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Editor's Note

Dear Reader,

Welcome to the latest edition of Teletimes International.

First of all, a big congratulations to Eutelsat and OneWeb on the decision to join. The two coming together means a complementary GEO/LEO service including a common platform, hybrid terminals and a fully mutualized network combining Eutelsat's 36-strong fleet of GEO satellites with OneWeb's constellation of 648 Low Earth Orbit satellites. There is a detailed Press Release on the announcement, the synergies and the roadmap in this edition - a must read.

In the world of connectivity, 5G is certainly the biggest point of interest for everyone right now. On that subject, we have an editorial from a thought leader belonging to one of the leading players in this space in this edition. I would highly recommend you to read "5G - Advanced will re-define our intelligent world in the next decade", an exclusive byline on the back of Huawei's Win-Win Innovation Week with Steven Yi, Middle East President, Huawei.

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

Enjoy Reading!

Khalid Athar
Chief Editor

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Global AI market will grow to over 1.5 trillion U.S. dollars by 2030

Ever increasing technological change is rapidly increasing its beneficial impact on every aspect of people's lives, leisure and work activity. As it is as every business in the world turns to digital solutions to keep pace with an ever more demanding customer.

A key engine for these changes is the application and development of Artificial Intelligence (AI), linking up with the whole digital ecosystem of Internet of Things (IoT), 5G, cloud computing, cyber security, entertainment and local, national and international complete connectivity.

AI is proving increasing disruptive impacting positively the speed, efficiency and cost of our daily lives. It is impacting healthcare, financial products, leisure, manufacturing, retail amongst many other sectors as well as creating new sectors for the future.

It is also saving lives as well as time, for example in healthcare, where it can identify, analyze and personalize treatments, quicker, safer and more effectively than ever before.

AI is also helping protect our planet, embedded within smart infrastructures, smart cities and resource management to ensure we protect the planet and provide food more productively and efficiently.

The market research firm IDC projected that the global AI market will reach a size of over half a trillion U.S. dollars by 2024. Precedence research suggest the market will grow to over 1.5 trillion U.S. dollars by 2030, as stated by Statista. This growth is fueled by an ever-increasing number of AI startups. AI startup acquisitions have accelerated since 2010, growing almost fourfold between 2015 and 2018. Global funding for AI startups has increased from over a billion U.S. dollars in 2013 to 8.5 billion U.S. dollars in the first quarter of 2020 alone.

The potential and key importance of AI has been recognized with Saudi Arabia for some time. An indication is the formation of the Saudi Company for Artificial Intelligence (SCAI), a company wholly owned by Public

Investment Fund (PIF), to grow and develop artificial intelligence (AI) and emerge technologies into industries in KSA, to substitute innovation in strategic sectors and accelerate key national technological priorities.

Within this ambitious framework, stc, the leading digital enabler in the region, has launched a long-term strategic partnership with the SCAI and DataRobot. This partnership will drive the growth and development of the Kingdom's AI capabilities and empower the next generation of Saudi changemakers and tech talent. All partners will leverage their resources, networks and ecosystems with a range of ongoing collaborative efforts, working together closely and sharing best practices to advance the Kingdom's tech landscape to transform it into a hub of innovation.

As part of the agreement, DataRobot — the AI Cloud leader — will establish its regional headquarters in KSA, where an AI development hub and Research and Development center will also be set up. The launch of the partnership marks the latest step taken by stc and SCAI to bolster the Kingdom's AI infrastructure, with DataRobot underlining its commitment to democratizing artificial intelligence by providing people and communities easy access to quality AI solutions. Crucially, this will also contribute to the enhancement of regional and global AI services in green tech, oil and gas and healthcare, setting the Kingdom apart — on the global stage — as a pioneer of tech innovation.

The launch of stc's strategic partnership with SCAI and DataRobot is very much in line with its Vision 2030 goals and "Dare" strategy, which aims to improve and develop the local economy, while safeguarding the Kingdom's sustainable growth, and supporting its human capital development. SCAI and DataRobots join stc's long list of partners, including Ericsson, Huawei and Nokia — likeminded entities that have supported the digital service provider to establish three innovation centers for research and development in the Kingdom.

This adds even more weight to stc as the only global player owning and operating the complete digital eco-system of IoT, cloud, connectivity, cybersecurity, entertainment, banking, every aspect of connectivity and 5G etc. It builds on the $1bn launch of its major digital hub "MENA Hub" for the Middle East and North Africa, investment with Alibaba Group the Alibaba Cloud in Riyadh, Kingdom of Saudi Arabia, with an initial capital investment of $238.3 million (SAR 894 million), a 50:50 joint venture with PIF forming a specialiszed company for IoT, are just three recent illustrations of stc's determination to invest with expanding scope, increasing scale and accelerating pace. T

5G - Advanced will re-define our intelligent world in the next decade

Exclusive byline on the back of Huawei's Win-Win Innovation Week
Steven Yi, Middle East President

Many Middle Eastern countries have set national frameworks for economic growth for the next decade or so. Interestingly, we find numerous parallels between these vision statements and our roadmaps of ICT evolution over the next decade.

Most governments seek to revolutionize key sectors such as healthcare, transportation, finance, and energy, focusing on feeding them with more intelligent capabilities to improve the efficiency of the services they provide as it is the case with remote surgery in healthcare. Meanwhile, driverless cars will have taken over our roads, significantly impacting where and how we live and work. Robots will also take over many manual tasks today, allowing humans more time for creative pursuits and leisure. Achieving these goals, however, requires a significant upgrade of digital ICT technologies.

Infrastructure, especially connectivity, will enable the shift to this digital and intelligent world. While 5G is already powering compelling use cases today, 5.5G technology will underpin the emerging digital sphere by enabling 10Gbps experience and a hundred billion connections.

Huawei first proposed an outline for 5.5G in 2020, and 3GPP officially named the concept "5G-Advanced" in 2021. As an upgraded version of 5G, its features such as ubiquitous 10 Gbit/s connectivity, 100 billion connections, intrinsic intelligence, and energy saving capabilities, will power future industries such as the IoV, IoT, robotics, and manufacturing, and serve as a key driving force of the digital economy. These technologies support real-time, engaging, and more immersive experiences in the digital world and gradually make a 10 Gbps network experience available everywhere on the planet.

5.5G, an enhanced version of 5G, is expected to be put into large-scale commercial use by 2025 to further digitalize the economy and society, and speed up green and intelligent transformations.

Looking ahead to 2025, the sheer diversity and magnitude of network service requirements will create huge new market potential. Operators stand to benefit from this evolution. For example, 5.5G's sensing technology will create a new market for telecom operators, powering use cases such as smart transportation and low error security.

Steven Yi - President, Huawei ME

On the industrial front, digitalization has already entered the fast lane. AI will be fully integrated into enterprise production processes, and the size of the 5.5G IoT market will grow rapidly. Collaboration between robots and people in complex scenarios will impose greater requirements on next-generation industrial field networks.

There are numerous scenarios where such technologies can impact our lives. One very special to us at Huawei is the environment protection and energy saving.

The increasing use of ICT technologies in industrial settings will allow 5.5G to contribute more to energy conservation and emissions reduction efforts. According to a report released by Global Electronic Sustainability Association (GeSI), the ICT industry will only account for 1.97% of global carbon emissions by 2030, but the use of advanced ICT technologies in other industries can reduce their carbon emissions by 20%, amounting to a total emissions reduction 10 times greater than what the ICT industry will produce itself.

Like all previous network technologies, 5.5G will require global standardization, creating common frameworks that add value to all. Fragmentation of standardization that arises will create inconvenience and higher costs for users. If GSMA, 3GPP and other standardization organizations work together to develop a unified standard, users will benefit from superior and more affordable services.

Together with its customers and ecosystem partners, Huawei is laying the foundation of the digital economy, helping all industries go digital, building a low-carbon world and promoting sustainable development, readdressing new challenges in cyber security and privacy protection, and developing digital talent to bridge the digital divide.

We provide innovative technologies, products, and solutions that help customers build open, secure, flexible, and easy-to-use digital platforms, crafting customers own intelligent solutions, and enabling industries to navigate digital transformation and intelligent upgrade.

As industries go digital, new business models and new entities, such as industry knowledge platforms, are emerging. Standards will play a different role in the digital economy. To adapt, we need to change our mindsets, and proactively anticipate and analyze future directions and patterns of industry development, as well as the shape of new ecosystem value chains, their key nodes, and the roles of different players. We need to collaborate with partners from different industries and domains if we are to adapt to the needs and characteristics of each industry. This is the only way to build stronger industry ecosystems faster and make progress in industry digitalization.

The digital economy is changing the way

the world creates and distributes value. Businesses are now finding they must strike a balance between business value and social value. The more social value they create through the monetization of business opportunities, the more new business opportunities they are finding. While creating business value for our customers, we recognize the importance of requirements from non-market stakeholders. We work together to create social value that can be shared by all. ICT talent ecosystem and sustainable development remain as our priorities.

Digital economy is, first and foremost, a green economy. Green and low-carbon development has become a globally recognized goal. More and more countries and businesses are increasing investment and transitioning to clean and renewable energy. Building on its experience in power electronics and energy storage, Huawei combines its technical strengths in 5G, cloud, and AI to provide low-carbon or even zero-carbon energy solutions for different industries. We are also helping the energy industry become more intelligent by creating synergies between computing power and electricity. We are increasing the proportion of electricity generated from clean and renewable energy, optimizing energy supply and demand models, and speeding up the shift to a green and low-carbon energy industry. This will ultimately benefit the entire energy sector and society at large and make green and sustainable development a reality.

We were excited to see Middle East countries prioritize sustainable development and spearhead 5G deployments and the benefits they have accrued so far. Undoubtedly, these pioneers will lead the next era of sustainable connectivity, starting with 5.5G.

All stakeholders both in and outside the telecom industry chain now still need to work together on the technological, system, and business verification required to fully harness the potential of 5G-Advanced to bring digital intelligence to all. As the partner of choice for our customers, we will continue to support them to explore use cases and innovative best practices to enable a fully connected, intelligent world that benefits all. T

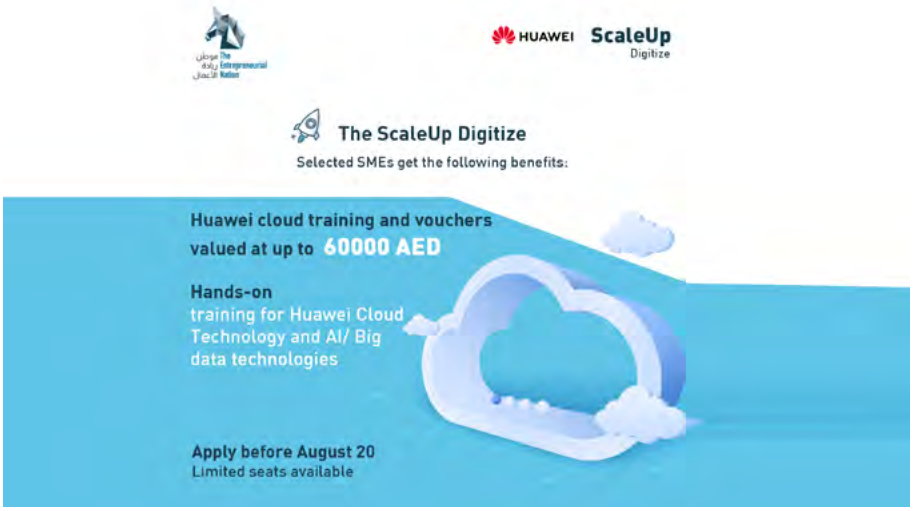
The Entrepreneurial Nation launches 'ScaleUp Digitize' in partnership with Huawei

To support digital transformation of SMEs

The Entrepreneurial Nation, the national project by the Ministry of Economy designed to transform the UAE's entrepreneurship landscape into a globally competitive and innovative one,has launched the ScaleUp Digitize program in partnership with Huawei.

The program is aimed at promoting innovation and the digital transformation of both startups and SMEs in the UAE by enabling them to enhance their digital infrastructure through the adoption of cloud technologies and services. The integration of these services are set to expedite their growth to become Unicorns with the ability to compete in local and international markets. ScaleUp Digitize falls under the ScaleUp program, which is one of the three main tracks of The Entrepreneurial Nation.

The partnership with Huawei reflects the UAE's focus on ensuring the development of its entrepreneurial sector as a major pillar of the new economic model; enhancing its sustainability and agility; and its alignment with futuristic trends based on knowledge, innovation, technology, and digitization. These efforts are in line with the Principles of the 50 and the goal to strengthen the



UAE's position as a leading global hub for entrepreneurship, talent and FDI.

In order to be eligible for registration in the program, applicants must be:

•Owners of already-existing SMEs with 10 or more employees.

•Generate revenues or must have successfully secured funding at least once.

•The founding team must have a passion for advanced cloud technologies and AI.

The Ministry further announced that only 15 SMEs will be selected to participate in the first cycle of the program. Each selected company will receive Huawei Cloud training and vouchers valued at up to AED 60,000. These vouchers can be redeemed to purchase cloud computing services, cloud storage, cloud network, and cloud database, in addition to receiving hands-on training in Huawei Cloud technologies, AI, and big data tools. T

Khalid Athar

Research and development

The foundation for Middle East economic transformation

Experts agree that research and development (R&D) is the backbone of a competitive, knowledge-driven economy. R&D investments help develop new products and services that drive growth, create jobs, and meet the future demands of societies and nations.

Regional governments have taken significant steps to incorporate innovation into their national agendas to drive socio-economic growth. For example, the UAE's R&D Governance Policy announced in 2021 established the Emirates Research and Development Council. In addition, a National Guide for Measurement of R&D Expenditures in the Government Sector has been launched, and an Advanced Technology Research Council was established.

Meanwhile, Saudi Vision 2030 targets at least five universities in 200 world best universities rankings, focusing on research and development as a key driver towards this end. A significant focus for this R&D drive is nurturing an advanced ICT sector, whose success is key to addressing societal challenges, supporting economic recovery, raising the bar in commercial competitiveness, and opening new revenue streams for businesses.

The region can borrow a leaf from China in this endeavor, a country that has quickly transitioned from a cost-driven manufacturing hub to an innovation-driven economy. The Asian country rose from 29th in the Global Innovation Index in 2015 to 14th in 2020 and fourth to first in patent registrations over the same period.

Two sectors stand out in China's technology R&D primacy and innovation – A.I. and 5G. China is quickly closing the once-formidable lead the U.S. maintained on A.I. research. Chinese researchers now publish more papers on A.I. and secure more patents than their U.S. peers and the country is poised to become a leader in AI-empowered businesses. China also accounted for nearly one-fifth of global private investment funding in 2021, attracting $17 billion for A.I. startups.

In 5G, China dominates in both scale and innovation. The country has built the industry's most extensive 5G mobile infrastructure, with 1.43 million 5G base stations rolled out as of 2021, accounting for over 60% of the global total. With such investments, Chinese operators have been critical drivers of 5 G's progress globally. China did not stop at 5G and will likely lead in the 6G evolution as well. 5G had only started rolling out when the country announced a 6G strategy in 2019, even before industry standards or definitions had been established. The country has led the 6G race ever since. A report by Nikkei shows that China topped the list with 40.3% of 6G patent filings, well ahead of the U.S. with 35.2%. For example, a Chinese government-backed institute, Purple Mountain Laboratories, announced earlier this year that it had achieved a 6G wireless transmission up to a speed of 206.25 gigabits per second for the first time in a lab environment.

