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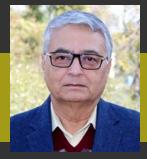
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#### Editor's Note



Dear Readers,

Welcome to the latest edition of Teletimes International.

First of all, I would like to wish a very holy and blessed month of Ramadan to all our readers. Let's take some time off from our hectic work-routines to focus a bit more on our personal and spiritual lives a bit more.

The highlight for April has been SAMENA's Annual Telecom Leaders' Summit held in Dubai. We saw industry leaders and organizations from the public and private sectors discuss plans for 5G readiness in the region, while examining best practices ahead of large-scale 5G network deployments in the Middle East and internationally. A detailed post-event report is included in this edition for your perusal.

In the race for 5G, Huawei has long been in the highlights as a key partner for all telecom operators. With the recent announcements around 5G, and with the pressure from the US regarding security concerns, Charles Yang, President of Huawei ME sheds light on some important factors and shares his opinion on pressing matters during a roundtable with international media on the sidelines of the Leaders' Summit. You should also find coverage of the roundtable in this edition.

Staying on the subject of 5G, one of my recommended readings from this edition is "5G: Time to Invest", an editorial by Suraj Godse, Sr. Research Analyst & Saurabh Verma, Associate Director, Digital Transformation, Frost & Sullivan focusing on global 5G deployments and factors driving investment in 5G.

As always, you should find the latest news and updates from the industry in this edition of Teletimes International. Your feedback is welcome on info@teletimesinternational.com

**Enjoy Reading!** 

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#### Authors: Suraj Godse, Sr. Research Analyst & Saurabh Verma, Associate Director, Digital Transformation, Frost & Sullivan

#### Introduction

No longer hype, 5G is a technology that is already out there and ready to change the whole telecom and technology landscape within a year. Governments and mobile operators across the world are readying to allocate 5G-ready wireless spectrum ahead of large-scale network deployments. Competition is fierce on the 5G global stage, 5G activities are growing, as vendors and service providers in technology-focused countries work on early 5G network trials and test 5G in limited circles.

#### Global 5G deployments

In 2018, around 13 commercial 5G networks were launched including both mobile and fixed wireless deployments worldwide. As the race to 5G continues, these numbers are expected to triple by the end of 2019. The total count of live 5G deployments is expected to reach 55 by the end of this year; Europe contributing the largest with 21 deployments followed by the Middle East with 14 deployments. Asia is expected to have 10 deployments followed by America with 8 and Australia with 2 deployments. These numbers are realistic and look very achievable as compared to the exaggerated numbers and promises analysts and operators are making. Having said that, 55 deployments would still be a huge step in the 5G era; more than 14 network equipment manufacturers have announced involvement in 5G trials involving Huawei, Samsung, Ericsson, Nokia, ZTE to name a few.

To highlight some of the major deals in Europe, Nordic telco Elisa announced availability of a commercial 5G network in Tampere, Finland and Estonia's capital city



Tallinn in the month of June 2018. In late 2018, French carrier Orange announced detailed plans regarding 5G network deployment and commercial launch.

In the Middle East, the UAE, the KSA and Qatar are leading the 5G race. In the UAE, local operators Etisalat and Du have confirmed the roll out of 5G in the second half of 2019; while the KSA is releasing an additional 400 MHz in mid-band (3.5 GHz) for commercial operators. Apart from telecom operators, network manufacturers are also approaching large businesses, which have potential use cases for 5G. Huawei has partnered with Middle East based electrical product manufacturer Alfanar to explore how IoT and 5G technologies can be implemented in electrical products.

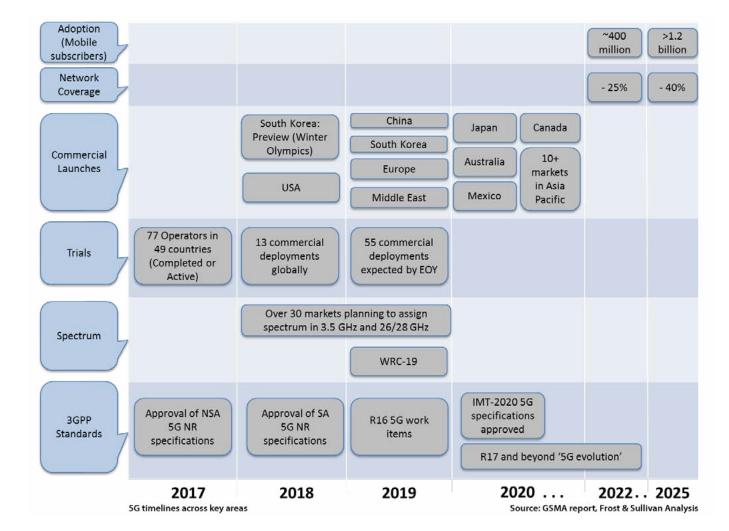
In Asia, South Korea is taking an early lead in 5G deployment. All three operators, SK Telecom, LG Uplus and KT in the country have already launched 5G in December 2018.



However, they currently provide access with mobile 5G routers since 5G phones aren't set to grow until end of 2019. Australia is the second Asia-Pacific country after South Korea to auction off 5G spectrum; four telecom operators Telstra, Optus, Dense Air Australia and a joint venture between TPG Telecom and Vodafone Hutchison Australia are set to roll out 5G in the country soon.

With Japan hosting the ninth Rugby World Cup in 2019, it has set the stage for limited pre 5G commercial services. NTT DoCoMo and KDDI both have revealed plans to launch pre commercial 5G services in limited areas in 2019, with full-fledged services in 2020.

In America, Verizon launched a commercial 5G service in October 2018 with an offering called 5G Home, which is so far available in Houston, Los Angeles, Sacramento and Indianapolis. On the business front, Verizon is partnering with Walt Disney's StudioLab to explore how next-generation connectivity



can improve Disney's content production and transmission. AT&T reportedly launched a 5G service in 15 cities in 2018; however, the initial rollout was available to selected businesses and consumers only. AT&T plans to make 5G publicly accessible in 2019 after it makes the NETGEAR Nighthawk 5G Mobile Hotspot available for purchase.

Looking ahead, 5G momentum will intensify in 2019 and 2020 with further commercial launches around the world and continuous work across the industry on spectrum, specifications, network deployments and devices.

#### Factors driving investment in 5G

The above deals and deployments clearly show the potential of 5G and the future telecom operators envision of the technology. We will try to understand the factors that are actually driving these investments by countries and telecom providers. At a provides; we heard all the hype of 5G, the

broader level the use cases of 5G can be grouped into three categories, enhanced mobile broadband, IoT, and mission-critical applications. The success of these use cases is dependent on the performance of all network parameters including spectrum, radio access network (RAN) infrastructure, transmission, and core networks.

5G will enable virtual and augmented reality, connected automobile, IoT (smart manufacturing, smart city), personal Al assistant, connected drones, connected energy, wireless health, entertainment, and much more. However, use cases, which will cater to smart vehicle and transport system, enhanced human interaction AI and the broadband experience for business enterprises are the ones, which will drive commercialisation success along with sustainable market growth.

We saw the vast array of use cases that 5G

new opportunities, and the new ways to delight customers with 100× bandwidth, 10x throughputs, and 10x reductions in latency. But what about the commercial success of 5G; the road to 5G monetisation is not easy and will take a long time to reach breakeven. The capital investment required in spectrum, RAN, enhanced packet core and IT infrastructure is substantially high. Organisations will have to adjust and transform. Creating effective monetisation opportunities will be essential to ensure maximum return on both capital and organisational investments. While operators plan 5G rollouts it is very important they also be clear with their monetisation plans.

