attacks perpetrated by cyber attackers since His Excellency instituted pro-active preventive measures to reduce the attack surface and secure the UAE cyber space.

"This award reflects the global recognition of the constant efforts made by the UAE in the field of cybersecurity, and an inevitable result of the directions and visions of the country's wise leadership, in addition to cooperation by all national teams, which contributed to enhancing the UAE rank on global competitiveness indicators," said Dr. Al -Kuwaiti.

"The UAE Cybersecurity Council follows a clear strategy aimed at creating a safe and resilient cyber environment that helps organisations, institutions and individuals achieve their potential, creates a safe digital society, and promotes a positive digital identity."

"The Cybersecurity Excellence Awards' Global Leadership Award elevates the efforts of the UAE Cybersecurity Council to achieve cyber stability locally and regionally, while encouraging more work and innovation to strengthen the UAE's global leading position in cybersecurity and improving its national capabilities in this area."

The 2023 Cybersecurity Excellence Awards honour individuals and organisations that demonstrate excellence, innovation and leadership in information security. The 8th edition this year attracted more than 800 entries across 300 categories.

"We congratulate His Excellency Dr. Al-Kuwaiti for the recognition as the exclusive award winner in the Global Leadership Award category of the 2023 Cybersecurity Excellence Awards," said Holger Schulze, CEO of Cybersecurity Insiders and founder of the 600,000-member Information Security Community on LinkedIn, which organises the annual Cybersecurity Excellence Awards. "This award is a testament to Dr. Al-Kuwaiti's dedicated leadership and outstanding contributions to advancing global cybersecurity and digital transformation."

An ardent advocate of embracing digital transformation to increase efficiency in the UAE government for the betterment of its people, Dr. Al-Kuwaiti was also responsible for launching several initiatives to rapidly secure investments made in emerging technologies from the next new wave of Industry 4.0. His Excellency subscribes to a notion of 'Cyber Heaven' through which citizens of the UAE become more digital and cyber literate, and are able to keenly discern cyber threats around them today.

With more than 20 years' experience, Dr. Al-Kuwaiti holds a Doctorate in Computer Engineering and Network Security from George Washington University in the U.S. and a master's degree in Telecommunications and Computer Networks. He holds a M.A. degree in International and Civil Security, is a recipient of numerous awards, and an honorable member of the Society of Engineers, IEEE Society, Golden Key National Honor Society and Computer Society. His research interests are detecting, monitoring and responding to cyber warfare, network forensics, corporate governance & processes, and national cyber policy. ∎

CPX and Huawei launch their first joint cloud security offering at GISEC

CPX Holding and Huawei are bringing their first cloud solution to the UAE market. A ground-breaking security data lake has been launched at the Gulf Information Security Expo & Conference (GISEC) 2023, as part of the ongoing strategic alliance announced a few months ago between CPX and Huawei. The data lake is aimed at protecting valuable critical infrastructure in the UAE from cybersecurity challenges.

Powered by advanced analytics and machine learning from Huawei and CPX's industry-specific expertise, the new offering enables customers to gain unparalleled visibility into their operations and rapidly respond to mission-critical cyber incidents.

With the expanding threat landscape, protecting operational technology (OT) environments from cybersecurity challenges has become crucial for ensuring the safety and reliability of operations. Cyber incidents on OT systems can cause grave damage, resulting in production downtime, equipment damage and even physical harm to persons. IT leaders often have limited visibility over their organizational data, making security more difficult to control. To counter this, the security data lake service provides a reliable and scalable solution for collecting, storing and analyzing data from OT environments.

Khaled Al Melhi, Chief Executive Officer of CPX, said: "As a leading home-grown provider of cybersecurity services and solutions, we are always striving to launch cutting-edge cybersecuritiy offerings in the region, to help secure the UAE's critical infrastructure. Through our collaboration with Huawei, we're now bringing the cloud security data lake to create a fully secure ecosystem of analytics and free data flow across any industry. This will also strengthen our commitment to the UAE's vision of becoming the leading digital economy."

Aloysius Cheang, Chief Security Officer, Huawei Middle East & Central Asia, said: "We are thrilled to partner with CPX in order to provide a state-of-the-art service that will help protect the UAE's valuable infrastructure. At Huawei, cybersecurity and privacy protection are our top priorities. We have been continuously committed to building trust, ensuring privacy protection, maintaining transparency and advocating open collaborations."

The service is provided from a secure, government-approved cloud offering in the UAE and is designed to protect the most vital sectors including oil and gas, transportation, healthcare, finance and banking, amongst others. It has undergone rigorous testing to ensure the highest levels of security and regulatory compliance for UAE organizations. ∎

Huawei experts share latest cybersecurity advances at GISEC Global 2023

Huawei has participated at GISEC Global 2023 as the Lead Strategic Partner where it is showcased a range of its latest cybersecurity solutions, innovations for digital transformation, and successful use cases. Highlighted the best strategies to protect MEA enterprises in the current digital era, Huawei experts will also contribute to various keynotes and sessions, leveraging the company's longstanding ICT expertise and sharing its best and latest practices.

GISEC Global is the largest and most influential cybersecurity exhibition and conference in the region that brings together cybersecurity experts and leaders to anticipate the next major movements, challenges, innovations and strategies that will further strengthen cybersecurity across organisations, industries and economies. Of the solutions Huawei is showcasing at the event is Huawei Ransomware Protection Solution, Huawei CyberEngine, Huawei SecoManager Platform, Huawei Industry Sensing, Huawei Cloud Security and Compliance tool, Cybersecurity in 5G and F5G World, AI-enabled One-Stop Managed Security, Cloud-Network Synergy Secure, and Secure Digital Power Solutions, amongst others.

Jiawei Liu, CEO of Huawei UAE, commented: "We are glad to participate as the Lead Strategic Partner of GISEC Global 2023. With rapid digital transformation across multiple industries, enterprises in the Middle East should have a robust security strategy in place to survive and prosper. At Huawei, Cybersecurity and privacy protection are our top priorities, and must always come before commercial interests."

Aloysius Cheang, Chief Security Officer, Huawei Middle East & Central Asia, said: "GISEC Global is the platform of choice for Huawei to deliver our cybersecurity messaging in the Arab World. Through

our participation, we demonstrate the value Huawei brings to the table, helping safeguard the digital transformation journey of our customers and shedding light on cybersecurity and privacy challenges facing businesses across the region. Cybersecurity is part of our DNA. Our cybersecurity strategy has been consistent over the years, positioning a product security baseline that focuses on building trust, ensuring privacy protection, maintaining transparency and open collaborations."

As the Headline Sponsor of the Nation Stage which will feature a series of keynotes and discussions focused on GCC and Africa, several Huawei experts are participating in various sessions to exchange knowledge on important security topics. Dr. Aloysius Cheang is delivering a keynote on the main stage, shedding light on the steps that should be taken to redefine the role of a CISO to avoid being replaced by AI and robotics, and Kamal Zian, Chief Security Officer at Huawei Gulf North, is also delivering a keynote discussing cloud security key challenges, key technology trends to solidify cloud security and Huawei cloud security highlights. Furthermore, Martin Xie, Senior Expert, Global Security

and Privacy Office at Huawei is addressing "The Cybersecurity Collaboration and International Cooperation", and Babar Haq, CTO-IT, Huawei Middle East & Central Asia, will discuss how to remain agile in the changing landscape of challenges. Additionally, Huawei will sign a number of MoUs during GISEC Global with several leading telecom and industry partners in the region.