Chinese-headquartered companies have followed suit, with Huawei leading the innovation race. Between 2009 and 2013, Huawei invested more than $600 million into 5G technology research, followed by a further $1.4 billion into 5G product development in 2017 and 2018. Overall, Huawei invests more in R&D than any of its competitors. Huawei's R&D expenditure

reached $22.4 billion in 2021, representing 22.4% of total revenue and bringing its total R&D expenditure over the past ten years to over $132.5 billion. In terms of R&D expenditure, Huawei ranked second in the 2021 EU Industrial R&D Investment Scoreboard. Furthermore, in 2021, Huawei had about 107,000 employees, representing approximately 54.8% of the entire workforce, working in R&D. Today, Huawei maintains one of the largest patent portfolios globally; by 2021, Huawei held more than 110,000 active patents across over 45,000 families.

In 5G investments, Huawei had signed 50 5G commercial contracts and had 150,000 base station shipments by July 2019. Huawei investment in the last decade / 10 years exceeded 132 M USD + mentioning 2021 R&D figure 22.4 B. + In 2021, 107,000 employees, representing 54.8% of Huawei's total workforce, worked in R&D.+ Huawei has one of the largest patent portfolios in the world. By the end of 2021, Huawei held a total of 110,000+ active patents, across 45,000+ patent families. For 5G investment, ahead of global launches.

Huawei is the only equipment provider to provide end-to-end 5G products and solutions. Huawei's 5G network RAN portfolio was ranked a leader for the third year in a row in GlobalData's H2 2021 report. Huawei's product portfolio outclassed its competitors. The company has taken the lead in 6G research and development. Huawei began R&D on the sixth-generation technology as early as 2019 and rotating chairman Eric Xu announced last year that the company plans to launch its 6G networks in 2030.

Huawei is today leveraging its R&D capabilities in its ambitious diversification drive. The company launched the Huawei Digital Power unit last year to digitize the energy sector. Digital Power is committed to integrating digital and power electronics technologies, developing clean power, and enabling energy digitalization to drive energy revolution for a better, greener future. Its unique value lies in its long-term R&D investment in digital and power electronics technologies.

HUAWEI CLOUD is the fastest-growing cloud services provider in the world and has emerged as an essential platform for internet companies and organizations to go digital. These numbers have been updated five years into its development, HUAWEI CLOUD has attracted 2.6 million developers, 28,000 consulting partners, 9,000 technical partners, and released 6,100 Marketplace products. In the Middle East, HUAWEI CLOUD offers more than 220 cloud services, 210 solutions, 19 data centers, over 200 local partners, and a growing list of more than 80 marketplace offerings.

To deepen the region's cloud ecosystem, HUAWEI CLOUD announced the launch of a new startup support program, Spark, in the Middle East last year. Spark is part of the

Nations that succeed in nurturing a thriving R&D ecosystem will lead in innovation, building strong economies and nurturing a flourishing future for their people and the world.

HUAWEI CLOUD Oasis Program launched in September 2021, where the company announced plans to invest $15 million over the following three years to accelerate the development of technology enterprises and ecosystems in the Middle East. Spark will see 50 SMEs receive up to $15,000 fund support on HUAWEI CLOUD in addition to cloud training during the program's first phase. A select group of SMEs will then join Spark Accelerate Program, receiving further technical support from HUAWEI CLOUD experts to help transform their businesses in the cloud and evolve their offerings.

Developers are key to Huawei's continued innovation. Updated this slightly as well in 2019, Huawei committed to investing $1.5 billion in its developer program over the next five years, supporting five million developers and enabling partners worldwide to develop next-generation intelligent applications and solutions for example, the Huawei Global App Innovation Contest and Huawei Best Arabic App category specifically highlights the nurturing innovation in the Arab World. Moreover, the Huawei Spark Program targeted the Entrepreneurs and SMEs. To further support developers who want to innovate with Huawei, the 2022 edition of the Huawei Global App Innovation Contest ("Apps UP" for short) opened last month, attracting nearly 10,000 submissions from almost 10,000 developers.

Under the theme #TogetherWeInnovate, Apps UP has set aside over US$1 million in prize money to encourage developers to build an app ecosystem that intelligently connects everything. The 2022 edition of the competition saw the launch of the Best Arabic App in the Middle East & Africa region award, part of Huawei's mission to nurture innovation in the Arab World. With over 300 million Arab speakers worldwide, there is an untapped opportunity for developers to build app solutions customized to the region's demographic. Facing unprecedented geopolitical pressure caused by politically-driven U.S. anti-competitive measures, China and other local enterprises responded by pursuing technology self-sufficiency, particularly in semiconductors.

China is the world's largest importer of chipsets, used in everything from electric vehicles, smartphones and other consumer electronics. However, last year saw Chinese imports of integrated circuits (I.Cs.) shrink 9.6% in volume in Q1 of 2022 from a year ago, according to Chinese customs data, reversing a 33.6% increase in the same period in 2021. The reduction in import volume mainly comes from China's vigorous push toward technological self-sufficiency.

Nations that succeed in nurturing a thriving R&D ecosystem will lead in innovation, building strong economies and nurturing a flourishing future for their people and the world. It is, therefore, reassuring to see regional governments make strident efforts to develop their R&D capabilities. Early adaptors of R&D are today's winners and tomorrow's stars.T

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stc expands complete digital eco-system with cable to European Union

stc group's MENA Hub to build East to Med Data Corridor (EMC) undersea and land fiber optic data cable that will link Europe with Asia, with Greek partners.

stc's MENA Hub with this new project shows the nature of its ambition to provide every increasing global connectivity and data center capacity to the markets of Asia, Europe and the rest of the world through Saudi Arabia which sits at the geographic heart of these key economies.

This is another illustration of the increasing scale, scope, and pace of stc group's transformation as a digital company and as it builds out a world leading complete digital eco-system.

As the world accelerates towards an increasing digital connectivity of businesses and people it is essential that business can offer all aspects of this world for the benefit of businesses and the customers and clients they serve.

That is why stc have also developed separate but connected IoT businesses to facilitate the analysis and implementation of greater efficiency and effectiveness of multiple operations to running multi-billion dollar manufacturing or logistics facilities.

stc's investments in cloud computing and data centers provides the capacity for the ever-increasing analysis and storage for data as we head towards the world of quantum computing.

With increasing digital connectivity comes the need to protect businesses and companies. sirar, stc's cybersecurity arm, with access to and comprehension of the complete eco-system which stc has created is ideally placed to handle and address these current and future requirements as they arise.

Only by owning, combining, integrating and coordinating every aspect of the digital world, can stc offer the end to end solution and latency, effectiveness and efficiency that tomorrow's businesses and customers demand.

Regarding the signing, the Group CEO, Eng. Olayan Mohammed Al Wetaid, said, "This important signing represents another validation of the execution of our DARE2.0 strategy as we build out our complete digital ecosystem at expanding scope, increasing scale and accelerating pace. We are pleased to be building out even further our integrated system for the benefit of our clients and customers, as we look to further establish our digital credentials and contribute to Vision 2030 and become a leading digital company and regional digital hub linking three continents".

stc's revenues for Q2 and first half of 2022 increased by 6.54% & 7.39%

stc has announced the company's preliminary financial results for the period ending at 30 June 2022.

•Revenues for the 2nd quarter reached SAR 16,939m with an increase of 6.54% compared to the corresponding quarter last year. For the first half of 2022, the revenues reached SAR 33,930m an increase of 7.39%.

•Gross Profit for the 2nd quarter reached to SAR 9,174m with an increase of 9.84% compared to the corresponding quarter last year. For the first half of 2022, the Gross Profit reached SAR 18,324m with an increase of 8.37%.

•Operating Profit for the 2nd quarter reached to SAR 3,720m with an increase of 14.46% compared to the corresponding quarter last year. For the first half of 2022, the Operating Profit reached SAR 7,543m with an increase of 12.05%.

•Earnings before Interest, Taxes, Zakat, Depreciation and Amortization (EBITDA) for the 2nd quarter reached to SAR 6,204m with an increase of 10.25% compared to the corresponding quarter last year. For the first half of 2022, the EBITDA reached SAR 12,504m with an increase of 9.03%.

•Net Profit for the 2nd quarter reached to SAR 2,837m with an increase of 0.57% compared to the corresponding quarter last year. For the first half of 2022, the Net Profit reached SAR 5,872m with an increase of 1.71%.

In accordance with the approved dividend policy for three years starting from the 4th quarter 2021, which was announced on 27 September 2021, and has been ratified during the Ordinary General Assembly Meeting on November 30th 2021, stc will distribute a total of SAR 1,997.5 million in cash dividend to the shareholders for the 2nd quarter 2022, representing SAR 1 per share as the total number of Treasury shares related to the Employees Stock Incentives Plan stood at 2,499,963 shares at the end of the second quarter 2022 and those shares are not entitled for any dividends distribution. The eligibility of dividends shall be for the shareholders at the close

"We are proud of the achievements made during the past. We will continue working on accelerated pace, providing the latest technological solutions".

Eng. Olayan AlWetaid - Group CEO

of trading on 07-08-2022 and as per the registered shareholders in stc's shareholders registry in the Depository Center at the end of the 2nd trading day following the eligibility date. Dividend distribution date will be on 25-08-2022.

Consequently, Alwetaid stated, "Among these investments is the establishment of a major digital center for the Middle East and North Africa "MENA HUB" with capital of nearly SAR 4 billion, which will strengthen the Kingdom's position as a significant digital center in the region and the world. Moreover, a new company in the field of IoT was established in partnership with the Public Investment Fund (PIF) to support IoT technologies in the Kingdom through stc's reliable digital infrastructure to take advantage of the expected growth and increasing demand for its services and products. Adapting to the ICT acceleration pace, Solutions by stc (one of the group's subsidiaries) announced its acquisition of 89% of Giza Systems Company and 34% of the remaining share - not owned by it - in its subsidiary, Giza Arabian Systems, to expand and diversify its products and services to meet customers' demand. This acquisition also enhances Solutions by stc's position and leadership in enabling digital transformation in the Kingdom and the region.

Alwetaid confirmed, "These investments reflect stc group commitment of achieving its strategy to expand in scope and scale to be aligned with Kingdom's digital transformation acceleration pace, diversify investments and build a comprehensive digital ecosystem."

In line with the objective of supporting the group in achieving its "DARE 2.0" strategy that aims for expansion, growth, and maximizing shareholders' return through increasing and diversifying investments and seizing growth opportunities in the telecommunications and information technology sectors in the Kingdom and the region; stc's board of directors recently recommended increasing the company's capital by 150% to reach SAR 50 billion by granting bonus shares through capitalizing SAR 30 billion from retained earnings.

Finally, Alwetaid stated, "We are proud of the achievements made during the past. We will continue working on accelerated pace, providing the latest technological solutions in addition to developing a reliable digital infrastructure within our digital ecosystem".

This will boost the Kingdom's position as a leading digital service center through innovative projects and global partnerships. Thus, enabling the digital transformation of the public and private sectors will reflect in strengthening the digital economy in harmony with the Kingdom's Vision 2030. T

Including a cybersecurity track for the first time

inspireU program embracing 18 projects in its 9th intake

stc Group's inspireU entrepreneurs support program has announced the selection of incubated projects in the final phase of the 9th intake.

The program embraced 18 projects, including Spoilz games provides services to game developers, win provides the sale and purchase of surplus industrial inventory of oil and petrochemical products between industrial companies, Sirdab serves business owners to instantly configure and manage their cloud repositories, Fraim app connects production companies to advertising service providers such as photographers, Qparts provides technical solutions in the field of auto parts and OPETA specializes in artificial intelligence and data analysis, which provides a platform that serves the restaurant and café sector.

In addition to Autoly Inc. application that specializes in AI / ML technology to help drivers and companies maintain their cars through damage analysis capability, "Moeco" platform for logistics solutions, provides low-cost tracking devices, "Flashlead" platform that provides a cloud-based software for customer management to improve corporate performance and increase sales, "Nugttah" platform, brings restaurant or café owners closer to their customers to allow them to order digitally, "Clevr" platform, supports small and medium enterprises in the retail sector, "Oumlapay" platform, provides a payment gateway that enables companies to accept, organize and transfer encrypted payments, "Nabt Agri Tech" platform that connects farmers and importers of fresh goods to business owners.

"Yamm Pay" platform that provides the latest "Buy Now, Pay Later" solutions, the "Siolla" application that helps individuals to invest their surplus funds, and the "FKEACI" platform to verify customers identity by using the artificial intelligence and automated learning to detect plagiarism. Innovation Pioneers (IPSA) provides an innovative and secure authentication system that enables their users to verify remotely using encryption technologies to reduce cyber risks and "Sabry" simulates phishing and automate response to email incidents.

These projects were qualified out of more than 600 projects applied for the 9th intake of the program after they passed all the levels of screening, which included presenting eligible projects in the final stages to the arbitration committee, which is based on evaluating them on several criteria, including the quality of the idea, the work team, the possibility of expansion, and the business model. Where rental committee of the arbitration has interviewed with projects founders and chose the best projects to embrace them in the ninth intake to benefit from inspireU services.

The Chief Investment Officer, Motaz Alangari said: "The inspireU program in this intake included a special tack to support projects in cybersecurity in cooperation with sirar from stc group, the digital provider of cybersecurity services. Alangari stressed that the establishment of this track aims to enhance local content and enable digital cyber projects, by providing a specialized workshops and technical advisory sessions for this track. "

It's also worth mentioning that the inspireU program since its launch in 2015 has been able to incubated 75 emerging projects in various fields, as graduate companies have obtained investments worth more than 500 million Riyals, while the market value of these investments amounts to more than 10 billion Riyals, and inspireU projects use more than 40 million users, and financial transactions for incubated projects worth more than 12 billion riyals, and contribute to the creation of 600 thousand jobs in the market of the region.

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Eutelsat and OneWeb to combine: a leap forward in Satellite Connectivity

Eutelsat Communications and key OneWeb shareholders have signed a Memorandum of Understanding with the objective of creating a leading global player in Connectivity through the combination of both companies in an all-share transaction. Eutelsat will combine its 36-strong fleet of GEO satellites with OneWeb's constellation of 648 Low Earth Orbit satellites, of which 428 are currently in orbit.

The transaction would be structured as an exchange of OneWeb shares by its shareholders (other than Eutelsat) with new shares issued by Eutelsat, such that, at closing, Eutelsat would own 100% of OneWeb (excluding the 'Special Share' of the UK Government). OneWeb shareholders would receive 230 million newly issued Eutelsat shares representing 50% of the enlarged share capital.

The potential transaction builds on the deepening collaboration between Eutelsat and OneWeb, begun with the equity stake acquired by Eutelsat in OneWeb in April 2021, the global distribution agreement between Eutelsat and OneWeb announced in March 2022, and the new exclusive commercial partnership, addressing mainly the European and global cruise markets, signed today.