5G is coming at a time when customer experience is becoming a key performance metric and a top challenge. Choosing to embark on the journey towards 5G, the following three things are critical to address the monetisation issue of 5G. Firstly, 5G is all about scale: unless operators are targeting



a huge audience with unique niches to drive initial volumes it will be difficult to sustain the market. Secondly, a strong enterprise segment service offering will become important for 5G monetisation. The current technology ecosystem is not geared for the next generation of enterprise service offerings, an open dialogue to create a platform to support all current ecosystem players including OEMs, vendors and managed service providers, and future ecosystem players will be very important.

Lastly, building solutions that will compel the customer to approach the operator will be crucial rather than the operators pushing their offerings.

#### Time to Invest in 5G and stay competitive

The global race to lead the 5G revolution, as

well as faster full-fibre broadband, is arguably the most important of the modern era and one that could decide who dominates vital technological advancements, like Artificial Intelligence (AI). As the final countdown to 5G launch has begun, companies are increasingly investing in 5G technologies. 5G technology investments are primarily driven by the companies' need to secure market leadership, meet customer demand, and take advantage of flexible and scalable networks.

Compared to investments in the earlier generation of wireless mobile technologies, investments in 5G will be significantly high. That would also be on account of the pace at which the technology will mature. The deployment of 5G is expected in a time frame of 3 years from 2019 to 2022, as compared to 4G and 3G which took around

6 years and 9 years, respectively. Moreover, the commercial synchronisation of 5G with network and network devices (Smartphones, CPE, etc.) has already started in 2018 and would realise its full potential in a year. Earlier technologies took around 3 years to synchronise with network devices and applications.

Competition is going to be fierce 2 to 3 years down the line; preparing to invest at that stage may also increase costs considerably along with delayed implementations. And while the latecomer fully implements 5G, there are chances that the market could reach a maturity level where customer acquisition costs will increase as they would already be users of the first comer. So it would not be wrong to say that for a sustainable run in the 5G race, operators need to start investing at



# **Satellite Industry Forum 2019**

17 June 2019, Four Seasons Hotel Singapore #aviasif

As 2019 progresses, it will be of interest for many to find out what trends the satellite industry will see play out this year, as well as what the key drivers of growth will be for operators and customers alike.

Gearing up with new discussion topics, AVIA Satellite Industry Forum 2019 is proud to announce the preliminary program and introduce an early lineup of distinguished speakers:



















Mark Rigolle









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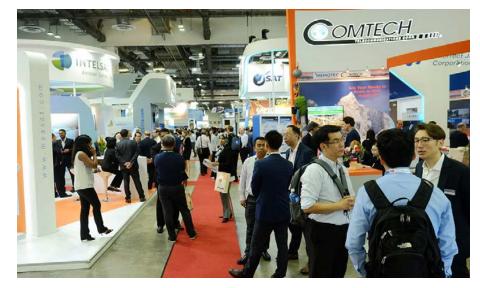
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# ConnecTechAsia – The Region's TMT Platform for Networking and Business Intelligence Under One Roof

Asia's Mega Infocomm, Media and Technology Event presents the latest innovations and thought leadership to help Asia thrive in the digital age



With transformation at the top of their agenda, business leaders are meeting at Authority, Singapore. ConnecTechAsia, held in Singapore from 18 - 20 June 2019, to showcase and discover the latest technologies that promise to ready businesses for the future.

"Connectivity infrastructure is a key enabler for Digital Economies worldwide, including Singapore's. ConnecTechAsia has always been a key telecoms calendar highlight, bringing the world's leading players to Singapore to exchange insights, share best practices, and build the capabilities that will be necessary to bring about next generation networks. We expect ConnecTechAsia to be an exciting platform to learn and experience the cutting edge developments in the technologies that will shape our lives, and wish the event every success," says Howie Lau, Chief Industry Development Officer,

Info-communications Media Development

Among a congregation of 1,800 exhibitors and 200 thought leaders at the Summit, an estimated 40,000 attendees will be looking to truly transformative technologies and solutions to get an edge up in automating business processes and exploring fresh revenue streams in this digital era.

ConnecTechAsia comes out the gate in 2019 as the region's newly minted telecom, media and technology (TMT) knowledge powerhouse, leveraging new partnerships with leading business intelligence and research affiliates such as Accenture, Deloitte, KPMG, Light Reading, McKinsey, Ovum and Tractica, to provide expert insights to all event stakeholders, not just during three event days, but throughout the year.

Top brands including Amazon, Axiata, Ericsson, Google, Grab, Huawei, IBM, iflix, Intel, Microsoft, Netflix, NHK, NTT DoCoMo, RedHat, Singtel, Verizon and VMWare among many others will bring with them the latest innovations, new business opportunities and networks, and thought leadership to the show floor and Summit.

"Knowledge has always been the most powerful asset to have, and today's enterprises need additional clarity to optimise business decisions and harness opportunities. ConnecTechAsia will bring the combined value of its new knowledge partnerships providing TMT intelligence to our stakeholders throughout the year, culminating over three event days in June when the industry comes together to share, make deals and network. This new iteration of ConnecTechAsia is testament to our ever-growing commitment to support the TMT industry and facilitate its path towards successful growth in the region," says Ivan Ferrari, Event Director for ConnecTechAsia,















from organiser UBM Singapore.

In 5G, Artificial Intelligence (AI), cybersecurity, multi and hybrid-clouds, Internet of Things (IoT), smart cities and more, ConnecTechAsia, comprising three pillars catering to each sector of the TMT space, will bring together the diverse yet hyperconnected businesses that will form a big part of tomorrow's digital life.

CommunicAsia brings together nextgen technologies for the telecom and related industries. BroadcastAsia is where broadcasting media companies and equipment makers showcase their latest products and services, and NXTAsia will feature emerging technologies and enterprise solutions. There will also be power-packed activities, free workshops and seminars, speciality zones, partner programmes and networking receptions to keep attendees fully immersed and engaged.

Commenting on the event, Andrew Phua, Director, Exhibitions & Conferences, Singapore Tourism Board says, "STB is pleased to support the second edition of ConnecTechAsia. ConnecTechAsia is one of Singapore's flagship exhibitions and anchoring it here bolsters Singapore's ConnecTechAsia Summit reputation as a centre for knowledge, innovation and economic exchange in the Asia-Pacific region. We are glad to host leading international experts and thought leaders in the tech, digital, and media industries here, and to facilitate the exchange

of ideas, knowledge and connections, which will in turn deliver greater value to delegates." ConnecTechAsia Exhibition Highlights

Led by the chairman of the ASEAN Smart City Network (SCN), in cooperation with country partners such as China, South Korea, Japan and Singapore, and the ASEAN Smart Cities Communities (SCC), 2019 will see a new Smart Cities Arena at ConnecTechAsia. With connectivity and digital solutions for city planning, smart buildings and smart homes, this will be where government delegations, investors, technology suppliers, disruptors and infocomm operators gather to do business to develop the cities of the

Also making a debut at this year's event is the 5G Experience - a dedicated platform with multiple live demo zones on how 5G will translate to new opportunities and possibilities for enterprises, especially in healthcare, energy, manufacturing and transportation. Attendees can learn how 5G-connected drones, for example, will make a difference for businesses, how 5G improves mapping and transportation, as well as its impact on a digital-ready manufacturing

The ConnecTechAsia Summit, themed Shaping Future Societies, will bring together thought leaders from infocomm, technology, media and enterprises to discuss what is driving digital transformation in the

region and how the latest tech trends and innovations are changing the landscapes of Cities, Economies, Business and Media.