At Huawei, protecting the customers' interests is at the core of its end-to-end cybersecurity and privacy protection assurance system. In 2021, over 20,000 data subject requests were processed in a timely and effective manner, while the company obtained a total of 74 cybersecurity certifications. Further, Huawei works with all stakeholders in an open and transparent manner to tackle the challenges of cybersecurity. Huawei, therefore, promotes the adoption of open and verifiable security standards such as GSMA NESAS /3GPP SCAS for 5G security, GSMA 5G Security Knowledge Base, or OIC 5G Security Framework. Huawei believes security should be addressed from a technological perspective rather than geopolitics or ideology. ∎

etisalat by e& announces

Mobile Security Operation Centre with UAE Cybersecurity Council

Masood M. Sharif Mahmood
CEO, etisalat by e&

etisalat by e& has announced the launch of the Mobile Security Operation Centre (MSOC) in collaboration with the UAE Cybersecurity Council to provide business customers with real-time protection services to safeguard mobile phones from malicious attacks.

The new centre will offer cutting-edge cybersecurity technologies and solutions to the UAE business sector, addressing the challenges critical sectors may face due to the increasing number of mobile phone users and global business performance. The services offered by the centre protect against malicious and disruptive software, including viruses that target mobile devices such as smartphones and tablets.

The Cybersecurity Council, established in November 2020, has been tasked with developing and overseeing the UAE's cybersecurity strategy and creating a secure and robust cyber infrastructure in the Emirates.

Dr. Mohamed Hamad Al Kuwaiti, Head of Cybersecurity for the UAE Government, said: "With rapid digital transformation being witnessed across businesses, the risks posed by cyberattacks against various sectors have increased exponentially. This new centre with etisalat by e& will support in enhancing the level of protection from cyber crimes and also play a vital role in protecting the integrity of businesses and ensuring sensitive data is secured. This is in line with the UAE leadership's cybersecurity strategy to create a safe and strong cyber infrastructure in the country, empowering businesses to thrive. It also lies at the heart of the work of the CyberSecurity Council, which aims to build a cybersecurity culture that enables everybody to be fully prepared to deal with any challenges."

Masood M. Sharif Mahmood, CEO of etisalat by e&, said: "In today's world of increasing reliance on smart devices and digital services, ensuring reliable connectivity and cybersecurity is more critical than ever. Our partnership with the UAE Cybersecurity Council to launch the MSOC is a significant step in protecting our customers against cyber threats and demonstrating our unwavering commitment to providing secure and reliable telecom services.

"As businesses increasingly adopt cloud-based services and solutions, the MSOC will serve as a shield against cyber threats, ensuring business continuity and supporting the nation's digital aspirations. Our vision is to implement strategic partnerships and employ the best global cybersecurity technologies to safeguard this vital sector's sustainability and promote digital transformation. We value the Council's continued efforts to raise digital awareness among individuals and institutions and as well as their support for the business sector." **T**

etisalat by e& launches the MENA region's first enhanced 5G Standalone network for consumers and businesses

etisalat by e& has announced the first commercial deployment of comprehensive 5G Stand-Alone (SA) network in the Middle East and North Africa (MENA) for consumers and businesses. This marks a significant improvement over the previous generation of 5G Non Stand Alone (NSA) currently available in the market. etisalat by e& first launched the previous generation of 5G NSA commercially in 2018, which was the first of its kind in the region. With this deployment, etisalat by e& has transitioned from using a 5G radio access network on an existing 4G LTE network to a more advanced 5G network.

The latest version of the 5G network will provide customers with access to a dependable nationwide standalone network that can support a wide range of applications. These applications include massive machine-to-machine communication solutions, real-time device-to-device networking, ultra-reliable, low-latency functionality for autonomous devices and next-generation Internet of Things (IoT) devices. Standalone 5G technology offers additional capacity and significantly lower latency, making it essential for innovative use cases such as Industry 4.0, industrial IoT, commercial augmented and virtual reality, and large-scale digital sensing.

The etisalat by E& 5G Stand Alone (SA) service is designed to offer a more satisfying and productive user experience. Users can enjoy high-speed broadband connectivity comparable to fibre-optic connections, which provides an enhanced experience for high-demand applications such as 4K video streaming, high-quality music streaming, and cloud gaming. In addition to providing individuals with a more efficient broadband experience, the

Khalid Murshed - CTIO, etisalat by e&

service can also serve as an alternative broadband option for businesses. By leveraging the advantages of 5G SA Fixed Wireless Access (FWA), companies can improve their operations and customer experience.

Khalid Murshed, Chief Technology & Information Officer of etisalat by e&, said: "We are pleased to announce our successful investment in 5G Standalone technology. This is a significant milestone as we look to deliver end-to-end 5G solutions in UAE, providing our customers with the latest digital innovations and superior experience and laying the foundation for new revenue streams. The 5G Standalone network will allow us to offer our customers the latest in high-speed and low-latency connectivity. Our recent collaborations have enabled us to increase the quality of our services, while creating a more reliable and cost-effective experience for our customers. We are proud to be leading the way in 5G technology and are committed to continuing our efforts to

provide the best services in the industry."

This commercial deployment of a comprehensive 5G Stand-Alone network is based on Service Based Architecture (SBA), including the capability of edge computing, network slicing, 3GPP SA (defining standard for 5G) guided network orchestration and service-based architecture. Launching the 5G Stand-Alone Fixed Wireless Access (5G SA FWA) as the first service will open a new era of commercial use cases with a multi-vendor 5G Dual Mode network to enhance the broadband offering to customers.

The technology of 5G SA will enable subscribers to enjoy higher uplink bandwidth with special case scenarios for enterprise applications where uplink throughput is equally important as downlink. In other cases, requiring lower user-traffic latency, it will address critical gaming issues and experience futuristic technologies like Virtual Reality (VR) and cloud gaming. The technology also has high-security levels that utilise best industry practices to maintain a robust network.

The solution is further enriched with network exposure, slicing, edge computing and orchestration. Network slicing is a way of virtualising the 5G network, allowing it to be partitioned into multiple, logically isolated networks for different customers based on their needs. It allows for greater efficiency and flexibility in the deployment of 5G networks. Edge computing is a way of bringing computing resources closer to the users, reducing latency and improving the performance of applications. The 5G SA will co-exist efficiently with existing networks using dual-mode 5G core technology.∎

etisalat by e& UAE introduces

'Smart Living Home Control' service with unique capabilities in collaboration with Amazon Alexa

etisalat by e& UAE has announced the introduction of the "Smart Living Home Control" service, a pioneering service in the region that integrates solutions for controlling smart home devices in collaboration with Amazon's AI-powered voice assistant 'Alexa'.