Commenting on the combination, Dominique D'Hinnin, Eutelsat's Chairman said, "I am delighted to announce this new and significant step in the collaboration between Eutelsat and OneWeb. Bringing together our two businesses will deliver a global first, combining LEO constellations and GEO assets to seize the significant growth opportunity in Connectivity, and deliver to our customers solutions to their needs across an even wider range of applications. This combination will accelerate the commercialisation of OneWeb's fleet, while enhancing the attractiveness of Eutelsat's growth profile. In addition, the combination carries significant value creation potential, anchored on a balanced mix of revenue, cost and capex synergies. The strong support of strategic shareholders of both parties is a testament to the huge opportunity that this combination offers and the value that will be created for all its stakeholders. This is truly a game changer for our industry".

Sunil Bharti Mittal, OneWeb's Executive Chairman said, "Having played a pioneering role in providing connectivity in the emerging world, I am excited about the possibilities of connecting the unconnected. The combination of Eutelsat and OneWeb represents a significant development in that direction as well as a unique GEO/LEO combination. The positive early results of our service together with our strong pipeline represent a very exciting opportunity in the fast-growing satellite connectivity segment, especially for customers requiring a high speed, low latency experience. Our customers are actively seeking a combined GEO/LEO offering leading us towards this important step. Bharti, as the lead shareholder of OneWeb, along with other key shareholders, is looking forward

to playing a meaningful role in providing expanded connectivity through the combination of OneWeb and Eutelsat".

Eva Berneke, Eutelsat's Chief Executive Officer said, "Our initial investment in OneWeb was underpinned by our strong belief that the future growth in Connectivity will be driven by both GEO and LEO capacity. This belief has intensified as our relationship with OneWeb has deepened, first by raising our stake in the company, and then with the global distribution agreement signed a few months ago. We are now moving to the next level, with a full combination that will ensure the potential of the GEO/LEO integration is fully realized, supported by compelling financial, strategic, and industrial logic. This ground-breaking combination will create a powerful global player with the financial strength and technical expertise to accelerate both OneWeb's commercial deployment, and Eutelsat's pivot to Connectivity. The combined entity will be geared towards profitable growth, with strong medium-term cash flow generation and a rapid deleveraging driven by strong forecast EBITDA growth. The benefits for our customers and strategic partners, who are at the center of our strategy, are both significant and unique. This is also a very exciting opportunity for our employees who will be key to the success of this transformation".

Neil Masterson, OneWeb's Chief Executive Officer said, "Just 20 months ago, OneWeb resumed its mission to connect the unconnected and remove the barriers to connectivity that hold back many of the world's underserved economies and communities. Since then, we have turned this vision into reality and become the second largest low Earth orbit satellite operator in the world. Today's announcement is another bold step in OneWeb's remarkable journey. It is testament to the resilience, execution and innovation of our teams, the strong demand we have seen since launching our commercial services, and the close collaboration we have forged with our partners to provide high-speed, low latency connectivity for governments, businesses, and communities. This combination accelerates our mission to deliver connectivity that will change lives at scale and create a fast growing, well-funded company which will continue to create significant value for our shareholders".

Dominique D'Hinnin - *Chairman, Eutelsat*

Sunil Mittal - *Executive Chairman, OneWeb*

A compelling market opportunity

Eutelsat and OneWeb will address the considerable Connectivity market opportunity, which is fueled by the growing needs of customers in both the B2B and B2C segments for consistent, reliable connectivity. These market segments are forecast to grow by three and five times respectively over the next decade, to reach a combined value of circa $16bn by 2030, with growth being served by both GEO HTS and LEO capacity.

Moreover, the combination of the network density, compelling economics and high throughput of GEO with the low latency and ubiquity of LEO, creates the optimal solution to address an even wider range of customer needs, thereby expanding the addressable market.

A powerful combination, representing a game-changer in the industry

The operations of Eutelsat and OneWeb are highly complementary. A clear roadmap has been designed to develop over time a complementary GEO/LEO service including a common platform, hybrid terminals and a fully mutualized network creating a one-stop shop solution for customers, providing them with a unique offering and a seamless user experience.

Tapping into significant revenue, cost and capex synergies

The combination of Eutelsat with OneWeb is forecast to generate substantial value:

Average annual revenue synergies are estimated at circa €150m after four years, with hybrid GEO/LEO offerings providing a premium service to customers as well as improving the fill rate.

Synergies from joining organizational forces are expected to generate annual run-rate savings of over €80m pre-tax after five years, mostly through cost duplication avoidance.

Capex optimization is expected to generate average savings estimated at circa €80m per annum, from year one. This would be achieved by leveraging the hybrid GEO/LEO satellite infrastructure and through the improved purchasing power of the combined entity.

These sources of incremental value creation represent a balanced split between revenues, costs and capex. Taken together they equate to a net present value of over €1.5bn after tax (net of implementation costs).

Value-creative pathway to robust, profitable growth

The transaction provides a platform for both entities to create value while transforming their respective growth profiles and cash generation potential.

Combined entity would have revenues of circa €1.2bn and EBITDA of circa €0.7bn in FY22-23.

Revenues are forecast to grow at low double-digit CAGR over the next decade.

EBITDA is expected to grow at a mid-teen

CAGR over the medium to long term, outpacing sales growth, with EBITDA margin levels moving gradually back in line with best-in-class GEO standards.

The capex of the combined entity is estimated in average at some €725m to €875m, per annum, over the period FY23-24 - FY29-30.

Well-funded investment program and rapid deleveraging

Eutelsat's strong cash flow generation will provide both visibility and funding to develop OneWeb's fleet at minimal risk. Combined EBITDA – CAPEX, standing at circa -€0.2bn in FY22-23 is expected to be back in positive territory by FY24-25 - FY25-26 (depending on Gen-2 capex phasing).

Eutelsat will temporarily suspend its dividend, and cash flow will be focused on the deployment of the Gen 2 constellation while maintaining a strong balance sheet.

Leverage, which would stand at circa 4x net debt / EBITDA post transaction, is expected to be reduced on the back of strong EBITDA growth, backed by a disciplined financial policy, with an objective of leverage of circa 3x in the medium term.

Eutelsat will pay its dividend in respect of FY21-22 with a scrip option. Thereafter, the dividend will be suspended for FY22-23 and FY23-24.

Structure of the transaction

The transaction would be structured as an exchange of OneWeb shares for newly issued Eutelsat shares. This excludes the 'Special Share' in OneWeb which is retained by the UK Government together with the existing rights associated therewith. OneWeb shareholders would receive 230 million newly issued Eutelsat shares, representing 50% of Eutelsat's enlarged share capital.

Eva Berneke - *CEO, Eutelsat*

Neil Masterson - *CEO, OneWeb*

The number of new Eutelsat shares to be received by existing OneWeb shareholders would not be affected by the payment of the €0.93 per share dividend with a scrip option for FY 21-22 to be proposed at the upcoming AGM of Eutelsat.

Trading under its existing name, OneWeb will continue to operate the LEO business, with OneWeb's headquarters remaining in the UK.

Eutelsat will continue to be headquartered and domiciled in France, listed on Euronext Paris and would apply for admission to the standard segment of the UK Official List of the UK Financial Conduct Authority and to trading on the London Stock Exchange (subject to meeting the applicable eligibility requirements and the approval of the UK Financial Conduct Authority).

A new balanced ownership and governance

The combined entity will have a balanced ownership structure with a substantial free float alongside anchor public shareholders and supportive private investors.

The Board of Directors of the combined group would consist of 15 members including ten independent directors. Seven directors, in addition to the CEO of Eutelsat, would be proposed by Eutelsat and its key shareholders and seven directors would be proposed by OneWeb and its key shareholders (the number of directors proposed by each of key Eutelsat and OneWeb shareholders being commensurate to their shareholding in Eutelsat post transaction).

It is contemplated that, post-closing, a shareholder agreement between Eutelsat key shareholders and OneWeb key shareholders which does not qualify as a concerted action be in place. It would in substance provide for the right for each party to propose 1 director (if its shareholding is at least 7.5%) and 2 directors (if its shareholding is at least 15%), as well as a 6-month lock up period.

Dominique D'Hinnin would be proposed as Chairman of the combined entity and Sunil Bharti Mittal as Co-Chairman (Vice-Président). Eva Berneke would continue as CEO of the combined entity. T

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White Paper on Operator Data Storage Power Index released to shape future Data Infrastructure

***Dr. Peter Zhou** - Vice President, Huawei and President of Huawei Data Storage Product Line*

An International Data Corporation (IDC) white paper Telco Operator Data Storage Power Index, sponsored by Huawei, was released during Win-Win Huawei Innovation Week.

This white paper is the first in the industry to systematically elaborate on research into operator data storage across multiple areas. It proposes five core indicators for measuring data storage capabilities, alongside a three-layer evaluation system for measuring these indicators. The paper also identifies four future trends in the target architecture for operator data storage. The paper is intended as a guide and reference for operators' digital infrastructure development in the digital economy era.

Dr. Peter Zhou, Vice President of Huawei and President of Huawei Data Storage Product Line, believes that carriers are concerned about maximizing the value of data and measuring the effectiveness of data storage, management, and utilization within data infrastructure. Dr. Zhou pointed out that Huawei has invested heavily in data storage for more than a decade, and the company's data storage products have served over 400 operators in more than 150 countries and regions around the world. The Telco Operator Data Storage Power Index white paper is the result of close collaboration between Huawei and IDC, made possible through extensive communication with experts, customers, and partners in the industry. The paper aims to establish a system for evaluating data storage power, enabling operators

Thomas Zhou - *VP, IDC China*

to comprehensively assess their data infrastructure and ensure it becomes stable, reliable, and efficient.

Thomas Zhou, Vice President of IDC China, noted that 95% of operators have an urgent need to optimize their IT infrastructure. He added that the digital economy will logically lead to future digital infrastructure, and that storage power is a pillar of such infrastructure. Zhou went on to explain that this white paper focuses on five core capability indicators for the storage power of operators' data infrastructure: Security and Resiliency, Real-time Agility, Energy Efficiency, Intelligent Management, and Data Innovation. In addition, the paper establishes a three-layer evaluation system for measuring these capabilities, consisting of the operator region layer, data center layer, and storage device layer. The paper thus identifies four trends in the target architecture for operator data storage: core services on flash storage, massive distributed data, intelligent O&M, and storage as a service.

Through the study and evaluation of the core capability indicators for operators' data storage power, and by identifying future trends in operators' data management, the Telco Operator Data Storage Power Index white paper will help operators build higher-quality data infrastructure to achieve digital transformation and new growth. T

Huawei 2022 H1 financial results reveal solid performance with a focus on the future

Huawei has announced that its business results for the first half of 2022 and overall performance was in line with forecast.

In 2022 H1, Huawei generated $45 billion in revenue, with a net profit margin of 5.0%. The Carrier BG contributed $21.3 billion, the Enterprise BG $8.1 billion, and the Device BG $15.1 billion.

"While our device business was heavily impacted, our ICT infrastructure business maintained steady growth," said Ken Hu, Huawei's Rotating Chairman. "Moving forward, we will harness trends in digitalization and decarbonization to keep creating value for our customers and partners, and secure quality development."

Huawei's R&D spending reached a high point in 2021. The company invested about USD 22.38 billion, representing 22.4% of its total revenue and bringing its total R&D expenditure over the past ten years to over USD 132.5 billion. Moving forward, Huawei will continue to invest heavily in R&D.

In the first half of this year, the carrier business saw steady growth in line with forecasts. The business reported stable development in 5G, while other business modules like optical networks, cloud core networks, services, and software grew rapidly. Huawei's exploration into 5GtoB has been highly rewarding. Working with carriers and partners, the company had signed more than 5,000 commercial contracts for industrial 5G applications by June 2022. In some Middle East countries, such as Saudi Arabia and the UAE, Huawei's 5GtoB offerings have seen large-scale commercial deployment across numerous industries, including ports, mining, manufacturing, and oil and gas. 5G Fixed Wireless Access has seen wide adoption in home applications, helping carriers achieve business success with 5G among home and enterprise users.

During H1, Huawei's enterprise business revenue grew steadily, exceeding 27% both in and outside China. In the second half of 2021, the company established "integrated teams". These teams focus on select industries of strategic importance to the company and work closely with partners to create more customer value. Characterized by shorter management chains, integrated teams are designed to more rapidly mobilize internal resources and delve deep into industry-specific scenarios to explore which technologies will best serve customers.

"While our device business was heavily impacted, our ICT infrastructure business maintained steady growth".

Ken Hu - Rotating Chairman, Huawei

Huawei Cloud maintained rapid growth in the first half of this year and has been widely recognized by customers across several sectors like government, finance, manufacturing, and the Internet. In terms of product innovation, Huawei Cloud closely follows its "Everything as a Service" strategy. In the first half of 2022, Huawei Cloud released 15 innovative services, covering Infrastructure as a Service, Technology as a Service, and Expertise as a Service.

Moving forward, Huawei Cloud will continue to invest and innovate according to its "Everything as a Service" strategy and build the best cloud platform for industry-specific innovation as the world heads towards a golden decade of SaaS. Huawei Cloud will also forge a new partner system and help partners improve their capabilities to achieve shared success. With Huawei Cloud serving as the foundation, Huawei will enable developers to grow and contribute to a thriving developer ecosystem through developer programs like the Huawei Cloud Developer Program.

Huawei Cloud has continued to expand its global presence. Together with partners, Huawei Cloud is currently operating 65 Availability Zones in 27 Regions, including UAE and the upcoming Saudi Region. According to Gartner, Huawei Cloud is the 5th largest IaaS vendor in the world.

In the device business, the HarmonyOS ecosystem continues to grow rapidly. HarmonyOS has already been deployed on more than 300 million Huawei devices and HarmonyOS Connect has attracted more than 2,000 ecosystem partners. Over 170 million third-party HarmonyOS Connect devices have been shipped. As the world becomes fully connected, Huawei will continue to pursue this HarmonyOS-centered device ecosystem using an open-source strategy and allow more developers to use, contribute to, and benefit from Huawei's capabilities.

Green development is now a global consensus. To support the green agenda and help drive the digital economy forward, Huawei has continued innovating and proposed a three-layer solution: green sites, green networks, and green operations. Huawei aims to help carriers enhance network energy efficiency in all areas. By integrating digital and power electronics technologies, Huawei is developing innovative digital power products and solutions that will drive the shift towards a green and low-carbon energy sector. By June 2022, Huawei's Digital Power solutions had already helped customers generate 588.5 billion kWh of green power and save 17 billion kWh of electricity. These efforts have offset 290 million tons of CO_2 emissions, equivalent to planting 390 million trees.

Tackling the electronic E-waste problem using sustainable & responsible reverse supply chains in a Circular Economy

Serge Conesa - *Founder Chairman & CEO at Immersion4*

I - What is Electronics Waste?

Electronics recycling is the process of recovering material from old devices to use in new products. E-waste is a symptom of an industrial production system inherited from the steam-driven days of the first industrial revolution in the 18th century. E-waste is also at the very first about wasting rare earth metals. Metals which are essential for IT equipment and very costly to produce.