The keynote by Harriet Green, CEO and Chairman of IBM Asia Pacific, will explore how the shift from digital experimentation to scale adoption of new technologies will fundamentally alter the value chains of entire industries and change the way we work and

Key industry leaders at ConnecTechAsia2019 Summit will also include:

- Dr Min Sun, Chief Artificial Intelligence (AI) Scientist, Appier
- Muhamed Zilkhairilishamuddin, Assistant Vice President, OTT Principal Engineer, Astro • Dr Keeratpal Singh, Chief Data Scientist,
- Ong Geok Chwee, CEO, Bridge Alliance
- · Cheryl Goh, Group Vice President of Marketing, Grab
- Dr David Soldani, CTO, Huawei Australia
- Jason Little, Chief Information Officer -SEA, Manulife
- Ian Yip, CTO, McAfee Asia Pacific
- Gustavo Fuchs, General Manager Cloud & Solutions (Asia), Microsoft
- Andreas Spanner, Chief Architect (ANZ), Red Hat
- Krishnan Rajagopalan, Director of Payments APAC, Netflix
- Seizo Onoe, President of DOCOMO Technology and Chief Technology Architect, NTT DoCoMo



Draws Leaders' Attention to Ensuring Digital Inclusion in the Fourth Industrial Revolution, Driven by 5G SAMENA Telecommunications Council's the Leaders' Summit 2019, delved into annual Leaders' Summit was successfully held on April 18th at Atlantis, The Palm,

Dubai, with patronage of the Telecom Regulatory Authority (TRA) of the United Arab Emirates, provided under the leadership of Director General H.E. Mr. Hamad Obaid Al Mansoori; special quest-of-honor address by **UAE Cabinet Minister & Minister of Tolerance** H.H. Sheikh Nahyan bin Mubarak al Nahyan; and a leadership message by International Telecom Union (ITU) Secretary-General H.E. Mr. Houlin Zhao.

Hosted for the sixth consecutive year by Huawei Technologies Middle East, Co-Sponsored by Sudatel Group and Ericsson Middle East, with Zain Group promoting the need for child protection online as an important imperative for the Industry, Etisalat showcasing its superior 5G readiness in the UAE, and with promotion of the upcoming WRC-19 by NTRA of Egypt, the leaders-only congregation,

discussions pertaining to the future of 5G and foreseeable impact that 5G will have on ICT business growth, and on the development of the digital ecosystem and innovation, as the region prepares for the digital revolution and

anticipates fulfillment of national ICT visions.

"I am very pleased to have witnessed today's prolific presence of leaders from all across the Industry, who took an active part in SAMENA Council's Leaders' Summit





2019. It was an honor to welcome each one of them. We have always had a highly distinguished congregation in the Summit, but this year is special, because the region is about to experience 5G, and representatives from so many regions converged today to both contribute insights and to take back perspectives, which could assist in their own technology deployment planning. We, as Industry, have made tremendous progress, and this is especially seen in the UAE. I wish to immensely thank the UAE Government, SAMENA Council's leadership, the SAMENA Council membership, Leaders' Summit sponsors, and our team, for making this much anticipated event a great success", stated Bocar BA, CEO and Board Member of SAMENA Council.

As an integral part of the Leaders' Summit, to accelerate the large-scale deployment of 5G, Huawei hosted the "5G is ON" Forum, which served as an occasion for 5G industry partners to discuss how emerging 5G-enabled intelligent services and innovations may help telecommunications operators to identify new business opportunities, thereby enhancing prospects of achieving growth. Driven by the goal of creating an intelligent 5G ecosystem, Huawei, as host sponsor



of the Leaders' Summit 2019, assured the Industry that it has invested considerable resources into 5G development, deployment, and infrastructure, and has been a partner of choice for global operators to deploy nextgeneration networks.

"Today the era of 5G is upon us, with new networks across the region either rolling out or on the verge of being launched, said Charles Yang, President of Huawei Middle East. "As evident in our 5G is ON forum during SAMENA Council's Leaders' Summit 2019, the entire ICT ecosystem is now coming together faster than expected to ensure this great opportunity will be an enabler for realizing national development on a regional and even global scale. 5G large

scale rollout in the Middle East has started since 2018, GCC countries are in the first wave of 5G rollout globally. Huawei is well prepared to provide organizations across the Middle East with the best possible solutions to take full advantage of this next generation of communications. Huawei has the great willingness, capability and confidence of building the most secure 5G networks."

SAMENA Council's 4th SALT Meeting (SAMENA Leaders' Roundtable) among operators, technology providers, and regulators was also held. A by-invitationonly closed-door meeting, following the Chatham House rules of communication, the SALT Meeting was organized to discuss critical issues, including those







relating to 5G spectrum availability in the region, preparations for the global WRC-19 conference later this year, cross-border spectrum interference, and digital services matters, with special mention of the need to protect children online.

Leading regional regulatory authorities, global and regional telecom technology providers and operators, as well as global bodies and institutions contributed to the discussions during Leaders' Summit 2019, including among others CITC - Saudi

ITU Secratary General Houlin Zhao & Khalid Ather,

Chief Editor Teletimes during SG's press talk

and panel discussions, held among stakeholders in a world-class setting.

Leaders' Summit 2019 has built on past discussions, centered around enabling a true digital economy, which can only materialize itself via the timely availability of 5G; thus requiring prompt attention to address the region's spectrum needs, making 5G devices available, and attending to crossborder spectrum interference as well as cybersecurity challenges.



Arabia, TRC - Jordan, TRA - Bahrain, TRAI

- India, Saudi Telecom Company, Batelco

Group, Etisalat International, du, Omantel,

Orange MEA, Sudatel Group, Zain Group,

Eutelsat, AT&T, BT Global Services, Huawei

Technologies, Ericsson MEA, TechMahindra,

# 5G is an end-to-end system, and Huawei's strength is not only in wireless, but in all aspects of 5G

### Charles Yang, President, Huawei ME speaks at Media Roundtable during SAMENA Leaders Summit

Huawei hosted the '5G is ON' forum as part of the SAMENA Leaders' Summit earlier last month where Huawei and partners explored the 5G readiness of the region and engaged in discussions exploring the large-scale deployment and commercialization of 5G.

Charles Yang, President of Huawei Middle East spoke with international media at a roundtable during the event where Charles shared Huawei's understanding of the current ICT landscape and its vision for 5G.

Commenting on Huawei's current strategy, Charles said, "The world is changing, and we are facing new challenges. But Huawei will stay the course. We will work with our customers and partners to build an ecosystem that thrives on shared success. And we will do our best to push the limits of technology and promote social progress along the way."

Further commenting on the current 5G situation, he said, "5G is growing much faster than expected. All factors that 5G needs are ready now. For example, we already had 5G chipsets in 2018. In MWC 2019, vendors like Huawei, Samsung have already announced 5G smartphones."