The "Smart Living Home Control" service offered by etisalat by e& provides unique capabilities that distinguish it from other regional services. Users can control their connected smart home devices in the household with voice commands using a compatible smart eLife TV box empowered by Amazon Alexa's built-in for free, the eLife TV dashboard, or the Smart Living app. These capabilities are available anytime and anywhere, providing users convenient access to their smart living devices.

Khaled ElKhouly, Chief Consumer Officer, etisalat by e&, said: "This exciting development for etisalat by e& is setting the roadmap for the future of smart homes. The launch is a result of our continuous commitment to consumer needs and interests while addressing them with the latest digital technologies and solutions. We will continue to imagine, innovate and implement ideas that will drive smart connectivity and maximise value creation for our customers in all segments."

Dr Raf Fatani, Regional General Manager of Alexa MENA, said: "Our collaboration with etisalat by e& is a testament to our commitment to innovate and design experiences that simplify everyday life. We are excited for our UAE customers to benefit from Alexa's smart home capabilities and automate trivial tasks, so they can focus on being present and doing what they love most at home."

Customers can enjoy central control to Alexa-operated and connected smart home devices through voice command, which is accessible and controllable over the eLife TV. By subscribing to the service, customers in the UAE can take advantage of Alexa's built-in technology and capabilities for free. The service enables customers to operate various compatible smart home features through voice command, including live video broadcasts from Ring smart doorbells and cameras on the TV screen, TV settings adjustments, such as volume control and channel switching, video-on-demand menu searches, and access to Alexa's range of capabilities, such as playing music, reading the news, setting timers and alarms, and more.

The service provides centralised control of smart home devices through a unified mobile application called "Smart Living App," which offers multiple functions in one app. Users can sync, control, and manage all their smart home devices in one place, create preferred routines for chores, manage energy consumption, and remotely control their homes.

In addition, users can access a unique "Smart Living dashboard" on their TV screens that displays connected devices and provides the ability to control them via the TV screen. The dashboard provides a quick view of all smart living devices, allowing users to easily view and manage them through the TV screen.

The service also enables users to control a range of energy-saving solutions, including Honeywell Home, Philips Smart LED lighting, Yale smart door locks, and receiving notifications from Ring doorbells and cameras.

With its commitment to offering reliable services that meet the highest standards of quality to meet the evolving daily needs of customers. The "Smart Home Control" service by etisalat by e& aims to enhance the digital customer experience by providing the latest cutting-edge smart solutions and advanced services at reasonable prices. The service includes flexible payment plans of up to 36 months, free home delivery and installation of select branded devices, readily available technical support, and after sales service.

The service is available for eLife's customers with 3P (landline, internet, and TV) bundles. Customers can sign up for the service through various channels, including etisalat by e &'s stores, the mobile app, the website, or by contacting customer service centres. A compatible eLife Smart Living TV box (Standard and Premium TV box options) is required to set up this service.∎

e& partners with Microsoft to embed GPT in its products and services for customers, employees and media industry

e& has announced the integration of Microsoft Azure OpenAI's GPT, into its internal operations and processes in addition to a potential service for elevating customer experience and supporting the media industry in their daily tasks.

e& becomes one of the first digital conglomerate in the MENA region to utilise GPT capabilities in Azure OpenAI Service to enhance its customer service and products, marking an important step in the use of Artificial Intelligence (AI) in the technology and telecom sector.

Building on the partnership between e& and Microsoft, the integration aims to improve the customer experience and optimise internal operations, including HR within the company, to enhance its overall performance and enable faster decision making by leveraging the latest advancements in AI technology.

Masood M. Sharif Mahmood, CEO, etisalat by e& UAE, said: "We are excited about this project with Microsoft as we believe this innovative solution will lead to a sustainable and efficient ecosystem, improving the customers' overall experience and helping businesses in the region grow. GPT can be a valuable tool for employees in a company, providing assistance and support in various ways improving efficiency across the business operations. This can also be a powerful tool for improving customer experience helping businesses provide more personalised customer support. In the ever evolving media industry AI tools like these can help optimise content as well as improve engagement and gain audience insights."

Naim Yazbeck, GM Microsoft UAE, said: "e& has been a long-standing strategic partner for us, and we look forward to further exploring the integration of cutting-edge technologies into their innovative services. We debuted Microsoft Azure OpenAI Service to enable customers to tap into the power of large-scale generative AI models with the enterprise promises customers have come to expect from our Azure cloud and computing infrastructure—security, reliability, compliance, data privacy, and built-in Responsible AI capabilities."

In the first phase of the deployment, etisalat by e& plans to integrate Azure OpenAI Service capabilities into its internal operations, including HR chatbot and decision making processes. This integration will enable the company to make faster and more informed decisions, improve key performance indicators (KPIs) and reduce the time and effort spent on daily operations.

The use of Azure OpenAI Service will enable etisalat by e& to streamline its processes, making them more effective and efficient, ultimately resulting in a better experience for its customers.

etisalat by e& will also leverage Azure OpenAI Service for different solutions and services in the UAE, starting with a service targeting the media industry. Using Azure OpenAI Service, media professionals, including editors, will have access to a powerful AI tool that will assist in their daily tasks, such as content creation, editing, translating and publishing, allowing them to focus on more creative tasks and improve the quality of their work. e& and Microsoft entered into a long-term strategic collaboration in 2022 to transform the lives of e&'s customers and advance enterprises' digitalisation journey. The partnership, which was e&'s first strategic alliance after its repositioning, focused on harnessing the versatility of the Microsoft Cloud and partner ecosystem to create new solutions and accelerate value creation for businesses.∎

e& and E-Space collaborate to drive global innovation in advanced Internet of Things (IoT) and digital transformation solutions

e& and E-Space has announced the plans to develop advanced global IoT, Smart-IoT and digital transformation solutions.

The collaboration seeks to maximize the end-user value derived from borderless smart connectivity and digital solutions across land, sea and sky applications. The cooperation will focus on the creative development of cloud-native digital and IoT solutions optimised with edge-based Artificial Intelligence (edge AI). By leveraging e&'s terrestrial infrastructure and E-Space's advanced space system, including its global LEO constellation and unique device capabilities, the two organizations will create powerful new business models to elevate IoT and digital transformation agendas of governments and large-scale enterprises worldwide.

Mikhail Gerchuk, Chief Executive Officer, e& international, said: "Telecommunications and space technology have a natural synergy, offering enormous opportunities for telco companies to expand their reach and capabilities. From satellite internet to space-based sensors, at e& we see the potential to revolutionise the way we connect, communicate and gather data from space".

"With our advanced infrastructure and E-Space's next-generation space system, optimised with edge AI, we will offer a multi-technology platform enabling our customers to embrace a digital-first lifestyle more efficiently. We are confident that we can leverage our combined expertise to create seamless global digital IoT experiences to help our customers advance their digital transformation plans."

The relationship is expected to facilitate e& customer data to connect directly to private data centers without interference from commercial traffic by using peer-to-peer space-based communications to address security and data protection policies and regulations worldwide. Both parties will jointly develop IoT and digital solutions based on AI at the edge as well as everywhere in-between to enable system-wide intelligent decisions and take automated actions to levels beyond traditional IoT.