Electronic waste (i.e. e-scrap) is described as discarded electrical or electronic devices and only makes up 4% of the waste stream, but it accounts for 70% of the toxic pollution in earth landfills. Informal processing of E-waste in developing countries can lead to adverse human health effects and environmental pollution.

II - The fundamental problem - The linear, 'Take-Make-Waste' process & scarcity

The linear, 'Take-Make-Waste' process is based on the assumption that the production system has infinite resources where materials are:

- Extracted from the earth's crust,
- Transported to manufacturing sites,
- Used to produce products knowing that all materials not part of end product are discarded as waste.

Later on, these products are transported to users and finally, at the end-of-life,

"The path to the future"

discarded as waste.

III – Digitalization - The global E-waste problem is escalating!

In the 21st century we should know better:

- Fossil fuels are limited and have a negative health and planet impact,
- Rare earth elements (rare materials) are scarce. In electronic components heavy metals and harmful materials such as lead, cadmium, beryllium, brominated flame retardants and rare minerals if not properly handled can

> *"Immersion4 will be the greatest help in reducing E-waste up to 90% using FULL immersive DTMTM technology to remove cooling complexity".*

E-waste is one of the biggest problems for our planet today and we are not even completely aware of the problem as a society

cause severe environmental damage and harm to human health,

- Water is scarce.

By definition, this classical way of producing is unsustainable.

It's just a matter of time

World volumes of end-of-life e-products is expected to rise by 33% over 5 year periods according to studies in the past such as Solving the E-Waste Problem (STEP) Initiative

E-waste trends will continue to grow: Global E-waste Monitor 2020 reported that an estimated 53.6 million metric tonnes (Mt) of WEEE (Waste Electrical and Electronic Equipment) was generated in 2019. That represented a 21% jump in the five years since 2014 (with E-waste on a predicted course to 74 Mt by 2030)

China and the United States topped the world's totals in market volume of WEEE, and E-waste, however, an E-waste per capita gives a different view on E-waste production with North America having an approximate 20.9kg per capita and China having approximately 7.2kg per capita of E-waste.

IV - IT recycling - Laws & regulations

There are some moral, economic and financial incentives to stop this explosive growth of E-waste. A lot of the electronic devices are IT and Telecommunications Equipment and are used by corporate consumers. As such, in a way, these corporate consumers are taking part in the explosive growth of E-waste.

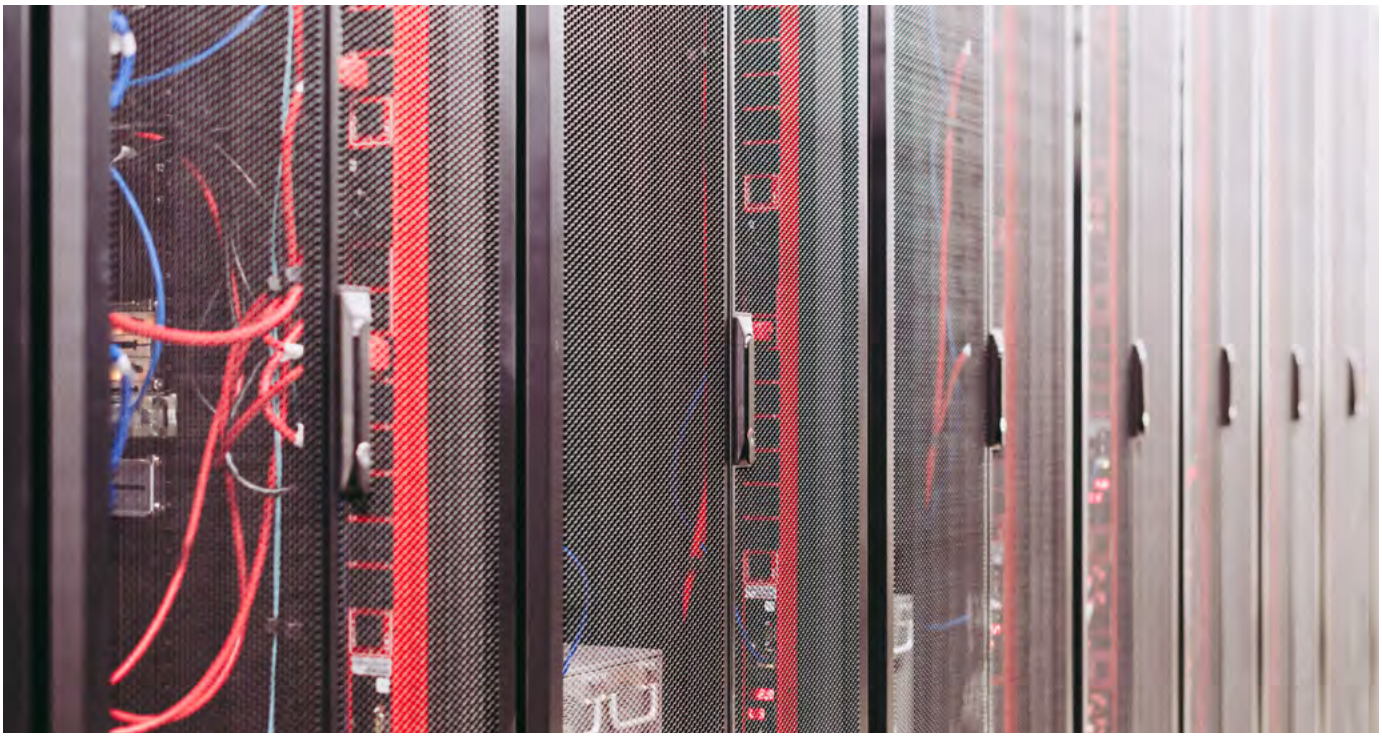
"The way we cool off electronics in data centers may be generating the E-waste recycling problem as we know it".

"The way we cool off electronics in data centers may be generating the E-waste recycling problem as we know it".

V - Conclusion – The problem is not related to the way we collect it and we scatter it. E-waste will never be solved or even reduced without using new technologies such as Full Immersion Cooling DTMTM technology.

We need to make companies & governments working together to build reverse supply chains that are sustainable, safe and responsible, and which ensure that materials do not flow into the informal sector whilst maximizing progress towards a circular economy for used and end of life information and communications technology, and electrical and electronic equipment.

The story we have long been talking about with these little electronic components warming up, which over the years has reached limits of laws of physics as we know,



Data Centers and their cooling consume huge amounts of energy and also lead to E-waste. We need Data Centers and we need to do better at how we maintain them.

ended up to be the overall components (CPU, GPU, FPGA, ASIC, memory, condenser, hard drive etc.) on the PCB and the way we cool them today is obsolete.

"Nothing will change as long as we are using air and water cooling. There is no Green Data center using such a solution for cooling!"

DTMTM FULL immersion technology by Immersion4 can impact the whole supply chain, the movement and processing of materials and the value of the finished product. The need and the value of the raw materials will be mostly avoided to create a highly efficient / economical reverse supply chain model which is essential to achieving a circular economy.

"Immersion4 will be the greatest help in reducing E-waste up to 90% using FULL immersive DTMTM technology to remove cooling complexity".

At the appliance level – DTM ICETM Coolant fluid is the thermal conductor

- No more issue related to physics laws Thermal and mechanical gradients critical factors defining MTBF using AIR cooling are solved as inexistent
- No more need to use heat sink materials on the top of "Hot spot"
- Appliance power supply can be reduced by up to 50%
- No more space needed for AIR circulation
- No humidity, no corrosion, no oxidation, no dust, no need for PCB protection layer aka conventional coatings and brominated flame retardant
- No more fan and air circulation needed
- No "liquid to the chip" complexity

"Nothing will change as long as we are using air and water cooling. There is no Green Data center using such a solution for cooling!".

At the data center level - No data center infrastructure required

- No AC, no HVAC, no In Row, no chemical fire suppression, no AIR IN row circulation & filtration (ASHRAE standard), no water cooling evaporation,
- Only half size UPS and Backup system This is not only about technology. This is about legislation and policy - all together national, regional and global, overseeing the associated standards, quality and boundaries, and the movement of materials which make up the reverse supply chain.

A regulatory framework will be required to support more sustainable and responsible stages of open and closed reverse supply chains in the electronics sector but it NOT what will make the change. The change will come from the consciousness of each of us and our awareness of what we leave behind for future generations. T

Bolder. More Vibrant. Upgraded:

Ooredoo Group launches new Brand positioning as part of ongoing Strategic Business Transformation

Ooredoo Group, operating across the Middle East, North Africa and Southeast Asia, has launched its new brand positioning and tagline – 'Upgrade Your World'.

In a fast-moving industry that thrives on innovation, Ooredoo's new brand positioning reflects a future-proof, employee- and customer-centric narrative that forms the core of its corporate transformation strategy.

UPGRADE YOUR WORLD

Ooredoo Group's new tagline is about enabling human progress, reflecting the company's commitment to keep improving, never standing still.

'Upgrade Your World' promises to keep moving customers and employees forward – whether in small steps or giant leaps - with every connection, innovation and service provided for every person, business, community and country the Group serves across its global footprint. Bold, vibrant, distinctive and upgraded, Ooredoo's new visual identity emanates the same spirit and passion for which the company is celebrated, and reflects its forward-thinking attitude.

Aziz Aluthman Fakhroo, MD and Group CEO, Ooredoo, said: "This is a hugely exciting new phase for Ooredoo, and one to which we have all looked forward for some time. It is the continuation of our successful transformation programme to embed a culture of continuous evolution in all aspects of our business, from improving the employee and customer experiences to ultimately improving value for our shareholders. Anchored to our ethos to enrich the digital lives of our customers, our new tagline 'Upgrade Your World' perfectly encapsulates our mission to place our people and customers at the heart of everything we do. It is also our promise to move them forward, enabling them to consistently be a step ahead of the curve anywhere they are."

WHAT IT MEANS TO OUR CUSTOMERS

'Upgrade Your World' empowers customers to make the choices that suit them, by giving them options to take their experiences to a higher standard and enabling them to realise their growth.

For Ooredoo it means continuing to invest in networks to provide seamless connectivity irrespective of where

customers are, and continuing to invest in maximising the customer experience through its products and services.

Ooredoo's advanced networks are enabling the Internet of Things and Data Analytics through 5G – now available in Qatar, Kuwait, Oman, Maldives and Indonesia.

Ooredoo's apps are providing a completely digital mobile experience, with Mobile Money apps offering a range of new services particularly to unbanked communities.

And to serve its customers even better, the company is also investing in its own people, supporting young leaders, as well as attracting, retaining and developing the next generation of talent. Ooredoo is aiming to become the employer of choice in each of its markets through the evolution of a more agile, team-focused corporate culture.

Sheikh Mohammed Bin Abdulla Al Thani, Deputy Group CEO and CEO of Ooredoo Qatar, added: "The Ooredoo brand refresh and renewed positioning will stand us in good stead in the coming years, as we continue to future-proof our business in a faster, more agile and more inspiring

Aziz Aluthman Fakhroo
MD & Group CEO, Ooredoo

Sheikh Mohammed Bin Abdulla Al Thani
Deputy Group CEO & CEO of Ooredoo Qatar

manner aligned with our business model and our position as a leading telco provider. We can see that work and home lives are becoming ever more digital and intertwined, increasing the need for a trusted, dynamic and evolved connectivity provider in all our markets. 'Upgrade Your World'- our new brand positioning – will take us to ever greater heights; it will further enable us to delight and enrich our customers' digital lives by enabling them to connect through a strong ecosystem of superior networks, advanced technology and digital services."

In recent years, Ooredoo launched a company-wide business transformation program, investing heavily in network upgrades, products and people to deliver transformational digital experiences to customers wherever they want them online.

PTCL, Nokia successfully trial 1-Terabit Live Optical Network

Pakistan Telecommunication Company Limited (PTCL) has successfully conducted a trial of 1-Terabit high transport capacity per wavelength, in collaboration with Nokia.

The trial was conducted in a live network environment, where PTCL Metro Transport Network was upgraded to 1-Terabit per channel, extending its capacity to extreme speeds of 32-Terabit per fiber. The trial was based on Nokia's Photonic Service Engine Transport Technology, designed to maximize network capacity and provide better customer experience, with faster and higher bandwidth.

This pilot transformation will lead to transport network enablement for future technologies, while creating new opportunities for industries as well as individuals. This is yet another step on PTCL's roadmap and resolve to prepare its network infrastructure to meet the growing data traffic demands for higher speed services and bandwidth intensive applications, including HD Video Streaming, Industrial Automation, Smart Cities and e-learning platforms for its subscribers and enterprise customers.

From a consumer point of view, 1 terabit-per-second capacity is enough bandwidth to download the entire Game of Thrones video series in HD in under 2 seconds and can support 300,000 HD video zoom calls simultaneously.

Jafar Khalid, Chief Technology Officer, PTCL Group, said, "We are committed to digitizing our customer experience by providing state-of-the-art solutions. Keeping this in view, we tested the scalability and evolution of our optical transport network by enhancing the existing capacity to 1-Terabit per channel, to facilitate the ever-growing data traffic demand of our corporate and consumer segments. Nokia's modern technology and expertise has helped us to test bandwidths up-to 1-Terabit, that will help provide a superior customer experience and enable seamless future expansion of our transport network capacity across Pakistan."

Imran Durrani, Customer Team Head for PTCL Group at Nokia, said, "This new trial with PTCL is yet another testimony to further strengthening long-term partnership between us. Our industry-leading optical solutions including Photonic Service Switch and Photonic Service Engine are empowering PTCL to cost-effectively enhance network capacity as data consumption continues to rapidly increase. Our pathbreaking Flexgrid architecture allows PTCL to modernize and upgrade its optical network to provide individuals and enterprises with a fast and reliable network connectivity."

PTCL endeavors to offer its customers enhanced service quality, faster speeds and enable a simplified network architecture that increases operational efficiencies.

e& reports consolidated net profit of AED 4.9 billion for H1 2022, up 2.5 percent

Board approves interim dividend of 40 fils per share for H1 2022

e& has announced its financial results for H1 2022. e&'s consolidated revenues reached AED 26.3 billion, while consolidated net profit was AED 4.9 billion, a year-over-year increase of 2.5 percent. At constant exchange rates, revenue increased by 3.8 percent. Consolidated EBITDA remained steady in reporting currency at AED 13.4 billion, while increased by 4.1 percent in constant currency, resulting in an EBITDA margin of 51 percent.

The number of etisalat by e& subscribers in the UAE reached 13.3 million in H1 2022, representing an increase of 10 percent over the same period last year, while aggregate group subscribers reached 160 million, a 2.5 percent increase.

Since e&'s evolution into a global technology and investment conglomerate earlier this year, the company has continued its journey with steady progress in creating innovative solutions using next-generation technologies and pursuing strong local, regional and international mutually beneficial partnerships that create value and benefit our customers, enterprises and communities.

Commenting on the H1 2022 results, H.E. Jassem Mohamed Obaid Bu Ataba Alzaabi, Chairman of e&, said: "e&'s performance during the first half of the year demonstrates our unwavering commitment, continued efforts and relentless focus on realising our vision of driving the digital future to empower societies. Our success is underpinned by our drive to make a positive change in the societies we serve while adding value to our shareholders.