In response to a question about US' efforts





against adoption of Huawei equipment in various countries, Charles shared the opinion that the stance of US is completely unjustified as there is no proof or evidence against Huawei. He further stated that any rules, requirements or policies set towards Huawei shall be imposed across all vendors in an unbiased manner. He went on to further explain Huawei's credibility and the security of its equipment are well visible from the various deployments Huawei has already done along with its partners around the

In response to a further question about Network Security, Charles said, "Network security is Huawei's highest priority and it

overarches everything. Huawei has served 3 billion users with 1,500 networks over 170 countries for the past 30 years, and Huawei has maintained a very solid record that we have never had a serious network security

During the forum, organizations from the public and private sectors laid plans for 5G readiness in the region, while examining best practices ahead of large-scale 5G network deployments in the Middle East and internationally. Huawei provided insights on how 5G can benefit the acceleration of digital transformation, help achieve the targets of the national visions and agendas, in addition









to pushing the development of different industries and sectors in the region.

Charles also commented on Huawei's financial performance during the roundtable. He stated, "Last month on March 29, Huawei released its 2018 Annual Report audited by KPMG. According to the report, the company maintained strong business growth in 2018. Its sales revenue rounded off at USD 106 billion, up 19.5% year-on-year; its net profit reached USD 8.7 billion, up 25.1% year-on-year. In 2018, Huawei invested USD

14.9 billion (14.1% of its sales revenue) in R&D, ranking fifth globally in The 2018 EU Industrial R&D Investment Scoreboard. Over the last ten years, Huawei's R&D expenditure has reached more than USD 70.5 billion. According to official data released by the World Intellectual Property Organization (WIPO), Huawei filed 5,405 patent applications to this organization in 2018, ranking first among all companies globally."

Alongside the various discussions, Huawei presented its end-to-end 5G solutions

within a dedicated exhibition area, including 5G-ready technologies such as chipsets and consumer devices, network infrastructure, and bespoke solutions for over 280 global industry partners.

Concluding the roundtable discussion, Charles commented on Huawei's readiness for the latest generation of wireless networks - "5G is an end-to-end system, and Huawei's strength is not only in wireless, but in all aspects of 5G, from devices to networks and to ecosystems." lacksquare

## Huawei: Region's 5G ecosystem growing faster than expected

Looking ahead to an all-connected, all-intelligent world, Huawei hosted top ICT industry leaders at its '5G is ON' forum, co-located at the SAMENA Leaders' Summit.

During the forum, organizations from the public and private sectors laid plans for 5G readiness in the region, while examining best practices ahead of large-scale 5G network deployments in the Middle East and internationally. Huawei provided insights on how 5G can benefit the acceleration of digital transformation, help achieve the targets of the national visions and agendas, in addition to pushing the development of different industries and sectors in the region.

Wang Su, VP of Huawei Middle East Marketing, said: "5G industrial development is accelerating. Huawei will work with ecosystem cooperators on Cloud X solutions (Cloud VR & Cloud Gaming, etc.) and vertical industry applications (Oil & Gas, etc.) through its wireless XLabs and ME OpenLab, and introduce these use cases to Middle East operators along the 5G journey as partners rather than vendors".



Huawei: Region's 5G ecosystem growing faster than expected



Pierric Duthoit, Industry Director, Google MENA



Hajime (Gen) Nakamura, GM, Sony Professional Solutions MEA

Huawei is working with customers and partners to drive the largescale commercial rollout of 5G, and build a mature 5G ecosystem that thrives on shared success, pushes the limits of technology and promotes social progress along the way.

Pierric Duthoit, Industry Director, Google MENA, said: "We are happy to participate at the 5G is ON forum in Leaders' Summit, SAMENA. As 5G is transforming most industries, we believe that the acceleration of the development of video consumption on Youtube and the rise of new applications such as VR/AR with Google Lens, Google Photos, Google Paly Store and cloud gaming will certainly benefit from the 5G. Google is working towards providing the best experience to our customers."

Hajime (Gen) Nakamura, General Manager, Sony Professional Solutions MEA, said: "To thrive in today's media environment, you need to deliver content anytime, anywhere to an unprecedented range of platforms. You need to do it efficiently, reducing your footprint, streamlining operations and achieving financial flexibility - all without sacrificing quality. Sony's Intelligent Media Services enhanced with the introduction of 5G services will provide customers flexibility to unlock more value from their content."

Wang Xiangning, connected-drone project manager from China Unicom Research Institute, said: "China Unicom considers connecteddrone as a growth engine into business in 5G age.5G technology with high bandwidth, low latency capabilities are naturally equipped





Wang Xiangning, connected-drone project manager from China Unicom Research Institute

with high-definition image/video transmission and remote control. Ecosystem and unified international industry standard are vital for 5G drone business successful. China Unicom would like to share the experiences which is happening in China and promote to build unified international connected drone standard with Huawei, TYJW and other partners who would like to join us in Middle East region and worldwide."

Yang Meng, CTO of TYJW, said: "Connected drone involves cloud computing Big DATA and AI, is an inevitable way for operators to expand their business in low altitude IoT and 5G, has already widely applied in China by China Unicom and TYJW."

Du Yeqinq, VP of Huawei 5G Product Line hosted and introduced the progress of Huawei 5G ecosystem cooperation strategy. For the past few years, one of Huawei's main focus areas has been creating the 5G ecosystem through collaborating with leading partners in the region and globally. Currently, we finished joint solution development with TYJW for the long-distance connected drone solution, with Visyon for the Cloud VR application solution, with LetinVR for Cloud VR live broadcasting solution, with BoE for 4K/8K video solution and with PlayGiga for Cloud Gaming solution in the region.

All factors that 5G need are available now: 5G chipsets, CPEs and spectrum are ready to serve the large scale rollout of 5G in the region. 5G is an E2E system and Huawei's strength is not only staying in wireless but in all aspects of 5G, from devices, to network, and to ecosystems. In 2018 Huawei announced the world's most powerful 5G chipset and CPEs with up to 4.6Gbps downlink. Recently, Huawei announced the world's 1st foldable 5G smartphone – Mate X.

The root reason of Huawei's leadership in 5G is our insistent and heavy investment in 5G for the past 10 years. We have brought 283 global industry partners and 57 regional partners into X-lab. Huawei believes it will only take 3 years to achieve 500 million users to 5G, which took 6 years for 4G and 9 years for 3G. It is estimated to have 1 million sites of 5G globally in 2019.

Mr. An Jian, President of Carrier Network Business Group, Huawei Middle East, said "Huawei established X-lab 3 years ago to explore vertical use cases with our global partners. Also, here in Middle East,



we launched a local ME ecosystem partnership program last year, to incubate local use cases in the region. We believe that the oil industry can champion that transformation to harness the power of 5G. In Middle East, all of the GCC countries have started 5G deployment. I believe the GCC will keep leading in the global 5G race for years to

Under the summit theme 'Early Proliferation of 5G - Vital to Building the Digital Economy', Huawei participated in several top discussions at the Summit. These included the high-level leaders' roundtable conversation addressing the impact of 5G, industry 4.0, crossindustry engagement, and digital enablement. Huawei was also a key contributor to the leaders' panel discussion, with participants examining key policies that will enable the transition to an inclusive 5G ecosystem across the Middle East.