Gregory Wyler, Chief Executive Officer, E-Space added: "There are tremendous opportunities in the terrestrial domain that can be amplified with the use of newer generation space systems coupled with edge AI. We're bringing real-time information with advanced automation to create entirely new suites of global capabilities to advance humanity, improve the planet and automate business processes for greater operational scale and efficiency with reduced costs. We are excited to work with e& to advance their digital transformation journey and augment the customer experience. Together, we can speed the time required to build a smarter, more connected planet, anywhere and anytime."

The collaboration also involves the joint development of global IoT use cases, which will have the potential to create new revenue streams, especially in global tracking and agriculture, using an optimised satellite ecosystem. The portfolio for IoT and digital products can further expand to enable products across land, sea and air environments, anywhere and at any time, with speeds ranging from kilobits per second (Kbps) to megabits per second (Mbps). E-Space expects to offer the most sustainable and affordable satellite-based system in the digital and IoT ecosystem with coverage available everywhere to support uninterrupted, global real-time data services. The Company estimates it can deliver an over 90 percent reduction in overall system and terminal costs compared to second generation LEO networks, enabling more governments, business, communities and individuals to access the power of space to achieve more on Earth.∎

ITU opens Area Office and Innovation Centre in New Delhi

Doreen Bogdan-Martin
ITU Secretary-General

Cosmas Luckyson Zavazava - *Director, ITU's Telecommunication Development Bureau*

Ashwini Vaishnaw - *Minister for Railways, Communications, Electronics & IT, India*

The International Telecommunication Union (ITU) has opened the ITU Area Office and Innovation Centre in New Delhi, India.

The new office in India's capital includes ITU's first centre for innovation, positioning it as a hub for promoting advanced technologies within the region and beyond.

"India remains committed to ITU's vision of universal, reliable, and affordable communication," said India's Minister for Railways, Communications, Electronics and Information Technology Ashwini Vaishnaw. "It is the vision of Honorable Prime Minister Narendra Modi that India contributes to ITU commensurate to her aspirations. It is a moment of joy that the ITU Area Office and Innovation Centre is being inaugurated today. I am happy to note that the Area Office will also have an Innovation Centre, which is the first of its

kind under the aegis of ITU. I'm sure the Area Office and Innovation Centre will play an important role in development of new telecom technologies."

The ITU Area Office and Innovation Centre brings together government, industry, academia and others in an entrepreneurial environment so that digital technology advancements in sectors such as agriculture, health, and education can reach the communities that need them most.

"With tremendous gratitude for the generous support of India, ITU is now able to work even closer to the people it serves," said ITU Secretary-General Doreen Bogdan-Martin. "Meaningful connectivity and innovation are tightly linked, and we will use our new presence in South Asia to expand the benefits of digital technology for everyone, everywhere."

ITU, the United Nations specialized agency for information and communication technologies, will also use the office to strengthen collaborative action on universal connectivity and sustainable digital transformation.

"ITU's new office in India will help us address the opportunities and challenges in the South Asia region," said Cosmas Luckyson Zavazava, Director of ITU's Telecommunication Development Bureau. "Innovation coupled with digital access, affordability, and skills should equate to transformational impact on communities in all the countries ITU serves."

ITU's presence in the wider region is led by the Regional Office for Asia and the Pacific, based in Bangkok, Thailand.

The facility is located within the Centre for Development of Telematics. The office is funded by the Government of India.∎

ITU
Secretary-General receives IEEE President's Award

The world's largest technical professional organization, IEEE, presented ITU Secretary-General Doreen Bogdan-Martin with the 2023 IEEE President's Award in a ceremony at ITU headquarters in Geneva.

The IEEE President's Award commends Bogdan-Martin for her "distinguished leadership and contributions to the public."

"I'm deeply humbled by this recognition," said Bogdan-Martin. "Our two institutions stand for the same thing, which is trying to bring the benefits of technology and derive those benefits for all of humanity. I look forward to closely collaborating, cooperating, and strengthening the partnership between our institutions."

IEEE is dedicated to advancing technology for humanity. Through the IEEE Awards Program, the organization recognizes major contributions in relevant fields for the benefit of society.

Past winners of the IEEE President's Award include Microsoft co-founder Bill Gates (2000), former Intel CEO Andrew Grove (2000), and NASA researcher Katherine Johnson (2019).

"On behalf of the IEEE Board of Directors, it is my pleasure to recognize Ms. Doreen Bogdan-Martin as the recipient of the 2023 IEEE President's Award for her distinguished leadership at the International Telecommunication Union, the ITU policymaking body, and her notable contribution to the global public," said IEEE President and CEO Dr. Saifur Rahman. "It is my honor to recognize you as a transformational leader and an IEEE member for the commitment you made to bridge the digital divide globally."

Bogdan-Martin was elected Secretary-General of ITU in September 2022 and took office on 1 January 2023, becoming the first woman to head the 157-year-old organization.

With over two decades of leadership experience in global telecommunications policy, Bogdan-Martin has emphasized the need for digital transformation to achieve economic prosperity, gender equality, and socio-economic inclusion, as well as to build circular economies, reduce climate impact, and save lives. Prior to becoming ITU Secretary-General, Bogdan-Martin served as Director of ITU's Telecommunication Development Bureau
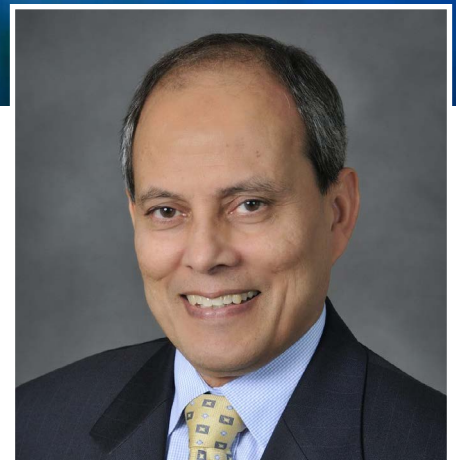
Dr. Saifur Rahman
President and CEO, IEEE

from 2018 through 2022.

ITU, the United Nations specialized agency for information and communication technologies, works around the globe to strengthen collaborative action on universal connectivity and sustainable digital transformation.

The 2023 IEEE President's Award will be presented publicly at the IEEE Vision, Innovation, and Challenges Summit & Honors Ceremony on 5 May in Atlanta, Georgia, USA. IEEE's premier event highlights the innovation and creativity of engineering, science, and technology through provocative, educational, and inspiring talks with a vision for the future. **T**

Ericsson, Deutsche Telekom and Vay show live teledrive technology demo with 5G

David Hammarwall - Head of Product Area Networks, Ericsson

Kaniz Mahdi - SVP Technology Architecture & Innovation, Deutsche Telekom

Thomas von der Ohe - Co-founder and CEO, Vay

Imagine a transport service where an unoccupied electric vehicle turns up outside your home exactly when you need it, you drive it to your destination, you get out and go about your business. No parking to worry about. Just a convenient and affordable door-to-door service. That's exactly the concept behind a remote driving – called teledriving – demo that Ericsson, Deutsche Telekom (DT), and teledriving company Vay has highlighted at MWC 2023 in Barcelona.