Jassem M. Obaid Bu Ataba Alzaabi
Chairman, e&

At constant exchange rates, revenue increased by +3.8% percent and EBITDA increased by +4.1% percent year-over-year

Our financial performance reinforces e&'s success story and its strong standing, tackling the challenges and rising to every opportunity to execute our ambitious plans we embarked on earlier this year and set the momentum for the remainder of 2022. We have embraced digitisation, with a continuous innovation ethos to charter our course into a more holistic digital transformation for our communities and societies.

"I would like to thank the UAE's wise leadership for their inspiring vision and continuous support to the ICT sector. I am also grateful to our e& management team for constantly capitalising on our deep digital expertise to act as enablers of digital transformation for governments, corporates, and consumers, providing complete end-to-end solutions. We remain thankful to our loyal consumers and shareholders for joining us in our journey of transformation and collaborating with us to set new industry benchmarks and reach new heights".

Hatem Dowidar, Group CEO of e&, said, "e&'s financial results for the first half of this year are an outcome of our earnest endeavours to drive growth and enhance efficiencies, with a strong commitment to key strategic priorities to enable a better digital future and drive innovation".

"e& achieved good performance despite global economic challenges characterised by soaring inflation, hike in interest rates and foreign currency devaluation. We will remain resilient and see these times as opportunities to deepen our focus and invest in the long term. As we navigate through the new global economic landscape, we will focus on our goal to create and deploy innovative solutions to positively impact people's lives".

We have maximised our efforts in growing

our core and digital services, by enriching consumers' value propositions with digital services that cater to their new lifestyles and emerging demands beyond basic telecom services. Our telecoms business has been the growth engine behind our company and its transformation into a techco. This has helped solidify our leadership across our geographic footprint, as well as grow adjacencies organically and through acquisitions.

The e& digital transformation path has accelerated, empowering our customers across the digital marketplace realm, growing in fintech, providing holistic digital solutions and elevating the streaming experience to new heights. Our investment in Vodafone, for example, has great potential to drive value for both companies as we explore potential collaboration opportunities in the rapidly developing global telecom market and support the adoption of next-generation technologies. We are confident that the efforts during the first half of 2022 will help us be even better positioned to bring the full potential of the digital world to our customers across all segments by strategically building blocks

Hatem Dowidar - *Group CEO, e&*

that enable a future-ready business model.

"We remain thankful to the UAE leadership, outstanding employees, customers and shareholders for their continued support. Our strength and determination rely on a collaborative ecosystem that moved us towards the decision of exploring new paths and reaching new horizons."

Etisalat Group has changed its brand identity to e&, effective from 23 February 2022. Its strategy aims to accelerate growth through the creation of a resilient business model representing the Group's main business pillars. The telecoms business currently continues to be led by etisalat by e& in e&'s home market and by existing subsidiaries for e& international, upholding the Group's rich telecoms heritage, bolstering the strong telecoms network and maximising value for the Group's various customer segments. Ramping up the digital services for individual customers to elevate their digital-first lifestyle, e& life brings next-generation technologies through smart connectivity platforms in entertainment, retail and financial technology. To enable the digital transformation of governments, large-scale enterprises and corporates, e& enterprise focuses on maximising value through its end-to-end solutions in cybersecurity, cloud, Internet of Things (IoT) and Artificial Intelligence (AI), as well as deploying mega projects. e& capital allows the Group to focus its efforts on driving new mergers and acquisitions while maximising shareholder value and strengthening global presence.

etisalat by e& UAE announces exclusive offer for senior Emirati citizens

etisalat by e&, has announced its exclusive offer for senior Emirati citizens as a token of gratitude for their contribution to the growth and development of the UAE. This is also aligned with the UAE's National Policy for Senior Emiratis to cater to all segments of the UAE society and ensure senior citizens' wellbeing as part of the UAE Centennial Strategy 2071.

Senior Emirati citizens holding a 'Thukher' or 'Barakatna' card can now avail up to 60 percent discount on four 'Freedom' postpaid plans from etisalat by e&. They can also enjoy preferential treatment at etisalat by e& stores and priority calls in the customer care centre. New and existing Freedom plan customers can activate the offer at any of the etisalat by e& business centres.

A Thukher card is a senior citizen privilege card with a multitude of benefits issued by the Community Development Authority in Dubai. These benefits are provided to

senior Emirati cardholders in collaboration with government and private institutions. 'Barakatna' card members in Abu Dhabi are registered under the Family Development Foundation database. Senior Emirati cardholders are entitled to a wide range of benefits, discounts and services offered by governmental, semi-governmental and private entities.

In line with its refreshed strategy, etisalat by e& is on a mission to deliver outstanding customer experiences, by enriching consumers' value propositions. The exclusive offer for Emirati senior citizens is aligned with its core values and overarching e& mission to support customer segments in any possible way, by constantly tailoring offers that best suit their needs.

etisalat by e& will continually create and provide innovative services at several touchpoints so that its customers, businesses and the community feel cared for as they adjust to continuously changing conditions.

etisalat by e& conducts first 6GHz test in MENA region

Enabling the 5G evolution and next generation of devices and technologies

etisalat by e&, has announced the successful completion of its first trial of the 6GHz spectrum, creating history by taking this monumental step for the future of 5G, opening up a world of possibilities for next-generation technologies and economies of the future. This trial conducted with Huawei Technologies was integral in today's technology evolution as full speed and capabilities of 5G depend on mid-band spectrum that secures performance in the long term and adds more capacity if required. Here, 6GHz plays a critical role, especially considering the use of mobile technologies has grown exponentially, devices have become more powerful, and services more diverse for both consumers and enterprises. With bandwidth-hungry applications, the number of connected devices per person has also increased, which means more bandwidth will be required to limit service degradation and deliver a good quality of experience.

The 6 GHz range is a mid-band frequency and sits at a balancing point between coverage and capacity, providing the perfect environment for 5G connectivity. Extending the bandwidth of 5G through the harmonisation of 6 GHz spectrum will provide more bandwidth and improve network performance. On top of this, the broad, contiguous channels offered by the 6 GHz range will reduce the need for network densification and make next-generation connectivity more affordable for all.

Khalid Murshed, Chief Technology and Information Officer (CTIO), Etisalat UAE, said: "5G allows the industry to support national digital transformation goals by providing reliable, high capacity, low latency, and wide-area connectivity to consumers and industries. The metaverse is opening untapped opportunities with hyper-personalised experiences powered by AI. Telcos will be the entry point to the metaverse because of connectivity but also because the customer wants access to a digital world. The future is powered by AI and analytics, with metaverse playing a role yet to be defined. This kind of technology disruption will create challenges but

simultaneously bring massive prospects to this dynamic industry.

The trial for 6GHz was influenced by these future market requirements as we foresee a significant growth accelerated by these applications. As a digital telco, we focus on our core while curating digital experiences that maximise engagement by building new capabilities across AI and digital to thrive in an increasingly competitive and ever-changing market environment."

The focus on 6GHz is also in line with etisalat by e&'s future roadmap as part of the e& group transformation drive to become a global technology conglomerate. Its partnerships with global tech companies like Meta are a testimony to the continuous drive for innovation by working together on metaverse technologies, use cases that integrate with the latest Meta products and solutions, consumer channel digitalisation, enhancing Augmented Reality (AR) and Virtual Reality (VR) experiences and conversational commerce throughout its digital communication plans.

The metaverse will require seamless mobility enabled by macro-cellular networks relying on mid-band spectrum such as the 6GHz band. In this scenario, as an example, XR (extended reality) headsets will require sufficient bandwidth on 5G smartphones to connect to these networks. At etisalat by e&, there has been remarkable progress in 5G implementation and connections across the country.

5G is the enabler of the future digital society and the foundation for the digital economy. According to GSMA's latest report, 5G will bring an economic contribution of $700 billion to society in 2030. At the end of March 2022, 5G services have been launched in more than 70 countries, with more than 220 5G networks being deployed, and more than 700 million 5G users.

5G use cases today accelerate digital transformation across industries and sectors, unleashing new waves of innovation that will benefit billions. 5G networks and technologies support next-generation industry 4.0 and implementations in health care and transport, all depending on bandwidth, coverage and capacity.

With 6GHz, new 5G projects can bring innovative and creative applications to society with faster, more reliable mobile broadband. They thus enable new applications and services, fixed wireless access (FWA) 5G to connect consumers and businesses at fibre-like speeds away from last-mile fibre, next-generation industrial automation transforming processes, increasing efficiency, reducing costs and improving safety. In healthcare and transport, speed and latency capabilities make advanced telemedicine with remote surgery possible, while connected transport is enabled along with highly efficient public transport networks.T

Huawei proposes a Three-Level Intelligent Digital Transformation architecture, helping carriers open the Blue Ocean of Digital Intelligence

At the Operations Digital Transformation Summit of Win-Win Huawei Innovation Week, Peng Song, President of Huawei Carrier BG Marketing & Solution Sales Dept, delivered a keynote speech entitled "Opening the Blue Ocean of Digital Intelligence Towards a New Era of DigiVerse". He pointed out that digital intelligence is the biggest opportunity in the next decade and will provide a new blue ocean for carriers, as well as giving them new impetus. Based on decades of experience in intelligent digital transformation, Huawei works with telecom carriers to develop a three-layer intelligent digital transformation architecture, five-dimensional and five-phase operations intelligent digital transformation maturity model, and three value-oriented transformation paths. In this way, carriers can better embrace new transformation opportunities.

"To seize opportunities, carriers need to accelerate their intelligent digital transformation from three levels," said Peng Song. "First, service transformation. Going forward, telecom carriers will focus on differentiated experience-based services, data services, and industry digital services. They need to implement business loop closure by leveraging ecosystem, platform, and network to drive the rapid growth of the second curve. Second, operations transformation. Carriers need to focus on the user journey, in which products, services, platforms, and networks are intricately linked. Given that 80% of service decisions are projected to be driven by data, they need to maximize data value for value-based operations. Third, infrastructure transformation. Carriers are expected to provide secure, green, intelligent, and ubiquitous networks in which computing and connection resources are integrated."

Intelligent digital transformation is a process requiring continuous optimizations. During the intelligent digital transformation of operations, Huawei cooperates with industry organizations to form a five-dimensional, five-phase maturity assessment model based on its own

Zhou Xiaohua - *Director, Huawei Service & Software Marketing & Solution Sales Deptt*

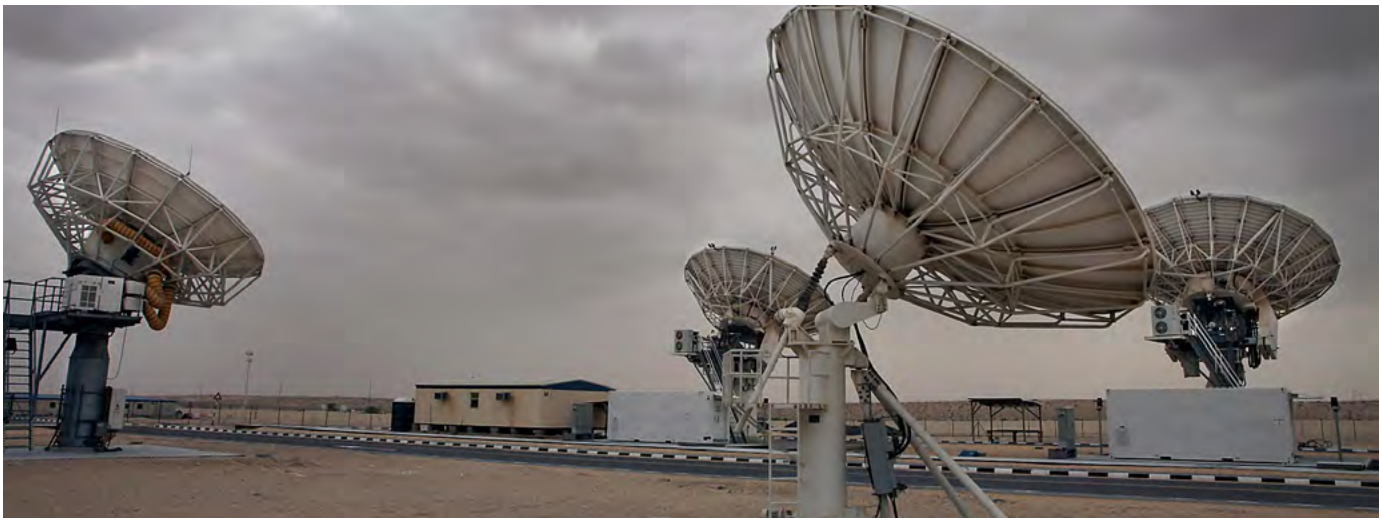
transformation experience as well as that of more than 100 carriers. The five dimensions of the model include transformation strategy, value measurement, process optimization, data/platform/network, and organization talent, and the assessment is conducted according to five maturity phases ranging from L1 to L5.

Intelligent digital transformation of operations is also a systematic project. Regarding this, Zhou Xiaohua, Director of Huawei Service & Software Marketing & Solution Sales Deptt, delivered a keynote speech entitled "Breaking Six Misunderstandings and Accelerating Intelligent Digital Transformation of Operations", in which three key paths were introduced to help carriers transform in terms of intelligence integration in digital services, data-driven intelligent experience, and predictable intelligent digital O&M. Huawei has rolled out a broad portfolio of products and solutions, such as the Artificial Intelligent Contact Center (AICC), SmartCare Smart series, and AUTIN i series. These help support high-value ToC, ToH, and ToB scenarios of carriers. We help carriers improve quality and efficiency through automation and intelligence to implement precision marketing and lean operations that are market-, government-, and enterprise-oriented. Huawei, in particular, works to enable a differentiated carrier ToB experience, and empowers industry innovation and revenue increase through smart operations. On the one hand, immersive digital marketing is provided for industry customers in the marketing phase, while deterministic SLA assurance is provided through digital integration and service-level O&M capabilities. On the other hand, mature digital intelligence capabilities are adopted to enable digital intelligence of industry operations and customer service, as well as data as a service (DaaS) to generate revenue in new digital services.

Finally, Huawei has built the Digital Intelligent Transformation DigiVerse Center, Digital Intelligent Transformation Columbus Exhibition Hall, and Digital Intelligent Transformation Innovation and Practice Center. Leveraging experience in valuable scenarios in the actual transformation process, Huawei provides more than 10 cloud showcases around the world and makes it possible to have immersive dialogues with more than 300 experts while enjoying scenario-based experiences. Together, Huawei, carriers, and business partners can carry out joint innovation, and ultimately embrace the blue ocean of digital intelligence.

Aftab Raza Khan

UAE to host next year's World Radiocommunication Conference (WRC-23) in Dubai



The International Telecommunication Union (ITU) has announced that the next World Radiocommunication Conference (WRC-23), will take place at the Dubai World Trade Centre in Dubai, United Arab Emirates (UAE) between 20 November and 15 December 2023.

Held every four years for a period of four weeks, the World Radiocommunication Conference (WRC -23) is mandated to update the Radio Regulations, the sole international treaty governing the use of the radio frequency spectrum and the geostationary-satellite and non-geostationary satellite orbits.