An Jian, President Carrier Network Business Group, Huawei ME

Alongside the various discussions, Huawei presented its end-to-end 5G solutions within a dedicated exhibition area, including 5G-ready technologies such as chipsets and consumer devices, network infrastructure, and bespoke solutions for over 280 global industry

A number of Huawei's ecosystem partners were with the company at the SAMENA Leaders' Summit, including: Google, Sony, China Unicomm, TYJW, Playgiga, Vsiyon, LetinVR, BoE, Aerodyne, No Fire Cloud, Quectel, INLIFE-HANDNET, MGI TECH Co. Ltd, HiScene, DALU ROBOTECH, and Fibocom.

# Huawei Al portfolio debuts at Ai Everything Summit, accelerating intelligence



Huawei has participated in the first Ai Everything Summit held in Dubai, UAE. Under the patronage of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President & Prime Minister of the UAE and Ruler of Dubai, the first Ai Summit was hosted by the UAE National Program for Artificial Intelligence.

During the Ai Everything Summit, to which Huawei was a Platinum Sponsor, the company presented its global AI development strategy to government leaders, enterprise customers, and technology partners through a series of keynotes, panel discussions, and exhibits.

showcased industry leading Huawei Al infrastructure—including its Atlas Al computing platform—which comprises cloud, edge and terminal solutions, and builds on Huawei's longstanding commitment to delivering an all-scenario Al portfolio that enables local industries to contribute in building a fully connected, intelligent world.

Jinshui Liu, Chief Architect of Huawei Intelligent Computing, delivered a keynote "AI Accelerates the Intelligent World" and also introduced how Huawei's Atlas Al computing platform can help accelerate Al development, deployment, and applications.

#### Huawei Atlas AI computing platform Covering the cloud, edge, and terminal

Computing power for AI needs to be deployed not only on the cloud, but also at the edge and terminal to meet the realtime data processing for AI applications. The Huawei Atlas AI computing platform, based on Huawei self-developed Ascend series Al chips, includes a variety of product forms such as AI accelerator module, AI accelerator card, AI edge station and AI server, which meets the needs of cloud, edge and terminal all-scenario AI deployment.

The Huawei Atlas 510 Al Edge Station, an innovative exploration of one-stop edge AI deployment, made its global debut at the summit. The innovation not only provides superior edge AI computing power, but also integrates multiple designs into one package, including power supply, water-proof, dustproof, high and low temperature tolerance, and network connection designs. It can be guickly installed and deployed along with municipal outdoor facilities, such as lamp poles, to support real-time pedestrian and vehicle analytics, accelerating intelligence.

Work with industry partners to accelerate the intelligent transformation

As a new general-purpose technology, AI will benefit all industries. Huawei have forged Al solutions for multiple industry applications with ecosystem partners. Within the Summit, Huawei partners such as YITU and CCi Intelligence demonstrated AI applications in the fields such as campus, finance, power sector, medical care, and intellectual property protection, making AI applications easier to use and accelerating the intelligent transformation of the industry.

# We help clients build resilience into their digital infrastructure and digital footprint

Rabih Dabboussi, SVP Sales & Marketing and Business Development, DarkMatter speaks to teletimes

Interview: Khalid Athar

Khalid Athar: Please give us a background overview of DarkMatter and the idea behind it.

Rabih Dabboussi: The DNA of our company is to ensure cyber defense and security of our clients through cyber services and cyber security technologies. We have also established a digital transformation practice that complements our cyber security transformation practice and that digital transformation practice is growing and growing rapidly. We are seeing a positive reflection from our clients when they realize that the inter-dependence between the cyber transformation and digital transformation is quite important. The overlap between the two is becoming bigger and because the industry is going through a phenomenon that we call tech-tension (which is: I want to digitize, I want to harness the digitization but wait a minute I am exposing myself to attacks, to hackers and to compromises).

Our job is to ease that tension by helping the clients build resilience into the digital infrastructure and digital footprint but also raise the maturity level from a cyber-security point of view so that they can take more risk with their digital appetite so that they can deploy cutting edge technology, deploy the latest and greatest and still feel safe and secure. That gives them a competitive edge. The market segment that we address is not just the government sector but we also focus on the finance industry, transportation

industry, energies and utilities and last but not the least our common media. If you think from a GCC perspective, these are the economic pillars of the GCC region and we want to align to these main critical verticals which are important for the GDP and

KA: Would you like to tell us about the extreme condition smartphone KATIM Ro1 that you are showcased at MWC earlier this

RD: We actually launched our 1st generation ultra-secured mobile device the KATIM device last year. The phone is designed for the office worker but designed from the grounds up to offer the user and the client the highest level of mobile communication security and mobile data security, given that a lot of what we do today depends heavily on making decisions on mobile devices, communicating through mobile devices and keeping sensitive data on mobile devices.

There is a specific tension especially when it comes to dealing with ultra-sensitive and ultra-classified data. Whether you are in a government organization or a private company, many of those decision makers deal with highly sensitive data that should be secured. So the second generation of KATIM device is also designed from the ground-up but in addition to being able to secure the communication and the data, we are also



that operate in extremely harsh and difficult conditions typically in the field whether that is the defense industry or industrial sectors such as oil & gas, transportation, real estate, energy or emergency services.

What we did with the KATIM R1 is that we targeting a market segment of our users designed a new generation of smartphone



still ultra-secure but very tough on the outside and tougher on the inside. The tough outside is because we actually designed it to withstand extremely harsh condition, we designed it against the standards of military specifications that are very rigorous around shock & drop and water & dust proof abilities.

We have also made it user friendly like easy to operate in low ambient light, extreme cold or hot temperature, we have built a physical button for push to talk so that we can operate without having to look at the device and a physical SOS button on top so that we can easily send an SOS signal with push of a button. We designed it between our development centers in Canada, Finland and Abu Dhabi.

When it comes to the software we have an operating system that is fully ruggedized against all the potential threats of malware and malicious applications or malicious injection of code into the device and on top of that we have our suite of applications that secure your chat, voice, videos and emails and that is where the layer of security that the user gets to feel. We have earlier launched the device at IDEX in Abu Dhabi.

Given that it is designed for operations in harsh field conditions, we felt that launching in a defense expo is the right thing and given that we have pride in the fact that we are a UAE company, we relaunched it on a global platform in GSMA MWC 2019 in which we are participating from past 3 years. The feedback so far has been positive, I think we are quite unique in our approach, philosophy, design



and the capabilities and innovation that have gone into this device.

#### KA: What is the cost of KATIM?

**RD:** This is a niche market - We are in the few thousand dollars' range. We don't publicize our pricing because the prices differ from deployment to deployment model based on the volume that we engage with the clients and what type of applications are needed so it differs but it is not on the upper end of such devices.

#### KA: Are you currently looking at expansion, especially from a geographical point of

**RD:** Our current business expansion strategy revolves around three horizons, the first is to focus on the nation we serve where we are headquartered which is UAE, the second horizon is the natural expansion into the GCC region and the third horizon is to take our innovative technology and innovative capabilities and products beyond the GCC. We are already looking at natural expansion into Asia and potentially Europe especially when it comes to our products and technologies.

#### KA: Can you tell us a bit about your involvement with the Expo 2020 as its Official Cyber Security Provider?

RD: All of our work with Expo 2020 is exclusive. When we engage with our clients, usually, our work with them is highly confidential. We are in fact the cyber security partner of Expo 2020 and we are proud to be selected but we are also proud to be a key player and a champion to make sure that this event which is quite unique and important to the nation is successful.