Before and after a customer takes control of the vehicle, it is driven remotely by a professionally trained teledriver from a teledrive center. Vay operates with redundant mobile networks. If the connection over one network is not sufficient, the signal can still be received via another one. The demonstration, which will connect live to an electric car in Berlin, is a significant use case proof point for L4S (Low Latency Low Loss Scalable), key technology for high-quality, latency-critical applications. It enables consistent low latency in challenging radio conditions such as network congestion. L4S is part of Ericsson's Time-Critical Communication capabilities.

The teledriving use case is the latest milestone in the long-standing innovation partnership between Ericsson and Deutsche Telekom to

advance the adoption of L4S. The companies have partnered with Vay for this teledriving demo since October 2022 by implementing and testing L4S. Vay is the first company in Europe to drive a car without a person inside the vehicle on a public road, and aims to launch a sustainable, affordable, door-to-door mobility service with remotely driven (teledriven) cars starting in Germany and the US.

Thomas von der Ohe, Co-founder and CEO of Vay, says: "L4S can bring fundamental improvements to Vay's teledrive technology. This feature makes it possible to detect network congestion in advance, stabilize latency and avoid packet loss. The main advantage of L4S is the improvement in utilizing network capacity and therefore keeping quality of data transmission permanently at its best possible level – while decreasing the level of network redundancy. Additionally, by reducing the amount of networks needed per car, we can lower costs while increasing our service area coverage, also in more rural areas. This brings Vay one step closer towards its goal of a sustainable door-to-door mobility service at large scale."

Kaniz Mahdi, SVP Technology Architecture & Innovation, Deutsche Telekom, says: "Deutsche Telekom continues to drive

innovation with partners to evolve our 5G network and unlock its power for human-centric applications. Demonstrating the quality of experience benefits of L4S for Vay's teledriving technology brings us closer to the era of driverless mobility services at scale. L4S, network slicing, and other advanced features in the 5G toolbox will play a crucial role in enabling new and innovative services for consumers and businesses."

David Hammarwall, Head of Product Area Networks, Ericsson, says: "Just a few years ago the capabilities highlighted in this teledriving demo with DT and Vay would have been beyond imagination. This innovative use case truly shows the capability of 5G connectivity to remotely operate a vehicle in real time, safely and securely. We are continually pushing the envelope on L4S technology, to show the role of Ericsson's Time-Critical Communication capabilities in changing how we work, live, and socialize." He adds: "Such capabilities will dramatically elevate the quality of experience for existing use cases such as cloud gaming, Automated Guided Vehicles, and drones. It will also enable emerging applications such as augmented reality/virtual reality (AR/VR) that service providers can offer to consumers and enterprises."**T**

center3 signed a strategic deal with Huawei to build Huawei Cloud Region in Saudi Arabia

center3 has announced the signing of a strategic commercial deal with Huawei, a leading global provider of cloud service, information, communications technology (ICT) infrastructure, and smart devices. Under this agreement, center3 will provide hosting and data services to Huawei to help it expand its cloud footprint in the region and meet the growing demand for cloud services.

center3 is excited to partner with Huawei to create a strong digital infrastructure in KSA and the Middle East region. The agreement represents a major step forward for center3's mission to provide digital infrastructure and data centre

solutions to businesses in the region. The agreement with Huawei is expected to open up new avenues of growth for center3 and its partners as well as creating a positive economic impact in the region.

"We are thrilled to partner with Huawei to provide them with the cutting-edge

digital infrastructure in the MENA region," said Fahad AlHajeri, CEO of center3. Huawei shares center3's enthusiasm for the partnership. "This collaboration is a significant step forward for both companies, and we are looking forward to a successful future together," said Alan Qi, CEO of Huawei Cloud KSA. ∎

stc and Samsung ink new partnership, expand availability of smart solutions

stc and Samsung Gulf Electronics have announced a new partnership to introduce more smart solutions in the country. A Memorandum of Understanding (MoU) establishing the collaboration was signed at the Mobile World Congress in Barcelona by Doohee Lee, President of Samsung Gulf Electronics, and engineer Maziad Alharbi, Chief Executive Officer of stc Kuwait.

As per the agreement, stc and Samsung will collaborate to avail all Samsung consumer and business solutions to stc customers. The two companies will also work jointly to enhance all stc channels through extensive engagement and training programs. The collaborative efforts extend to improving the visibility of Samsung through various stc channels to elevate Samsung customers to stc's preferred customer tier.

Engineer Maziad Alharbi, stc's CEO said: "Samsung is one of the world's leading smartphone brands, with a solid reputation

built on industry-leading innovations, R&D and iconic designs. stc is therefore delighted with the recent signing, which guarantees our customers access to the latest Samsung devices backed by our exceptional customer service. Considering the strength of our 5G infrastructure and cutting-edge network, our customers can leverage the full range of advanced features available in Samsung devices."

Doohee Lee said: "Kuwait is a very important market for Samsung thanks to a highly developed digital infrastructure by the country's service providers, including stc and a tech-savvy population. This new partnership allows us to delight existing and new customers in new ways by ensuring they get their hands with the latest devices faster, supported by our enhanced customer service initiatives jointly with stc." ∎

Amazon Payment Services launches the re:Imagine Payments Forum to spearhead collaboration amongst merchants in digital payments

Amazon Payment Services has announced the launch of re:Imagine Payments, a thought leadership forum which aims to help merchants and anyone interested in the digital payments space to increase their knowledge. The forum will see a series of engagements including, roundtable discussions, webinars, and white paper releases. "What's Next for Digital Payments in the Middle East and North Africa" is the first of the forum's publications, and provides insights on digital payment trends across the United Arab Emirates (UAE), Saudi Arabia (KSA), and Egypt. Sponsored by Amazon Payment Services, the white paper research was led by Euromonitor International (EMI) and Sixth Factor Consulting.

"Knowledge-sharing is crucial to promoting growth and innovation in an environment where payments technology is evolving faster than ever," said Peter George, Managing Director for Amazon Payment Services in the Middle East and North Africa (MENA). "The launch of re:Imagine Payments is intended to create a space for collaboration amongst existing and potential partners, including banks, card providers, government bodies and more, to engage, explore, and establish new solutions together."

White Paper Highlights

•The "What's Next for Digital Payments in the Middle East and North Africa" white paper identified 14 of the fastest growing industries in digital payments. The research took a look at the different dynamics and drivers of these industries in the UAE, KSA, and Egypt.

•In analyzing the progress of digital payments across key sectors in the UAE, KSA, and Egypt, research shows that from

Peter George
MD, Amazon Payment Services (MENA)

2021-2023 the overall digital payments market in the UAE is expected to increase at a compound annual growth rate (CAGR) of 18.3%; 13.6% in the KSA; and 19.6% in Egypt.

•Looking closely at each of the key countries, findings showed that there was an instant payment "revolution" in the UAE; expansion in digital banking in the KSA; and a boost in online retail in Egypt due to increasing smartphone penetration rates.