"I am very pleased that the WRC-23 is set to happen in Dubai in the United Arab Emirates," said ITU Secretary-General Houlin Zhao. "The world has come through the COVID-19 pandemic relying on digital technologies and services like never before. WRC-23 provides our quadrennial opportunity to update the Radio Regulations, ensure the sustainable evolution of information and communication technologies (ICTs) for all, and establish a coordinated roadmap for expanding radiocommunication services."

WRC-23 will bring national government authorities and telecommunication regulatory agencies together with representatives of key radio-communications users and providers, for crucial policy and technical regulatory discussions at the global level.

Houlin Zhao - *ITU, Secretary General*

Majed Sultan Al Mesmar - *DG, TDRA*

Engineer Majed Sultan Al Mesmar, Director General of the UAE Telecommunications and Digital Government Regulatory Authority (TDRA) said: "The United Arab Emirates is delighted to extend a warm welcome to ITU Members to the city of Dubai for WRC-23. As a major hub and global leader in the digital economy, the UAE is keen on supporting ITU in the vital task of allocating global resources such as radio-frequency spectrum and satellite orbit positions to create a seamless, reliable, and innovative global communication system."

International cooperation maintained through the four-year conference cycle supports the availability of, and future investment in, radiocommunication services that are free of harmful interference.

"WRC-23 will play a key role in shaping the future of technical and regulatory framework for the provision of radiocommunication services in all countries," said Mario Maniewicz, Director of the ITU Radiocommunication Bureau. "The economic opportunities brought about by technology should be available not only for some of us, but for all. I am delighted to see ITU Members making steady progress to ensure a successful conference next year".

To empower digital transformation for carriers and operators, Huawei announces a new versatile suite of cloud solutions

As the world rapidly transforms towards a digital economy, Huawei CLOUD has launched its latest solution which aims to provide a one-stop services hub and unleash the growth potential of networks. The announcement took place during Huawei Global Carrier Cloud Transformation Summit held in Shenzhen, China.

Huawei Carrier BG executives Peng Song, President of Huawei Carrier BG Marketing and Solution Sales Deptt, and Chen Xuejun, Director of Huawei Carrier IT Marketing & Solution Sales, showcased opportunities for operators to adopt cloud transformation, followed by the announcement of Huawei's first suite of global scenario-based cloud solutions for carriers at its exclusive Carrier Cloud Transformation Summit.

Peng Song spoke about the company's newest plans for operator cloud transformation, highlighting that Huawei is on supporting these transformations by helping increase network value, accelerate service innovation, and optimize telecom operations to unleash the benefits of connectivity.

By the end of 2023, 15% of operators are expected to develop and fully implement a comprehensive cloud strategy, resulting in a telecommunications cloud market worth hundreds of billions of dollars. To support this expansion and take advantage of the new markets these technologies are creating, operators must prioritize the construction of more efficient and agile ICT infrastructure.

Peng also believes that operators' cloud transformation should be based on communication technology (CT) and that operators should be leveraging the unique strengths of the telecom industry and cloud transformation to magnify the value of their networks and services.

Peng stressed that there are three areas operators must focus on to fully take advantage of the opportunities being presented: First, in terms of network value, operators need to expand network boundaries with the cloud and improve network value in the B2B market to make sure these advancements benefit more customers. Second, in terms of digital innovation, operators need to build cloud platforms for digital service innovation that they can use to launch new services more quickly. Third, in terms of telecom operations, operators need to use pre-integrated cloud solutions specifically designed for the telecom industry to support sustainable growth of their primary business.

Peng Song - *President, Huawei Carrier BG Marketing and Solution Sales Deptt*

He then concluded that, to succeed in cloud transformation and provide quality services to customers, it is important that operators establish strategic partnerships with those who deeply understand the telecom industry and knows how to leverage the strengths of telecom. By the end of 2021, Huawei had worked extensively with more than 120 operators globally on cloud services. Huawei has committed to further investing into ICT and leveraging its localized service capabilities worldwide to accelerate operators' cloud transformation and unleash the benefits of connectivity.

Announcing the first suite of carrier cloud solutions

From his side, Chen Xuejun announced Huawei's first suite of global scenario-based cloud solutions for carriers. These solutions focus on monetizing networks, innovating services, and optimizing operations to help carriers embrace cloud transformation and growth acceleration.

With advances in 5G, cloud computing, big data, and edge computing, cloud transformation has become the future of telecom carriers. According to Gartner, carriers around the world will increase their IT infrastructure investment in cloud transformation at a compound annual growth rate (CAGR) of 27% in the next five years. Huawei has distilled its over three decades of telecom experience and cloud expertise into the following key factors for carrier cloud transformation: first, the selection of a transformation strategy by factoring in a carrier's own advantages; second, the planning of a transformation path

Chen Xuejun - *Director, Huawei Carrier IT Marketing & Solution Sales*

considering data security, system stability, and service agility; and third, the selection of a trusted, experienced, and competent partner for win-win collaboration.

Huawei builds these three factors into its carrier cloud solutions. First, Network + Cloud expands the scope of network monetization. Huawei's network insights and cloud-network collaboration solutions enable carriers to expand their service and market boundaries for maximum network value. Second, Service + Cloud accelerates service innovation. Huawei Cloud leverages Huawei's experience in the telecom industry and its advanced cloud platform capabilities to make carrier development agile and bring innovation faster to market. Third, Operation + Cloud drives operations efficiency. Huawei Cloud pre-optimized cloud solution powers basic telecom services, expands the user scale, and catalyzes the continuous growth of main services.

Chen Xuejun concluded his keynote with Huawei Cloud's commitment. "The key to carrier cloud transformation lies in smarter use of the cloud for networks, services, and operations. Huawei Cloud will work with global carriers to transform and open up new growth space".

Ensign InfoSecurity Report: Technology, Media and TMT Groups were Singapore's Top Cyber Targets in 2021

Ensign InfoSecurity has unveiled the findings of its Cyber Threat Landscape 2022 report, which found that the Technology, Media and Telecommunications (TMT) and Transport industry groups were the top targets for cyber threats in Singapore in 2021.

The latest edition of Ensign's report provides insights and analysis into the cyber threat landscape in Singapore and key Asia Pacific markets such as Hong Kong, Malaysia and South Korea. It also explores emerging cyber threats that will impact organizations in 2022 and beyond.

Here are some of the key findings from the report:

TMT and Transport emerged as top targeted industry groups in 2021

The Technology, Media, and Telecommunications (TMT) industry group, comprising infocommunications, data center and media sectors, was the top target for threat actors in 2021. Ensign found that nearly 70% of malicious traffic observed in Singapore in 2021 was directed at the infocommunications sector.

"Infocommunications companies are lucrative targets for malicious actors as their services penetrate and power almost every aspect of our society and digital economy. We need to constantly elevate our cyber defence capabilities to prevent cyber threats from derailing our nation's digital ambition and undermining our position as a regional technology hub. This would require public and private stakeholders to work closely together to build a vibrant cybersecurity ecosystem conducive to nurturing skilled cyber talents and driving innovation," said Steven Ng, CIO and EVP of Managed Security Services, Ensign.

In addition, threat actors were targeting media organizations following the cyberattack campaigns outside Singapore. Media companies saw cyberattacks designed to cause business disruptions, including ransomware campaigns. A key driver behind these attacks was to prevent facts from being disseminated to the public. This can distort or disrupt the public's understanding of the situation.

Rise in opportunistic Cyberattacks due to COVID-19

In 2021, Ensign observed an increase in opportunistic cyber incidents using stolen credentials in Singapore. It revealed that 80% of these incidents were traced to "hands on keyboard" intrusions against remote access portals such as VPN and Virtual Desktop Interfaces. In these attacks, threat actors manually log into an infected system using leaked credentials. These attacks can be attributed to COVID-19 where companies were forced to swiftly establish emergency remote working arrangements. However, some of these systems are not adequately secured. As a result, past credential leaks and bad cyber hygiene, such as reusing leaked passwords, led to a number of these opportunistic cyber breaches.

Interra Systems to showcase innovative advancements in Content QC and Monitoring Solutions at IBC2022

At IBC2022, Interra Systems will showcase its innovative and award-winning content QC and monitoring solutions covering the entire gamut of content preparation and delivery, from audio/video quality checks to 24/7 monitoring, captions, lip sync, and deep-dive analysis. With Interra Systems' QC and monitoring solutions, media companies can address the most pressing industry needs, not just in terms of audio/video quality, but also creation and management of metadata, cloud and hybrid deployment, and tools to automate media processing and verification.

"We're looking forward to riding the momentum from a very successful 2022 NAB Show into Amsterdam for the IBC Show, which marks our first appearance at a major European event since the pandemic began. In that time, OTT video streaming has exploded, and providers are looking for solutions that allow them to launch and monitor their media content more easily and efficiently, and with better quality," said Anupama Anantharaman, Vice President of Product Management. "Linear and OTT consolidation, cloud infrastructure, scalability, and centralized monitoring with customization, and sports media, especially in Europe, are driving our customers toward adopting new technologies and standards. Our new products and software updates address these new requirements and offer significant improvements in terms of content quality and efficiency to help our customers set themselves apart from the competition."

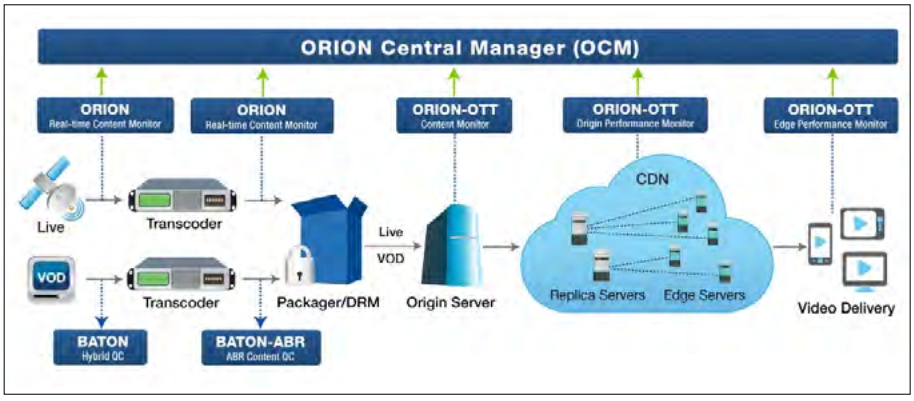
ORION Content Monitoring suite for OTT and Linear/IP Video ensures better QoS/ QoE

Addressing a variety of cloud deployment scenarios for both live and VOD content, Interra Systems' ORION-OTT is a comprehensive monitoring solution for live and VOD streaming. Recent enhancements to ORION-OTT include ad insertion monitoring, support for Dolby Vision and HDR, visual trending for QoS and QoE metrics, CPIX-based DRM integrations, and new audio/video quality checks. In addition, ORION-OTT now offers a flexible licensing model to accommodate dynamic bandwidth

Anupama Anantharaman - *VP, Product Management, Interra System*

requirements, enhanced user reporting, revamped alert reports, improved recording for the entire duration of the error, a daily service availability report with outage analytics, and support for the DRMToday multi-DRM.

In addition to ORION-OTT, Interra Systems will demo its ORION solution for real-time monitoring of linear channels in an IP-based delivery infrastructure. New features include support for the monitoring



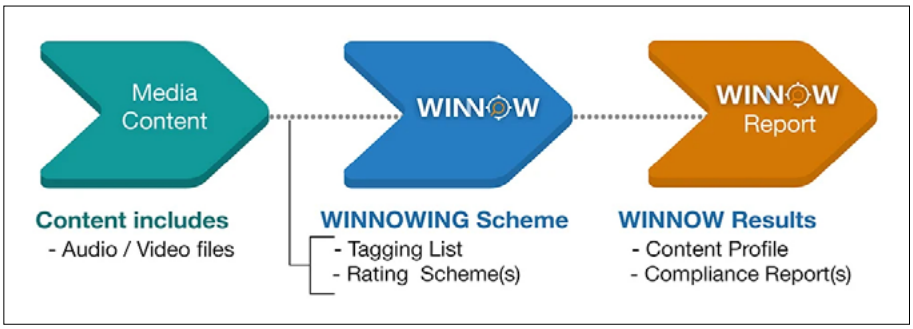
of contribution stream formats (SRT/ RIST), enhanced video dropout detection, additional audio quality checks (i.e., audio jitter, true peak levels, audio clipping, and stereo pair absence), CAS monitoring, HDR and ad compliance, visual trending for PMOS and blockiness, loudness reports, and user access control and secure HTTPS-based access.

New ORION 2110 Probe simplifies IP Monitoring

Part of the ORION product suite, ORION 2110 supports the SMPTE ST 2110 standard, providing broadcasters with a future-proof, end-to-end monitoring solution for ensuring exceptional video quality in an IP distribution environment. Key product features include redundancy and NMOS integration, monitoring of IP-related parameters such as jitter and packet loss, scrambling control checks, DAI custom checks for ad insertion monitoring, support for monitoring SCTE-104 ad signaling, and exportable reports and video thumbnails.

OCM (ORION Central Manager) for End-to-End visibility of video

OCM provides enterprise-wide visibility by enabling the central management of multiple ORION linear and ORION-OTT setups present at the same or diverse geographic locations. By providing a consolidated, single-screen view of both linear and OTT workflows, OCM makes error detection and isolation faster and more efficient. OCM's new features include smart tools and exportable reports for channel performance and alert trending; scheduled tasks to export reports; the capability to add comments regarding root causes and alert resolutions while defining maintenance downtimes to ignore unnecessary alerts; REST APIs to assure seamless third-party system integration; quality reports with daily and monthly channel availability; and outage analytics. In addition, support has been added for custom alert actions, as well



as alert notifications over Slack, Microsoft Teams, HTTP Push, and more.

BATON — Optimizing QC workflows

As the media industry's leading ML/AI-enabled automated QC platform, BATON addresses the most rigorous QC standards for quality and compliance. Recent updates to the BATON platform include enterprise-level hybrid deployments (including auto-scale, on-premises, and in the cloud), major 4K and MJPEG enhancements; new audio/video quality checks for complex content; the detection and decoding of QR codes; OAR, enhanced Cinavia, and Nielson watermark checks; IMF Application 2 Extended; PSE for HDR; enhanced foreign language support in the BATON UI; support for the Dolby Atmos master format; AC4 and FLAC audio; enhanced DCP compliance per SMPTE 428-1:2019; optimized ProRes decoding; and more. In addition, Interra Systems' BATON Media Player offers improvements in the loading and playback performance of 4K content; support for playing media files directly from S3, Azure, GCS, and FTP content locations or through YouTube URLs; and several usability improvements.

AI-ML enabled solutions

Under the QC umbrella, Interra Systems has exploited machine learning (ML) specifically in compliance and classification, where high accuracy can be obtained and content preparation can be made more efficient by replacing time-consuming and expensive manual processes with these solutions.

BATON captions is an automated solution for all captioning-related needs, allowing broadcasters and media professionals to address requirements from caption generation to QC, auto corrections, reviewing, and editing for global distribution of media. At IBC2022, Interra Systems will demonstrate BATON Captions with new support for IAM-based S3 access, additional languages (e.g., Italian), distributed processing using multiple nodes, next-gen format-specific checks, subtitling, stand-alone subtitle files for QC, recaptioning, exporting captions in the MacCaption Closed Caption (MCC) format, and adding tags for tasks. BATON Captions features cutting-edge machine learning and automatic speech recognition technology.