Andy Shi holds a Bachelor of Laws degree in International Political Economy. He graduated with honors from Yuanpei College, Peking University in 2008. Shi joined OPPO in 2014.

Prior to his current role, Shi served as a Brand Director overseeing all the external communications related to OPPO's brand awareness and position in the fast-growing markets of the Middles East and Africa region.

Shi also served as the Head of Brand in Australia, where he was responsible for bringing the OPPO brand to its first developed market. He played a key role in building up relationships with leading Australian mobile carriers and stakeholders. With a broad experience in marketing communication, Shi has held different key roles in several Chinese and multinational companies.

# Smartphones are the centre-piece that provide users the ability to truly leverage 5G

Andy Shi, President, MEA and Zhang Zhi, Senior Standardization Manager, Beijing at OPPO speaks to Teletimes

Interview: Mustafa Khan

Q: How does OPPO see 5G?

A: OPPO believes that 5G will provide a guick edge for the future of smart work. 5G will provide us a chance to connect everything including various IoT environments, health devices and a lot more. So the users can have a truly encouraging experience with

5G will be a new era that will make things a lot more connected so it will really change the way we communicate with the outside world and ofcourse, OPPO wants to be a part of making that happen.

Q: How can 5G improve customer's experience?

A: Once we see into the most important technical features of 5G, we recognise that two parts are very important - the first is extremely high speeds and the second is ultra-low latency compared to LTE. We leverage these factors to implement some important applications which the previous connections could not achieve such as cloud gaming and image/video processing.

Different users can upload the videos to the cloud and the videos can be processed for different users at the same time worldwide because the latency is very low. The users will truly experience the difference as compared to 3G and 4G.

We understand that this year is just the start of 5G so for now we can only expect things like cloud gaming or cloud based image and video processing but it is very likely that in a year or two the real application of 5G will appear and we will see that.

Q: What is the timeline around the launch of your 5G phones?

A: We already have launched OPPOs first 5G smartphone at MWC Barcelona 2019. Technically our device is ready but we are now in the process of testing 5G devices with the network carriers. We have launched the smartphones in Europe on the 10th of April and on 16th of April in the UAE in partnership with

Q: What is your commercialization strategy in the MENA region for your 5G smartphones?

A: We are working with Etisalat as a pioneer in 5G. I think we have a very strong partner with whom we have already launched the phones. We plan to become the number one 5G smartphone vendor in the region very soon.

Q: How does the importance of smartphone devices in the 5G

A: As I said, we think that the 5G technology will enable the ability to connect everything like health devices, many of the home applications, vehicles, and many others and we believe that amongst all that, the smartphones will be the centre-piece of it all. The smartphone is not just a platform to process your personal information but it is also the hub as a central integrate controller to all the Internet of Things devices around you. 5G smartphones will interpret all the intelligence and the IoT data around you and provide users the ability to truly leverage 5G benefits not only on their phones but on other devices as well by providing a centralized control/access to them. I



An expert in his field, Zhang Zhi has two decades of experience in the field of communications technology. Having been part of OPPO Tele. Co. Ltd since 2016, Zhi has had a pivotal role to play in the company's research and development division, particularly in his specialist field of Standardization. Zhi focuses on the creation of intellectual property rights (IPR) and 3rd Generation Partnership Project (3GPP) development, contributing to the development of mobile telephony protocols.

Zhi's career has seen him work in research roles with technology giants, particularly within the realm of LTE standardization and LTE physical layer (PHY). To date, he has more than 100PCT filings and 100 3GPP contributions. He has been published in several prestigious journals, and has delivered numerous conference papers.



# Etisalat Group reports consolidated net profit of AED 2.2 billion in first quarter of 2019

Etisalat Group has announced its consolidated financial statements for the three months ending 31st March 2019.

- Revenue from Services for the 1st quarter reached SR 13,386m an increase of 8.4% compared to the corresponding quarter last year.
- Gross Profit for the for the 1st quarter reached to SR 7,903m an increase of 14.0% compared to the corresponding quarter last year.
- Operating Profit for the 1st quarter reached to SR 3,275m an increase of 24.4% compared to the corresponding quarter last year.
- Earnings before Interest, Taxes, Zakat, Depreciation and Amortization (EBITDA) for the 1st quarter reached to SR 5,386m an increase of 19.0% compared to the corresponding quarter last year.
- Net Income for the 1st quarter reached to SR 2,750m an increase of 6.3% compared to the corresponding quarter last year.

#### Financial Highlights and Key Developments of Q1

- Aggregate subscriber base reached 143 million, representing a year over year increase of 2%.
- Consolidated revenues amounted to AED 13.0 billion and consolidated net profit after Federal Royalty amounted to AED 2.2 billion representing a year over year increase of 5% and resulting in a net profit margin of 17%.
- Consolidated EBITDA totaled AED 6.6 billion, representing an increase of 2% year over year and resulting in EBITDA margin of 51%.
- Etisalat achieved 'The Most Valuable Telecoms Brand' in MENA by
- UAE is ranked as a global leader in FTTH.
- Etisalat's innovation programme 'Future Now' signed agreements with four scaleups to develop Artificial Intelligence and Blockchain
- Etisalat collaborates with 'Abu Dhabi Smart Solutions and Services Authority' to digitise government services through 'TAMM'.
- Etisalat unveiled Robotic Centre of Excellence to deliver automated solutions for greater customer satisfaction.
- Etisalat launched the first Cloud Gaming service to deliver highquality (1080p) cloud-based games directly to TV sets from a set-top box.

#### GCEO's Message:

Eng. Saleh Abdullah Al Abdooli, Etisalat Group CEO said: "Etisalat's solid performance of the first quarter is a promising start for 2019, an extension for our achievements of last year, and a testimony to the efforts in realising our vision and ambitions toward "Driving the digital future to empower societies".

"Etisalat achieved the most valuable telecom brand in the MENA region, yet another significant milestone attributed to our digital efforts. Etisalat infrastructure continues to play a key role in our goal to bring-in full scale digital transformation. The consistent efforts and investment in our network has helped position the UAE as a global leader in FTTH penetration among all its international counterparts for a third year in a row."



### 5G infrastructure to become the nervous system of the Digital Society and Digital Economy: Al Shamsi at SAMENA Leaders' Summit

5G infrastructure is set to become the nervous system of the 'Digital Society' and 'Digital Economy' with clear goals being set to deliver on the 5G promise by enabling boundless connectivity, deliver sustainable innovation, accelerate digital transformation and drive growth with new use cases said Khalifa Al Shamsi, Chief Corporate Strategy and Governance Officer, Etisalat Group.

Al Shamsi shared his insights at 'Leaders Summit 2019' held by SAMENA Telecommunications Council which brought together leaders and change makers from more than 29 countries, with the aim of materialising private and government partnerships; for fostering collaboration within the ICT industry of the region; and for discussing challenges that have emerged since 5G became a priority in the region, in alignment with national ICT visions.

He brought to light the upcoming opportunities for operators with 5G, the chance for telcos and other stakeholders in the ecosystem to move beyond connectivity and collaborate across sectors such as logistics, smart cities, oil & gas, manufacturing, finance, transport, retail and health to explore new growth opportunities that deliver rich services that empowers societies.