•In KSA, 89% of consumers reported using at least one new payment method in the past year, including options to buy now, pay later and person-to-person transfers. In Egypt, digital payments were found to promote financial inclusion with penetration of prepaid cards and mobile wallets approaching 40% of the adult population.

•Consumers born between the late 1990s and early 2010s are the driving force for digital payments, thriving on innovation, convenience and seamless experiences. However it is the Millenials, who are those born between 1981 and 1996, who have the highest spending power.

•The research shows that 51% of Generation Z in the UAE use digital or mobile wallets for daily payments, compared to 48% in KSA, and 43% in Egypt. Moreover, 20% of UAE respondents reported a decline in cash usage, with 50% of Generation Z respondents confirming that they exclusively use cards for transactions.

•Three key pillars emerged through the research to define digital payment trends—namely, collaborative governance; the rise of the borderless marketplace; and increasing financial inclusion.

•The research found nine key payment themes occurring in the present which could influence the future of payments in the region: omni-channel payments; peer-to-peer payments; in-app payments; buy now, pay later options; installments; merchant lending; super apps; cross-border shopping; and instant payments.

"For over 25 years, Amazon has been consistently innovating to benefit merchants, sellers, and customers. In the Middle East and North Africa (MENA) region, we bring together our global expertise with local insights to drive meaningful innovation in all areas of our business," said Ronaldo Mouchawar, Vice President of Amazon MENA. "The region is brimming with potential, with the digital payments market anticipated to nearly double in size across MENA's three markets of UAE, KSA, and Egypt by 2023, and we expect to see local businesses flourish more than ever in that space."

Amazon Payment Services enables payments on Amazon stores in the MENA region including Amazon.ae, Amazon.sa and Amazon.eg; in addition to supporting thousands of other merchants and businesses across the region. ∎

Bharti Airtel deploys Ribbon's Apollo Optical Transport Services Platform for Long Haul DWDM Network Expansion

Ribbon Communications Inc. has announced that Bharti Airtel ("Airtel") has selected Ribbon to build its new high-speed transport network.

This project is based on a disaggregated approach, a critical part of Airtel's modernization strategy that enables them to offer cost optimized 5G mobile backhaul and high-speed enterprise business connectivity throughout Northwestern India.

The modern network architecture leverages Ribbon's Apollo suite of programmable and open optical transport platforms, with support for a combined network capacity across C&L bands of up to 51.2T, positioning Airtel to effectively fulfill both current and future bandwidth needs. The Long Haul solution will support the transport of 100GE/400GE IP services over 400G Optical channels. Finally, Ribbon's Muse domain orchestration platform also

Sam Bucci
Chief Operating Officer, Ribbon

delivers real-time network monitoring and management at the click of a mouse.

"Airtel continues to push the boundaries in digital service delivery and we're proud to support their mission with our solutions and expertise," said Sam Bucci, Chief Operating Officer, Ribbon. "This massive new network will have a tremendous impact as it delivers extensive capacity in one of the world's most populous countries."∎

> " *Airtel continues to push the boundaries in digital service delivery and we're proud to support their mission with our solutions and expertise* "

Acronis enhances security offerings with Intel® TDT technology

Acronis has announced the enhancement of its security defence against advanced file-less attacks using Intel® Threat Detection Technology (Intel® TDT) leveraging the Intel® integrated GPU to offload memory scanning operations from the CPU. Acronis is the latest cyber protection company to integrate Intel® TDT to enrich its security products.

With cyber threats evolving and growing on a daily basis, Acronis researchers have witnessed new types of malware and attack vectors on enterprises such as polymorphic malware and file-less attacks. Many threats utilize an in-memory-only approach which can be hard to detect. Intel® TDT technology allows Acronis cyber protection solutions to free resources while scanning HDD and memory resulting in improved system performance. Acronis researchers found that while scanning all the processes in system memory on supported CPUs, Intel® TDT reduced the load on the CPU 2.4x times, by offloading the job to the Intel® integrated GPU.

The Acronis solution combines complete single-agent cyber protection with Intel® TDT. This enhancement results in lower CPU utilization which allows more compute capacity for productivity and office software used by Acronis end customers while compute-intensive security operations run in Intel®'s integrated GPU. The innovation of Intel® TDT will be available through Acronis Cyber Protect Cloud, Acronis Cyber Protect, and Acronis Cyber Protect Home Office solutions.

"The integration of Intel® TDT into Acronis cyber protection solutions is a logical step to meet the needs of our users, said Patrick Pulvermueller, CEO at Acronis. "During the last year, we observed that almost 50% of attacks detected were file-less. The use of this Intel technology is a great milestone as we continue to optimize and enhance our

Patrick Pulvermueller
CEO, Acronis

Carla Rodríguez - VP and GM, Ecosystem Partner Enabling, Intel

Acronis | intel.

anti-malware engine."

"Through our collaboration with Acronis to integrate Intel® Threat Detection Technology into their cyber protection solutions, customers of all sizes that utilize Intel vPro® can perform frequent and highly performant memory scanning. This is a great benefit for our mutual customers as we help them stay ahead of increasingly sophisticated threats," said Carla Rodríguez, Vice President and General Manager, Ecosystem Partner Enabling at Intel.

"As the IT world grows in sophistication and continues its migration to the cloud, more stress has fallen on security teams with less-integrated technology, creating complexity and unintentional blind spots in security systems," said Research Vice President of Security and Trust Michael Suby at IDC. "According to a recent IDC

survey of 1,015 security professionals in North America, this is particularly the case for smaller organizations who are less equipped to effectively operate separate products from multiple vendors or benefit from a position of strength in negotiating with multiple vendors. As such, they are more likely to resonate with an integrated hardware and software approach to endpoint security."

Acronis provides its users with the ability to take back control and overcome complexity with an integrated platform which results in greater operational efficiency. By implementing an integrated solution like Acronis Cyber Protect Cloud, organizations can reduce the time that security teams spend on various operational activities, lower training costs, reduce the complexity in their environment by minimizing the number of tools managed, and ultimately drive business growth. ∎

Comba has been appointed by China mobile

Hong Kong to provide 5G Indoor coverage solution for LAWSGROUP's flagship technology property in Hong Kong

Comba Network Systems Company Limited ("Comba Network"), has announced that it was appointed by China Mobile Hong Kong (CMHK) for the design, building, and supply of a 5G Indoor Coverage Solution for LAWSGROUP's flagship technology property KTR 350, facilitating 5G Smart City development in Hong Kong.

As the first large-scale project under the strategic partnership between CMHK and LAWSGROUP to accelerate industrial transformations and the building of a digitalized society, KTR 350 is a new 29-storey smart commercial building with a gross floor area of 200,000 sq ft located at 350 Kwun Tong Road, Hong Kong. Comba Network will design and build an integrated indoor 2G, 3G, 4G and 5G New Radio (NR) System, operating in the new 5G 700 MHz band and the 3300 MHz to 3600 MHz golden spectrum band, as well as the traditional frequency bands for 2G, 3G and 4G. With a 300 MHz bandwidth, this integrated system will support 4x4 MIMO technology to deliver enhanced broadband user experience in the 5G NR network. Comba ComFlex Pro Distributed Antenna System (DAS) Solution will be deployed to meet all the advanced system requirements and help LAWSGROUP expand and deepen the 5G indoor network coverage for KTR350.