BATON WINNOW, the company's award-winning solution for content classification and identification, now performs with even greater efficiency when preparing content for different target markets and geographies. Powered by AI/ML technologies, WINNOW detects and tags content for violence, strong language, alcohol, guns, and more, based on user-defined rules. New features for WINNOW will be demonstrated at IBC2022, including language detection of visual text present in video, enhanced accuracy for detection of explicit scenes, and more concise display of text (i.e., speech, caption, and visual text) on PDF reports.

BATON LipSync leverages image processing and deep neural networks to detect audio and video sync-related errors. Capable of performing facial detection, facial tracking, lip detection, lip activity detection, and speech identification, BATON LipSync provides a comprehensive report of all lip sync issues.

Using BATON LipSync, available content can be checked in any language, independent of the region and area. The solution also supports the majority of industry formats and can be seamlessly integrated into any existing content processing workflow or used as a stand-alone application.

VEGA Media Analyzer (VMA) — powerful analysis for Next-Gen Media workflows

Interra Systems' VMA is an industry-leading analysis platform for standards compliance, debugging, and interoperability of encoded streams. VMA now offers support for the highest number of industry compression standards. The latest ones are AV1, VVC, Dolby Vision, ATSC 3.0, Dolby Atmos, DTS Audio, DolbyE Audio, Dolby AC4, Apple ProRes, HEIF, over and above AV1, HEVC, H.264, MMT, HLS, MXF, VP9, VP8, MPEG-2, MPEG-DASH, JPEG-2K, ISM, and PCAP.

VEGA Vista, a new addition to the VMA platform, enables media companies to receive or deliver video using the MPEG-2 transport stream format. The innovative analyzer can be part of automated workflows and offers granular-level customization of parameters and checks. Comprehensive reports provide deep visibility into MPEG-2 streams and help with root-cause analysis for a few errors that can cause problems related to transmission or audio/video quality. T

Witbe to bring breakthroughs in Automated Testing and Monitoring to IBC2022

At IBC2022, Witbe will be exhibiting its latest technology for automated testing and proactive monitoring, from the company's popular and redesigned Remote Eye Controller (REC) application to its complete lineup of Witbox products and everything in between. In Amsterdam, Witbe will demonstrate how its technology allows video service providers that rely on streaming video to measure and improve the quality of experience (QoE) their customers receive at home.

"We are thrilled to be back in-person at IBC2022," said Mathieu Planche, CEO of Witbe. "For over 20 years, our goal has been to use our automated testing and proactive monitoring technology to help video service providers deliver an exceptional QoE for their customers. At IBC2022, we'll be showcasing how our latest technology completes that mission."

Mathieu Planche - *CEO, Witbe*

At IBC2022, Witbe will continue to focus on the many ways the company's technology can help video streaming companies and digital service providers. Some of the most popular use cases for Witbe's technology include:

•**Remote Device Access:** Teams can remotely access their test devices from anywhere in the world, removing the need for engineers to travel thousands of miles to test specific devices in the field.

•**QA Test Automation:** Witbe's automated testing can run simultaneous tests 24/7 without ever needing a break, allowing quality assurance (QA) teams to cover the endurance, stress, and performance testing that can't be done manually.

•**Video Service Monitoring:** Video operations teams receive real-time alerts whenever their video stream quality dips or gets interrupted. The alerts even include video traces to quickly identify the issue.

•**VOD Asset Checking:** Witbe's technology can help content providers by testing that every asset in their video-on-demand (VOD) library is available and can be watched on any device and platform with all the intended features, including different audio tracks or subtitles.

Witbe Highlights at IBC2022 Will Include:

Control Test Devices from Anywhere

At IBC2022, Witbe will highlight the latest version of its popular REC application. While REC has previously enabled teams to access and control their test devices from anywhere in the world, it did require a computer application. This new version, now running on any modern web browser, bolsters these capabilities by allowing users to control their devices on laptops, smartphones, tablets, and more. It also builds on previous versions with improved latency, a stronger search, and native full-screen and picture-in-picture modes.

The Complete Witbox Family

Witbe's Witbox houses the company's automated testing and monitoring technology in a compact, accessible package that couldn't be easier to set up. The complete lineup of Witbox products will be on display at IBC2022, which includes the original WitboxOne for video streaming testing, the powerful Witbox+ for large team scalability, and the distinct WitboxNet for web testing.

Witbe Cloud Solutions

Witbe will present its lineup of Witbe Cloud products at IBC2022. Witbe Cloud delivers all the power users expect from Witbe's technology without the need for extra counter or rack space. With Witbe Cloud, companies enjoy dedicated, secure remote access to any physical testing device, deployed wherever needed. With Witbe Cloud OnDemand, users can even rent access to the same testing and monitoring technology for short periods of time. T

Telestream to showcase latest solutions encompassing Production through Distribution at IBC 2022

Telestream, a global leader in digital media, both file-based and live, will demonstrate its comprehensive portfolio of solutions that empower production and post production teams, operations personnel, and engineers to ensure the highest quality customer experience while providing maximum business value.

IBC 2022 will provide the first showcase of the company's newly expanded cloud-native services offering due to the recent acquisition of Encoding.com. Attendees will see how the cloud native automation and scale of Encoding.com, coupled with the broadcast media DNA of Telestream, delivers an unparalleled set of capabilities for customers.

"We're looking forward to seeing our customers and partners again after such a long hiatus," says Jon Wilson, Chief Operating Officer at Telestream. "We've grown significantly since our last gathering in 2019, recently having completed our 13th acquisition, Encoding.com. Now together as one platform, Telestream and Encoding.com deliver the most complete and comprehensive cloud media processing service in the market."

Also New for IBC 2022

•The latest enhancements in media processing and workflow automation feature new HDR capabilities in the Vantage Media Processing Platform, significant updates for Lightspeed Live Capture such as ST 2110 with NMOS, and a next generation captioning product, Stanza.

•A next generation, centralized video quality monitoring and analytics solution, A gus, that enables automated surveillance of each transition in the video delivery chain will be debuted for the first time.

•The latest version of the PRISM waveform monitor family features fast IP switching and enhanced post production format support, including DCI 4096x2160 4K sources and more.

Jon Wilson - *COO, Telestream*

•The latest versions of DIVA and Kumulate content management solutions will be on display with a new user interface for DIVA and support for the Archive eXchange format.

•The multiple award-winning, fully configured, live video streaming production system, Wirecast Gear 3, will be shown at IBC for the first time. Plus, the latest version of Wirecast live streaming and production software.

•Sherpa Stream, a secure and highly customizable live video streaming and content management platform, trusted by media and entertainment organizations, Fortune 500 enterprises, financial institutions, and more will also be shown.

"We've made tremendous progress in advancing our capabilities and solutions, especially with the acquisition of Encoding.com, and we look forward to demonstrating that at IBC this year," says Wilson. "These broader capabilities, combined with our market-leading cloud presence, position Telestream to address our customers' most complex business challenges. We look forward to connecting in Amsterdam!". T

EditShare showcases Cloud and Hybrid Media workflows for seamless collaboration at IBC 2022

EditShare, the technology leader that enables storytellers to create and manage collaborative media workflows, will use IBC 2022 to showcase how its latest technologies boost quality and efficiency for production and post production. Demonstrations will show how remote working and the cloud can interwork to give creative artists seamless and secure access to the tools they rely on.

Central to this is the ability to use EditShare storage spaces and FLOW workflow tools to synchronize projects across the popular NLE platforms, including Media Composer, Adobe® Premiere® Pro and DaVinci Resolve. The latest release of core FLOW software allows complex projects to be moved as needed between EditShare media management and whichever edit environment the creative team needs to use.

Having its first showing in Amsterdam will be the latest suite of EditShare FLEX software solutions for out-of-the-box cloud and hybrid workflows. FLEX reflects the powerful business trends in post today, including the migration to a "work anywhere" environment, with ready access to content wherever the creative staff need to be. In adopting cloud storage and processing, it also meets the move towards an OpEx financial model, with the cloud hosting and storage fees flexing to reflect the level of business.

Said Bacho - *Chief Revenue Officer, EditShare*

"The post industry is changing, in part reflecting the changes enforced by the pandemic, and in part because creative talent is looking to shift the work/life balance," comments Said Bacho, Chief Revenue Officer at EditShare. "What we now present is an eco-system where editors and other post artists can choose their preferred tools, and work where they like, when they like, without it in any way compromising their creativity or limiting the quality, even as we move to 4k and higher resolutions, and to HDR."

EditShare's EFS Multi-Site will also be on the booth for the first time this IBC. Multi-Site allows users with multiple locations to leverage built-in file acceleration to synchronize project storage between EFS clusters in different facilities. This ensures that users have ready access to content, wherever they choose to work. FLEX Cloud Sync extends the capabilities of Multi-Site to cloud storage, providing added flexibility in access as well as security in archiving.

For news and sports fast turnaround editing, FLOW supports direct ingest of NDI contribution feeds for immediate editing. Working in conjunction with the Helmut orchestration platform from MoovIT, IBC will see demonstrations of practical high-pressure editing operations linking EditShare storage with Adobe software.

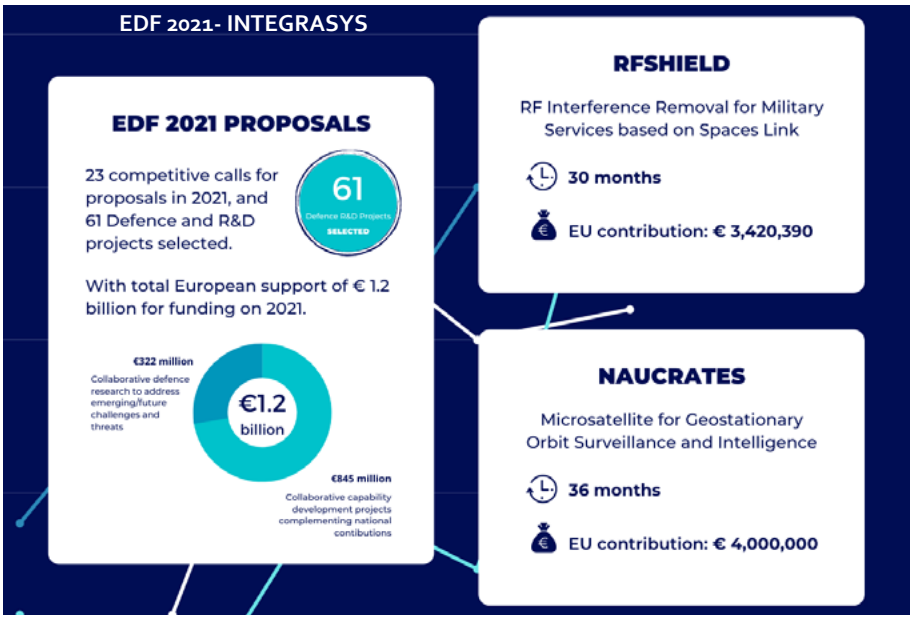
Content security and availability is vital to professional users, and EditShare has added new hardware and software in this area. The new EFS 60NL nearline storage provides 60 drive bays and nearly 1PB of storage in just 4U of rack space. This offers secure storage for large amounts of content which is needed but not immediately worked on, ready to be transferred to the online servers with virtually no delay. The 60NL is also the first hardware platform to utilize the new EFS capability for erasure coding-based storage goals, eliminating the need for hardware based RAID.

Rolling updates to EditShare's FLOW software platform ensure that the latest raw formats from popular camera systems like RED and Blackmagic Design are accepted, with LUTs imposed in real time, both on full resolution material and on proxies, boosting remote working using intelligent proxy management.

"IBC has always been very important to EditShare, a real opportunity to exchange ideas with our users and partners from around the world," Bacho added. "The whole team is excited to be returning to Amsterdam, seeing our users and partners face-to-face, and discussing the creative and operational challenges they encounter and how EditShare can provide proven solutions today and into the future".T

INTEGRASYS solutions for Government Applications in 2021 EDF proposals: NAUCRATES and RFSHIELD

The European Commission is supporting R&D projects through the program European Defence Fund (EDF) 2021, with almost €1.2 billion for Defence and R&D projects. INTEGRASYS has been selected as one of the companies for obtaining multiple EDF programs, two projects, thanks to its defence expertise acquired over the years.



INTEGRASYS will be coordinating RFSHIELD "RF Interference Removal for Military Services based on Spaces Link". The project will take up to 30 months, until June 2025. RFSHIELD will ensure the protection of the SatCom services from intentional and non-intentional interferences, increasing the availability and performance of COMSATCOM/MILSATCOM services for military users. The reason why INTEGRASYS has been designated as coordinator is due to the current expertise that the company has in Interference Removal solutions, with its available CLEANRF product. The consortium of the project is formed by 5 companies, AICOX, MBS, and INGESPACE as INTEGRASYS' partners, who are also specialized in defence capabilities.

The company has also been awarded with NAUCRATES project, which is focused on microsatellites for Geostationary Orbit Surveillance and Intelligence. The project duration will be until December 2025, and the main goal is to design and demonstrate a microsatellite with less than 100kg mass, positioned in a stable orbit outside the GEO belt, as an in-orbit optical sensor with the capability to approach other objects in GEO to take centimetre level resolution images.

INTEGRASYS is highly-oriented to defence solutions as the company is committed to contributing to innovation in this dynamic sector, so EDF 2021 is one of the multiple defence initiatives.

"We are very honoured to support defence with the rising threats from more allies nations and we look forward to supporting more missions in the future", says Alvaro Sanchez, CEO, INTEGRASYS . T

MBRSC announces opening of registration for SpaceOps 2023

The Mohammed Bin Rashid Space Centre (MBSRC) has announced that registration for the 17th International Conference on Space Operations (SpaceOps 2023) is now open. The conference, one of the world's leading and premier events in the space sector, will be held at the Dubai World Trade Centre, Dubai from March 6 to 10, with the underlying theme "Invest in Space to Serve Earth and Beyond." The event, the first of its kind in the Arab world, is hosted by the MBRSC in collaboration with the SpaceOps Organization.

SpaceOps 2023 will bring together world-class scientists, practitioners, engineers, and leaders in the space industry to discuss

the latest research, state-of-the-art technologies, and innovations in the space sector. The most recent advancements in robotics, human elements, earth orbiting missions, and deployments to the Moon and Mars, among other topics, are to be discussed in detail at the event.

The event follows the successful International Astronautical Congress, the world's largest space conference, which was held in Dubai for the first time in 2021 and hosted by the MBRSC. Hosting SpaceOps 2023 is part of the UAE's strategic vision to develop its space programme and strengthen partnerships with leading space organisations around the world. T

AVEVA launches 2023 Operations Control Software to strengthen Workforce Efficiency for Industrial Enterprizes

AVEVA has launched the 2023 release of its operations control software, the first major coordinated release of its HMI/SCADA software portfolio, available in both perpetual and subscription purchases. The new release further supports the delivery of AVEVA Operations Control, a flexible, subscription-based solution of integrated capabilities that promotes greater efficiency and workforce collaboration at the scale that best suits the business.