"5G will bring the wealth of opportunities in social economic transformation, and this

"Etisalat will continue its endeavour towards network modernisation and investment in future technologies such IoT and AI powered by our pioneering deployment of 5G network which will enable the company to address its growing customer and business aspirations with innovative services and solutions. We are confident that 5G will bring a wealth of opportunities in the socio-economic development of the UAE. Etisalat is also thankful to the vision of our wise leadership in the UAE in positioning the country among the most digitally advanced globally, inspiring us to deliver world-class networks and innovative services. We extend appreciation to our shareholders and loyal customers, to whom we owe more success and greater achievements."

#### Subscribers

In the UAE the subscriber base reached 12.6 million subscribers in Q1 of 2019, while Aggregate subscriber base reached 143 million,



requires more than just 'the right regulations

Governments do play a key role in demand stimulation and transformation with viable policies but in addition to regulations and spectrum, there is a need to eliminate asymmetrical regulations and put policies that are still in play for some markets in the

He added: "The telecom industry is taking the front seat in fuelling the 4th industrial revolution, by spearheading the launch of future networks and technologies, it is imperative that we rise to every challenge by working together as an industry to become an accelerator to drive innovation and development and most of all bridge the digital divide."

Al Shamsi also highlighted the changing role of the telco, "We are moving away from traditional business models and competencies, the need to collaborate and develop new skills are now required and more important than ever to unlock 5G era

representing a year over year increase of 2%

#### Revenue & Net Profit

Consolidated revenues amounted to AED 13.0 billion and consolidated net profit after Federal Royalty amounted to AED 2.2 billion representing a year over year increase of 5% and resulting in a net profit margin of 17%.

Group Consolidated EBITDA for the first guarter of 2019 increased by 2% to AED 6.6 billion while EBITDA margin increased 1 point to 51% year on year.

Earnings per share (EPS) amounted to AED 0.25 in the first guarter of 2019; a 5% increase from the same period last year.

28 May 2019

May 2019 29



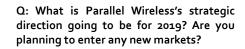


# Our focus is Global

### We will continue our efforts to connect end users around the world.

Steve Papa, CEO Parallel Wireless

Interview: Ana Gulraiz



A: We will continue our efforts to connect end-users around the world with our ALL G Open vRAN solution. We have live sites on six continents with leading operators who are eager to connect end-users with reliable coverage. Our latest Open vRAN deployments in Africa and Turkey showcase how operators can cost-effectively modernize their legacy networks.

By virtualizing 2G/3G/4G RAN and core functions, cost is significantly reduced and as a result network management and integration of new Gs is simplified. Cost and complexity of evolving cellular networks will no longer restrict MNOs from deploying new cellular technologies.

Our ALL G approach empowers telecom operators to expand their cellular networks to better meet their end-users needs. As the year progresses, we plan to share more case studies surrounding our ALL G approach and how our solution enables simplification for all deployment scenarios.

#### Q: What are going to be the key regions of Why do you think virtualizing G networks focus for Parallel Wireless as we enter the age of 5G?

A: Our focus is global. Each region has its own requirements and challenges. Some African and South Asian operators still need to continue supporting GSM, as there are many people living there who are still using the old 2G feature phones. Their current equipment consumes a lot of space, requires cooling and consumes far more power than the new generation of equipment available today. We are helping a good number of these operators modernize. The same modernization challenge exists for 3G, especially in the Middle East and Africa where 3G is expected to be the dominant technology by 2025. In many advanced markets our solution is helping fix the 4G coverage gaps by offering the flexibility that comes with supporting any kind of backhaul on an extremely small footprint. In short, we will continue focusing globally due to our solution being able to meet a wide variety of requirements.

Q: Parallel Wireless has launched its A: Leading operator Zain Telecom has

### is important?

A: At TIP summit, Vodafone and Telefonica expressed the importance of disaggregating hardware and software to make RAN open, easy and cost-effective to deploy and maintain. Both operators highlighted the necessity of software-based network solutions being able to support ALL Gs (2G, 3G, 4G, 5G). By doing this, we have enabled operators to evolve their networks as their subscribers' needs grow and technology advances. The race to 5G has highlighted the importance of an open ecosystem. The traditional approach of adding more hardware with new cellular technologies creates more complexity and financially restricts operators from progressing with the latest technologies. Operators around the world are eager to make the 5G transition, and software is the key enabler to this

#### Q: Would you like to tell us something about your projects with Zain Telecom?

2G/3G/4G/5G unified software platform. selected our ALL G 2G/3G/4G/5G Open



### Race to 5G has highlighted the importance of an open ecosystem"

vRAN solution to connect end-users in eight markets across the Middle East and Africa. We are pleased that our innovative solution is having a positive impact around the world, as users are finally receiving the connectivity they need to thrive in today's digital economy.

#### Q: Congratulations on winning two Aegis Graham Bell Awards in 2019. How has the journey been for Parallel Wireless so far?

A: It has been a very exciting year as we are now leading with 50+ awards. Winning the two awards for "Innovative Telecom Solution" and "Innovation in Smart City" was a great start to 2019. We are thankful to the judges for the Aegis Graham Bell Award for seeing the innovation behind our ALL G approach and how it can help MNOs expand coverage and implement IoT.

#### Q: Which trends are most likely to dominate in the coming years?

A: Operators are increasingly moving towards Open RAN, as 5G will require an

open architecture. The cost and complexity of deploying new Gs restricts operators from deploying or enhancing their networks.

The traditional approach of deploying new hardware for RAN and core functions is not feasible. A unified software approach will reduce deployment cost and alleviate deployment complexity as operators can use one solution to tie in 2G/3G/4G/5G networks regardless of vendors. Open RAN will be a key enabler for operators who plan to win the 5G race.

#### Q: Parallel Wireless is working with major Indian telecoms. Do you plan on deploying more projects in India and can you talk about how profit margins are in India as compared to Africa & Middle East?

A: Profit margins are tough everywhere. The fact that our solution can simplify the network architecture and deployments is one of the main reasons MNOs like to work with us and allows us to influence margins. In addition, our ALL G solution includes software-defined radio that allows the

same equipment to support 2G/3G/4G or a combination of any two technologies. This allows the operators to plan deployments in a way that can future-proof their coverage. The operators can also move between technologies remotely, thereby allowing them flexibility. This is also a key reason why we will continue expanding in India, the Middle East, Africa and even globally for fixing not spots, coverage holes, inbuilding coverage, densification and other challenging situations.

#### Q: What Parallel Wireless showcased at MWC? How do you feel about the event?

A: Mobile World Congress 2019 was a great success for Parallel Wireless. We were able to showcase how our ALL G software makes cellular networks unified, programmable, automated, agile and future proof to deliver optimal network performance for all use cases: low density/high density, in-building services (IBS) or public safety 4G/LTE. We had great discussions with global operators about how we can help them modernize their legacy networks. lacksquare





# ISOC holds first regional policy workshop on enabling the digital environment in KSA

The Communications and Information Technology Commission (CITC), and the Internet Society held their first regional workshop on enabling the digital infrastructure in the Middle East region. The workshop was attended by delegates from KSA, Egypt, Bahrain, Oman and the Internet

governance. The workshop aimed to identify the specific challenges and opportunities of the region. Moreover, the workshop also shed light on the efforts taken by Arab countries to develop and protect their critical information infrastructure, how they perceive cooperation among government organizations and among regulators,



The Arab governments have all either embraced or started implementing their digital transformation strategies. The Internet infrastructure has become the basic infrastructure for the entire digital transformation. Global research shows that the enabling factors are infrastructure, digital skills and entrepreneurship, and good

CERTS and law enforcement agencies.