Comba ComFlex Pro DAS platform is a unique, highly flexible, and scalable solution featuring advanced capabilities to ensure high-quality indoor network coverage and performance for all building types. It enables flexible system deployment and capacity allocation, as well as savings on power, cost, and rack space to meet

Tao Sun - Deputy GM, and GM of International Sales Center, Comba Network

Rico Lau IT Director, LAWSGROUP

the rapidly growing demands of IoT applications and optimal indoor network coverage, capacity, and performance in high-traffic areas. As a tier-one trusted partner of local mobile operators in providing both passive and active 2G, 3G, 4G and 5G DAS infrastructure and professional service in Hong Kong, Comba Network has successfully deployed ComFlex Pro Solutions in prominent landmarks in Hong Kong, including the Hong Kong International Airport (HKIA) (public 4G system), the Hong Kong Convention and Exhibition Centre (HKCEC), and the Olympian City for CMHK.

Tao Sun, Deputy General Manager and General Manager of International Sales Center of Comba Network said, "We are excited to support the strategic move LAWSGROUP have taken to transform industrial buildings into smart buildings with the integration of 5G smart technologies in

Hong Kong. As a trusted indoor distribution system supplier with a dedicated and professional engineering team, Comba Network will continuously innovate to compete, grow and remain relevant in the field of information and communications."

Rico Lau, IT Director of LAWSGROUP said, "We are pleased to further deepen the cooperation with our strategic partners, to integrate 5G smart solutions and infrastructures in our flagship 5G-enabled smart building KTR 350. As a corporate that places great emphasis on environmental protection and sustainable development, one of the main purposes of adopting 5G smart solutions is to enhance our overall environmental performance complementing the "1.5°Campaign" we rolled out earlier. We look forward to the continued collaboration to further the goal of our business digitization and sustainability development."**T**

Nokia and etisalat by e& UAE to upgrade IP Core Network

Nokia has announced that etisalat by e&, will use Nokia's IP solution to upgrade its IP core capacity and enable transport slicing capabilities, ensuring a superior and more resilient 5G experience for its customers. As part of the agreement, Nokia will also provide services for replacing the existing equipment with its 7750 Service Router (SR), and for implementing automated transport slicing over etisalat by e&'s aggregation and core network. Nokia's Network Services Platform (NSP) transport slice controller will enable the operator to automate the delivery and the closed-loop optimization of its end customer services in its core network, while ensuring strict bandwidth and latency performance.

Nokia's 7750 SR, powered by FP5 routing silicon, will help etisalat by e& provide a compelling, reliable and differentiated experience to its customers. Nokia's industry-leading 800GE routing capability enables operators to address ever-growing traffic demands in a more sustainable manner by building a faster and more energy-efficient IP network.

Khaled Al Suwaidi, Senior Vice President of

Khaled Al Suwaidi - Senior VP, Core Networks & Platforms, etisalat by e&

Core Networks and Platforms, at etisalat by e& UAE, said: "With the increasing proliferation of smart devices and use cases for 5G, it is now essential to provide high capacity and improved 5G network experience to our customers. The partnership with Nokia will enable us to amplify this experience and also reiterates our commitment to implementing the latest technology to continuously improve our services and provide world-class solutions."

Samer Makke - Head of the Customer Team etisalat by e&, Nokia

Samer Makke, Head of the Customer Team for etisalat by e&, UAE, at Nokia, said: "The demand for capacity is ever-increasing and service providers are always under pressure to meet these demands. Our solution will help etisalat by e& acquire more capacity and enable it to quickly provide differentiated services at scale. We are looking forward to working with the operator on this crucial initiative."∎

evision acquires exclusive broadcast rights to the TATA Indian Premier League 2023 in the MENA region

evision has acquired the exclusive broadcast rights for the TATA Indian Premier League (IPL) 2023, staring on 31st MarchThe TATA IPL is one of the most sought-after and anticipated cricket events of the year, with seventy league matches across twelve venues over fifty-two days. The top four teams will compete in the play-offs, with the final taking place on 28th May. Cricket fans can get all the action exclusively on evision fully owned channel CricLife1, available on eLife, Switch TV, and STARZPLAY platforms across the MENA region.

Olivier Bramly, CEO of evision said: "The acquisition of the exclusive broadcast and

media rights for the TATA IPL 2023 is a significant milestone for e-Vision. The IPL is one of the most anticipated cricket events of the year, and we are thrilled to offer our viewers the opportunity to experience it exclusively on CricLife1. We are committed to providing the best possible coverage of the event and delivering the best in sports and entertainment from local and international content providers." The acquisition reinforces CricLife's position as the 'Home of Cricket' in the UAE and MENA, with a successful track record of broadcasting high-profile cricket series such as the ICC World Cups, Asia Cup, and most recently, the India series and the PSL. The move expands evision's

premium sports content and demonstrates the company's commitment to delivering top-quality sports entertainment. CricLife channels are a one-stop shop for cricket and are currently available on eLife's Asiana and Sports packages and on Switch TV and STARZPLAY OTT packages. Subscribers have the opportunity to watch all the best cricket content available in India, Pakistan, Bangladesh, West Indies, South Africa, New Zealand and Ireland, as well as major events such as the Asia Cup, ICC Cricket World Cups and popular T20 leagues such as the Pakistan Super League (PSL) and Caribbean Premier League (CPL) on CricLife, CricLife2, CricLife3 and CricLife MAX channels.∎

IDC to explore a new era of cyberthreats as it hosts security roadshow in Türkiye

With cloud and software-as-a-service (SaaS) adoption continuing to accelerate across the Middle East, Türkiye, and Africa (META), annual spending on cybersecurity solutions in the region is set to grow at a CAGR of 9.3% over the coming years to cross the $6 billion mark in 2026. That's according to the latest forecast from International Data Corporation (IDC) as it hosted the Türkiye edition of its IDC Security Roadshow 2023 in Istanbul.

IDC's research shows that 70% of organizations across the META region are planning to invest in automated incident response over the course of 2023. Network security (56%), complete asset visibility (55%), and cloud security (52%) are set to be other major priorities as organizations work diligently to meet the challenges that come with massive technological leaps and the adoption of a digital-first approach to business.

"Over the coming few years, the pace of digital acceleration is expected to gain even more momentum, adding ever-greater layers of complexity to the threat landscape," says Nevin Çizmecioğulları, IDC's Associate Vice President and Country Director for Türkiye. "Today, IT security professionals face numerous challenges such as the need to protect an increasingly distributed workforce, an internet that is faster than ever before, interconnectivity that is increasing in complexity, stricter government regulations, and customers looking for immersive experiences and greater security for their data.

"In an increasingly digital economy, the digital trust concept becomes paramount, and it is critical for business leaders, technology suppliers, organizations, and consumers to all understand the fundamental importance of risk, compliance, privacy, and business ethics. Traditional approaches to security, risk, and compliance are no longer enough, with issues such as data security, confidentiality, integrity, and availability all becoming key concerns."