The first of its kind in the industrial software sphere, AVEVA Operations Control simplifies day-to-day routines of teams by aligning workers around common digital threads of information, delivering the data and insights they need to drive growth at every level through increased efficiency, agility and reliability. With rich visualization technologies, analytics and development tools deployed within a hybrid cloud and on-premises environment, customers can ensure performance consistency, remove opportunity for human error, and improve operator insight and reactions to process deviations. Not only can critical information be retrieved faster, but inbuilt flexibility

Rashesh Mody - *EVP, AVEVA*

provides greater scaling – of data, users, or routes to revealing the correct decision.

"Digital technologies now comprise the beating heart of industrial enterprizes. But operations teams do not yet have the ability to contextualize decisions within a cohesive and sustainable framework. AVEVA Operations Control leverages this information environment with a comprehensive set of applications that empowers users from edge to enterprise with real-time visibility of critical processes in every industry," says Rashesh Mody, Executive Vice President - Operations Business, AVEVA.

AVEVA's extensive portfolio is a core strength that supports customers in achieving the outcomes they seek. The 2023 operations control release focuses on worker empowerment with UI/UX enhancements, increased flexibility for web and mobile users, and greater connectivity. This release consists of updates in the following offerings: AVEVA System Platform 2023, AVEVA InTouch HMI 2023, AVEVA Edge 2023, AVEVA Plant SCADA 2023, AVEVA Historian 2023, AVEVA Communication Drivers 2023, AVEVA Reports for Operations 2023, AVEVA Development Studio, and AVEVA Teamwork.

"Value is often greater than the sum of its parts. The flexible collection of capabilities within the 2023 release function can be combined and linked for even greater effect. Instead of releasing a single HMI or SCADA product, we can enhance our customers' ability to eliminate silos and build more intelligent systems that make their people smarter, thus maximizing the value obtained from their industrial data," adds Mody.

The 2023 operations control software release is available through several procurement methods, including AVEVA Flex, the advanced industrial software subscription program. Customers can choose individual software offers within the operations control portfolio or realize new transformational value with end to end visibility across operations by subscribing to AVEVA's broad portfolio through AVEVA Operations Control. AVEVA Operations Control removes traditional limitations on implementation by including unlimited software usage (measured by the number of users) and offering maximum commercial flexibility.

AVEVA Operations Control helps workers to do their jobs in a more sustainable way. Its comprehensive digital framework supports quicker, data-backed responses to events that require resolution, providing reliable process management systems, and reducing the effort required to train new staff. Customers across industries can further enrich their approach to environmental, social and governance (ESG) initiatives by leveraging the solution to tap data-driven insights for more efficient and environmentally sustainable operations.T

ND SATCOM Multi-Band Flyaway is ready to go

ND SATCOM continues to distinguish itself through its commitment to innovation and customer satisfaction. The launch of the ND SATCOM FLYAWAY terminal underscores the company's competitive advantage.

One advancement that sets this new terminal apart is its operational wind resiliency: it can withstand and function in very high wind speeds and during severe storms.

ND SATCOM incorporated another clear advantage: the latest version of the premier SKYWAN 5G technology. Customers value the proven high reliability and security that SKYWAN represents. The bar was raised here, too, by integrating the pioneering innovation of Adaptive Coding and Modulation (ACM) for TDMA, thus permitting transmission during heavy rains with adaptive bandwidth control. For the motorized FLYAWAY version, engineers integrated the ACU into the 5G modem, thus minimizing equipment and enabling pointing on SKYWAN or DVB signals.

ND SATCOM pushed the engineering boundaries further by optimizing portability and product longevity for this new FLYAWAY. Carbon was used wherever possible to reduce weight, enhance durability, and provide the extreme stiffness required for Ka-Band in high wind conditions. Both the unique 180° azimuth range and integrated feed-booms for various bands expedite setup and use. For an extremely fast setup, this terminal was designed for easy deployment and dismantling - time and again - while maintaining structural integrity throughout.

The in-house R&D team in Germany designed and developed the new terminal, rigorously field testing the finished product as well as testing against stringent standards for military products. The ND SATCOM FLYAWAY is ready to go: whenever, wherever you are.

HISPASAT renews and expands a line of credit by incorporating sustainability criteria for the first time

HISPASAT, Redeia's satellite communications operator, signed a line of credit "for the amount of 250 million euros" with a group of five financial institutions composed of CaixaBank, acting as the agent bank of the operation and sustainability coordinator, BBVA, Societé Generale, Bankinter and Kutxabank.

This agreement, which extends and expands the current line of credit, makes it possible to adapt the terms and conditions of funding to the ESG (Environmental, Social and Governance) criteria and indicators aligned with Redeia's policies in this area. It marks a milestone in HISPASAT's Sustainability Strategic Plan since it is the first ESG Funding undertaken by the company.

Juan Jesús García Chaparro - *Economic and Financial Director, HISPASAT*

The new multi-currency revolving line of credit extends its maturity date to August 2025, with the possibility of extending it on a yearly basis to August 2027. Thus, the company reinforces its liquidity policy and at the same time supports the execution of its 2020-25 Strategic Plan, irrespective of the conditions that financial markets may have in the short and medium term.

Juan Jesús García Chaparro, Economic and Financial Director of HISPASAT, stated that "during these tough times for international markets, the financial sector's support of HISPASAT is a strong sign of confidence in the strength of the company and its strategic project to move up the satellite services value chain while we firmly commit to sustainability and socially responsible actions within the scope of our activity".

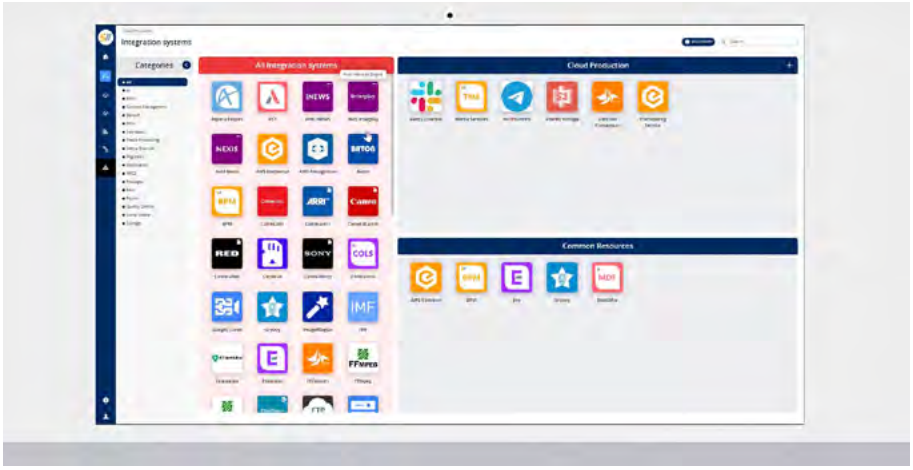
Tedial launches smartWork in Europe at IBC 2022 and demonstrates new Media Services

Tedial, the leading independent media technology solutions specialist, is introducing its next-generation, cloud-native, NoCode Media Integration Platform, smartWork to the EMEA M&E market at IBC 2022, on stand 10.D30. Following the Platform's launch in April 2022, Tedial will demonstrate how its new for IBC features will improve business processes for Media companies.

Visitors to IBC 2022 will see how Tedial's smartWork Media Integration Platform decouples the customary orchestration capabilities embedded in the systems that broadcasters have traditionally been using (MAM, DAM, PAM, CMS). It offers a framework where all the systems are integrated in the same way, based on three key pillars: Common Interface; Common Datamodel; and Common Workspace, where applications go to the media and not the media to the applications.

The M&E market is changing rapidly, impacted by evolving consumer behaviours. Users want seamless, effortless integrations and developers want to spend less time on repetitive software programming tasks and integration maintenance. The days of the traditional, complex monolithic content management systems, which generate huge dependence on software vendors to provide the agility required to integrate new applications within the digital ecosystem, are over. Tedial's NoCode approach revolutionizes productivity making the

Julian Fernandez - *Campon, CTO Tedial*



Media Integration Platform accessible to everyone, from non-technical users to citizen-developers. And, because it follows Infrastructure as Code (IaC), smartWork can be deployed on-premises, on any cloud or in a hybrid architecture for incredible flexibility. Business continuity can easily be achieved with smartWork as the current systems can be integrated and improve operation by adding new business processes or cloud operation.

smartWork NoCode workflow editor empowers non-technical users to define or re-adapt workflows to business needs. With smartWork, a new business operation is just a Drag&Drop action. No more tedious vendor services will be required for daily operational changes.

smartWork platform can easily be updated/upgraded from the Tedial Cloud repository via the Artifactory UI, which enables non-technical users to update services, workflows and integration systems to the latest version with just a few clicks.

smartWork includes a complete Business Intelligence tool for customer self-sufficiency that enables them to take full platform control. So, customers will be able to decide which processes can be modified to reduce costs without business impact.

Julian Fernandez- Campon, CTO Tedial explains, "We're really looking forward to getting back to IBC and showing the European market the huge benefits that smartWork delivers. No one can predict the future and the way companies operate can change from night-to-day. smartWork's NoCode approach enables the design of scalable, future-proof solutions and media services for the M&E industry, accessible to everybody everywhere, that can be seamlessly aligned with business needs to add value. "

smartWork benefits include:

•No vendor lock in – services implemented with a specific system can be changed for another from a different vendor without affecting the rest

•Flexibility and scalability - users without a deep technical knowledge can easily change and evolve business processes using a NoCode design tool

•Self-Sufficiency – no vendor services needed to manage the platform

•Agility and quick time to market - new business needs can be addressed

•Low Risk - easy prototyping - new tools can be tested easily and quickly, minimizing the risk

•Tailor to each customer needs

•Grow with the business at your own pace

•Reduced TCO and Improved ROI

•Future-proof.

Osta Tech, IEC Telecom & Thuraya Bolster digitalization in East Africa

With digitalization unlocking a plethora of business opportunities in an increasingly connected continent, African countries are emphasizing investments in digital technologies, communications infrastructure, IT hubs, data centers, e-commerce, and e-government services. With the ratification of the Africa Continental Free Trade Area (ACFTA), new opportunities in technology start-ups and e-businesses are expected to grow the combined GDP to over $600 billion.

Now, more than ever, it has become apparent just how critical a communications infrastructure is to optimize these commercial processes. The African Union's Digital Transformation Strategy 2020-2030 aims to bring universal digital access and develop a single pan-African digital market. The World Bank estimates that just a 10% increase in mobile internet penetration can translate into a 2.5% increase in GDP.

Satellite connectivity solutions enable the integration of latest technologies with existing infrastructure. According to the African Space Industry Annual Report 2019, satellite communications generate approximately US$ 6.5 billion in Africa annually. IEC Telecom Group, an international provider of satellite communication services, expanded its services to East Africa in 2021 with an official partnership with Osta Tech Limited, a leading information and technology company in Kenya. This partnership has been key to creating economic opportunities as well as increasing investments in innovative infrastructure and satellite communications in the East African market.

Kenya is quickly becoming a tech hub for East Africa and is one of the fastest-growing economies in Sub-Saharan Africa. In fact, 10% of all projects awarded between 2018 and 2020 focused on the digital transformation of the government, healthcare, and education sectors. "Connectivity is crucial for efficient, affordable, and safe business processes. Digitalization can empower business owners with reduced infrastructure investments and state-of-the-art hybrid technologies. It is almost a virtuous circle to see innovations in technology creating opportunities for increased entrepreneurship, and increased incentives for doing business in Kenya creating the demand for more connectivity," says Oscar Mwai, Chief Executive Officer, Osta Tech Limited.

IEC Telecom Business Development Director Alaa Alsadi with Osta Tech CEO Oscar Mwai

IEC Telecom is committed to extending the scope of digitalization in East Africa. "We believe that the introduction of affordable satellite connectivity that enables access to resources for remote communities almost at par with well-connected urban areas creates immense incentives for entrepreneurship and innovation," shares Alaa Alsadi, Business Development Director – Middle East & Africa, IEC Telecom Group. "Our wide portfolio of satcom solutions optimizes e-business services, offers a reliable back-up for the GSM network, and ensures business continuity in an unpredictable and ever-evolving business landscape," he adds.

MEASAT-3d enters commercial service following successful in-orbit testing

Following the launch of MEASAT-3d from Kourou, French Guiana, MEASAT Global Berhad ("MEASAT") – Malaysia's premier satellite operator, has successfully completed in-orbit testing for the MEASAT-3d satellite, ahead of schedule. MEASAT-3d, the company's latest and most advanced satellite has now entered commercial service, after its handover by Airbus Defence and Space ("Airbus").

MEASAT-3d, a multi-mission satellite with a planned lifespan of more than 18 years, carries C-band and Ku-band payloads for video and Direct-to-Home ("DTH") services and a high-throughput multiple spot beam Ka-band payload optimised to deliver high-speed broadband internet communications for Malaysia; even for users in the most remote areas of the country. The satellite also hosts a Q/V band payload, the first of its kind in the Asia Pacific region, allowing MEASAT to study radio frequency propagation effects in high rainfall regions like Malaysia, to enable the design of its next generation satellites. In addition, MEASAT-3d also carries an innovative hosted payload for KTSAT which will be used for the Korean Augmentation Satellite System ("KASS") to enhance accuracy and reliability of GPS signals for airplanes, increasing airline flight safety in South Korea.

MEASAT-3d is co-located with MEASAT-3a and MEASAT-3b at the 91.5˚E orbital slot – MEASAT's key video neighborhood, to form one of the region's most powerful and robust orbital locations with unrivalled in-orbit redundancy and expansion capacity.

"We are pleased with the successful in-orbit testing of MEASAT-3d and its commercial deployment, following the launch last month. I would like to thank the MEASAT and Airbus teams for their solid effort and continuous support. With this, MEASAT-3d is ready to support the Malaysian Government's National Digital Network ("JENDELA") target to achieve 100% internet coverage by 2025, as well as our clients' plans to expand service offerings and improve customer experience," said Yau Chyong Lim, Chief Operating Officer, MEASAT.

MEASAT-3d is co-located with MEASAT-3a and MEASAT-3b at the 91.5°E orbital slot – MEASAT's key video neighborhood, to form one of the region's most powerful and robust orbital locations with unrivalled in-orbit redundancy and expansion capacity.T

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21 September 2022

Dubai, UAE

28 - 30 September 2022

Las Vegas, USA

29 September 2022

Capetown, SA

04-05 October 2022

Nairobi, Kenya

10 - 14 October 2022

Dubai, UAE

18-20 October 2022

Seoul, Korea

02-03 November 2022

Riyadh, Saudi Arabia

07 - 11 November 2022

Cape Town, SA

08 - 10 November 2022

London, UK

27 Feb - 02 March 2023

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Washington, DC

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Dubai, UAE

10 - 12 May 2023

Dubai, UAE

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Dubai, UAE

06-08 June 2023

Manama, Bahrain

06 - 08 Dec 2023

Baku, Azerbaijan

BY THE INDUSTRY,
FOR THE INDUSTRY
WE
ARE
Your community
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