Çizmecioğulları - Associate VP and Country Director, IDC, Türkiye

Taking place at the Wyndham Grand Istanbul Levent, the Türkiye edition of the IDC Security Roadshow 2023 will bring together the country's foremost cybersecurity experts to showcase the very latest security innovations. The event will cover everything from threat intelligence, risk management, and digital resilience to the privacy and security implications of an increasingly remote and hybrid workplace, while also serving up essential guidance on building digital trust, automating security operations, and addressing the evolving nature of modern security challenges.

IDC's Research Manager for Türkiye, Yeşim Öztürk, will present the event's keynote, during which she will offer advice on how best to prepare for a new era of cyberthreats. "In Türkiye, companies continue to focus on data protection, data privacy, and regulatory compliance," says Öztürk. "The relationship between data-driven insights and trust is critical, and companies looking to implement effective trust initiatives must aim to strengthen their overarching trust structures."

The agenda will also incorporate a series of fascinating end-user panel discussions, featuring first-hand insights from respected industry thought leaders such as:

Yeşim Öztürk - *Research Manager* *IDC, Türkiye*

•*Mahmut Küçük* - Cybersecurity Director, Türk Telekom

•*Kenan Yılma* - Information Security Group Coordinator, SOCAR Türkiye

•T*arık Üstüner* - Head of Global Information Security, Getir

•*Suzan Pektaş Acar* - Senior Security Risk Manager, Fibabanka

•*Nihan Namoğlu* - Chief Information Security Officer, AgeSA Emeklilik ve Hayat

•*Mehmet Karadeniz* - Network & Cybersecurity Manager, CK Enerji

• *Emin İslam Tatlı* - Cybersecurity Director, Turkcell

•*Murathan Gemicioğlu* - Global Information Security Manager, Hayat Holding

•*Okan Erin* - Information Security Director, Pazarama

•*Hakan Kantaş* - IT Director, Halkbank

•*İsmail Özler* - Director of Risk, Security & Compliance, Paynet. **T**

Huawei Cloud announces a startup program to empower regional SMEs to go digital

Working with regional partners, Huawei Cloud launched a Startup Program for the Middle East, Central Asia, and Africa. The initiative provides SMEs in these regions with Huawei cloud credits, technical support, talent development training, and business resources to drive their growth.

The Huawei Cloud Startup Program was launched on the sidelines of the Huawei Cloud Summit Middle East & Africa 2023 in Dubai. Under the theme of 'Inspire Innovation with Everything as a Service', the Summit brought together over 300 government leaders, cloud-native industry experts, and customer representatives from the Middle East, Central Asia, and Africa to explore how to make the best out of cloud and the vital role of cloud in driving digital economy growth in the region.

The program demonstrates Huawei's commitment to building a regional startup ecosystem to empower 1000 startups in the region to innovate and grow on Huawei Cloud by 2025.

The launch ceremony was attended by representatives from the UAE Ministry of Economy, Middle East incubator GEN Asia, Dinarak – Jordan's licensed payment services provider, Ignite – a non-profit company owned by the Government of Pakistan and administered by the Ministry of Information Technology and

Telecommunication, and Kuwait's startup representatives Eyon TV, One Global, and Empower.

Frank Dai, the President of Huawei Cloud Middle East and Central Asia, said, "SMEs are the backbone of the regional economy. However, small businesses struggle to digitize their processes, thus missing out on the immense opportunities of the digital economy. Huawei wants to empower regional entrepreneurs with the tools to succeed in the digital age by adopting cloud services; we believe the Huawei Cloud Startup Program is an essential building block for growth in the modern age, and by empowering more SMEs with such programs, we can jointly cultivate a robust technology ecosystem in the region."

The summit also provided an opportunity to explore the latest innovations in cloud-native technologies. Cloud-native has emerged as an essential driver of digital transformation, with Gartner predicting that 95% of digital services will run on cloud-native platforms by 2025. Cloud-native greatly improves productivity and imposes increasing requirements on digital capabilities.

More industries are going digital and many have entered Cloud Native 2.0. The concept of Cloud Native 2.0 was first proposed by Huawei Cloud, and it is a new phase for

an intelligent upgrade of enterprises. The move to cloud changes from "On Cloud" to "In Cloud", where applications and services are not only migrated to the cloud but also being built on the cloud. Together with Cloud Native Computing Foundation (CNCF), China Academy of Information and Communications Technology (CAICT), and industry experts, Huawei Cloud founded Cloud Native Elite Cloud, a global cloud native community, to boost the cloud native ecosystem. In the Cloud Native 2.0 era, a new cloud-native enterprise is no longer a possibility, but a reality.

As a cloud enabler, Huawei Cloud leverages key technologies to support growth across regional industries. The KooVerse global infrastructure of Huawei Cloud that delivers an excellent cloud experience of 50ms latency greatly benefits the industry that requires demanding real-time audio and video services. Meanwhile, CCE Turbo is Huawei Cloud's flagship container service that runs on a cloud-native infrastructure, helping customers increase their resource utilization by 40%. These technologies, combined with Huawei Cloud's superb computing capabilities, empower enterprises to become more agile and efficient. Huawei Cloud released the Cloud Native 2.0 Architecture White Paper, aiming to enable local customers with full-stack cloud-native capabilities to take a quantum leap to the future. ∏

GLOBAL ICT, TELECOM & SATCOM EVENTS 2023

15-19 | April 2023
NABSHOW
Las Vegas, USA

31-02 | May-June 2023
GITEX AFRICA Morocco
Marrakesh

15-18 | September 2023
ib
Amsterdam, Netherlands

15 | May 2023
SAMENA LEADERS' SUMMIT 2023
Dubai, UAE

06 | June 2023
avia ASIA VIDEO INDUSTRY ASSOCIATION
Singapore

16-20 | October 2023
GITEX GLOBAL
Dubai, UAE

16-18 | May 2023
CABSAT
Dubai, UAE

07-09 | June 2023
CommunicAsia
Singapore

24-26 | October 2023
5G World
Paris, France

22-25 | May 2023
COMEX Technology Show معرض كومكس للتكنولوجيا
Muscat, Oman

28-30 | June 2023
GSMA MWC Shanghai • 上海
Shanghai, China

14-16 | November 2023
Africa Com Anchor Event of AFRICA TECH FESTIVAL
Cape Town, SA

23-24 | May 2023
seamless MIDDLE EAST 2023
Dubai, UAE

04-06 | July 2023
MEET ICT BAHRAIN 2023 BiTEX 2023 BAHRAIN INTERNATIONAL TECHNOLOGY EXHIBITION
Manama, Bahrain

15-16 | November 2023
TELECOMSWORLD Asia
Bangkok, Thailand

30-31 | May 2023
TELECOMSWORLD Middle East
Middle East | North Africa | Central Asia | South Asia
Dubai, UAE

25 | July 2023
CONNECTED AFRICA
Johannesburg, SA

06-08 | December 2023
bakutel
Baku, Azerbaijan

CLOUD TRIBE
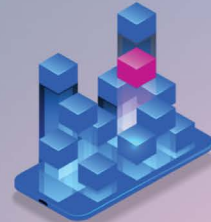
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