"Technology has changed the world's concepts, redefined the foundations of progress, and created a new concept of international competitiveness that is not dependent on natural resources, nor on wealth, but on the resources of minds and

the ability to create and innovate. Through the Kingdom's vision (2030), the Kingdom has opened the doors of the future to its citizens and prepared an environment for innovation and leadership."; said Eng. Majed AL Mazyed, deputy governor of CITC, KSA

"In most cases, creating the "right" environment is not an easy task for policymakers/ governments because there is no blueprint or "one solution" that fits all. Global research has shown that the most important success factor is the availability of an enabling policy environment that supports infrastructure deployment and use, capacity building and governance. This environment can be sustained if it is focused and collaborative" said Nermine Al-Saadany. Policy Advisor, Internet Society ME Bureau.

In order to prepare for this workshop, the Internet Society examined the legal and regulatory environment in the region and to what extent countries are ready with adequate policies to enable connectivity, entrepreneurship, privacy, competitiveness, and cybersecurity, among other topics.

In 2019, the Internet Society Middle East Regional Bureau will be organizing a series of workshops with governments and other stakeholders to discuss the building blocks and the needed steps/ regulations and legal frameworks for an open and secure Internet in the various Arab countries. A paper with recommendations will then be drafted as the result of these workshop.

# Nasser Al Nasser wins 2019 Top CEO Award



STC Group CEO, Eng. Nasser Bin Sulaiman Al Nasser, won first place as the best chief executive officer for the year 2019 in the ICT sector in the 2019 "Top CEO" awards and conference, which was held in Manama.

Al Nasser was selected among more than 700 CEO's of listed companies in the GCC Stock Markets. He was honored alongside the top 10 CEOs in each of the 10 different business sectors in the region who have contributed to the profitability and tremendous growth of their companies, and have also demonstrated outstanding corporate governance over

the past year. Organized by Mediaguest and TRENDS in collaboration with INSEAD business school for global entrepreneurship, The awards were based on guidelines developed by the Dubai-based Institute for Corporate Governance and supervised by the accounting giant KPMG.

Nasser Al Nasser received this award for his pivotal role in maintaining STC's growth in profits in 2018, and the launching of the company's new "DARE" strategy for ongoing growth and digital transformation, as well as the launching of STC Pay, which specializes

in digital payments. Not to mention his major role in supporting digital transformation plans that help achieve the Saudi Vision 2030, as well as his role in empowering women in STC to assume supervision and leadership positions.

STC Group CEO participated in the conference's main plenary session entitled the "Future of Growth Amid Volatility" with a number of CEOs who highlighted the need for creating strategies that strengthen capacities in order to be able to address future challenges and maintain growth.



# STC announces revenues for Q1 2019

### STC's Net Income for Q1 2019 compared to the corresponding quarter last year increased by 6.3%, and it distributes SR 1 per share dividends for Q1 2019

STC has announced the company's preliminary financial results for the period ending at 31 March 2019:

- Revenue from Services for the 1st quarter reached SR 13,386m an increase of 8.4% compared to the corresponding quarter last year.
- Gross Profit for the for the 1st quarter reached to SR 7,903m an increase of 14.0% compared to the corresponding quarter last year.
- Operating Profit for the 1st quarter reached to SR 3,275m an increase of 24.4% compared to the corresponding quarter last year.
- Earnings before Interest, Taxes, Zakat, Depreciation and Amortization (EBITDA) for the 1st quarter reached to SR 5,386m an increase of 19.0% compared to the corresponding quarter last year.
- Net Income for the 1st quarter reached to SR 2,750m an increase of 6.3% compared to the corresponding quarter last year.

In accordance with the approved dividend policy for three years starting from the 4th quarter 2018, which was announced on 16 December 2018, and remains subject to the ratification by the General Assembly Meeting that was held on April 24th, 2019 corresponding to 19/08/1440 H, STC will distribute a total of SR 2,000 million in cash dividend for Q1 2019, representing SR 1 per share.

The eligibility of dividends shall be for the shareholders at the close of trading on Sunday 05/05/2019 corresponding to 30/08/1440H and as per the registered shareholders in the register of The Securities Depository Center Company at the end of the 2nd trading day In order to establish our following the eligibility date.

Commenting on the results, Eng. Nasser Bin Sulaiman Al Nasser. STC Group CEO, stated: what has been achieved in this quarter compared to the comparable quarter last year was a result of our commitment to implement and achieve STC's strategic plans. The commitment to provide the best technical services, the cost optimization initiatives, and the outstanding performance of our subsidiaries as well as, the

investments in traditional and non-traditional sectors both had a positive impact on the financial results of the first quarter of this

He further added, part of the company's strategy is to invest in new and diverse domains that can enable the digital transformation and enrich the customers' experience. STC will continue to play its role as an incubator for creative projects and ideas that capture the rapid changes in the telecom industry, customer needs and requirements as both innovation and investment are key factors to accelerate and achieve the digital transformation.

pivotal role in enabling digital transformation within the guidelines of vision 2030, STC has signed three strategic agreements with international companies as part of the "5G Aspiration Project" to deploy the 5G network and develop innovative services and solutions related to latest generation of networks and communication technologies, which comes across our commitment to launch one of the fastest network in the world. lacksquare



# The first 5G roadshow is launched in the sixth forum of scientific societies





On the sidelines of the Sixth Forum of Scientific Societies, Huawei's first 5G & ICT Roadshow was officially inaugurated by HRH Prince Mohammed bin Abdulrahman bin Abdulaziz Al Saud, Deputy Governor of Riyadh. Huawei, a strategic partner of the Sixth Forum of Scientific Societies, will conduct the roadshow tour in the Kingdom connecting with local representatives from government, business, universities and the

The Huawei roadshow truck is designed specifically to showcase the benefits of 5G networks, incorporating demonstrations like artificial intelligence (AI) applications of 5G, and its uses in the latest technologies including intelligent video surveillance, robotics, augmented reality and more. Members of the public are welcome to visit the truck to learn 5G knowledge for themselves and to better understand the important role that 5G will play in supporting the goals of Saudi Arabia's National Digital Transformation Plan 2020.

Dennis Zhang, CEO of Huawei Saudi Arabia, said: "Saudi Arabia is one of the most advanced countries in the region when it comes to 5G planning, and we are privileged to work alongside telecommunications companies in the Kingdom to help realize the deployment of next-generation services across the nation. Our 5G & ICT Roadshow will

demonstrate to citizens and organizations across Saudi Arabia that the benefits of 5G are immense; they will empower the progression of our connected society and contribute to achieving digital transformation in line with Saudi Vision 2030."

Mohammed Alobaida, General Supervisor of the management of scientific societies, thanked Huawei for participating as a strategic sponsor for the event. Huawei launched the 5G roadshow technology exhibition and the IT roadshow exhibition to highlight the importance of the 5G, and is open for the forum's visitors to expand their 5G knowledge and experience the demo of 5G in the truck, which will be the first time in the Middle East and the Kingdom.

Huawei has been a partner of choice for telecom carriers globally in 5G network development, in part because of its broad range of end-to-end 5G solutions covering network sites, architecture, protocols and network operations & maintenance.





### Highly technical cybersecurity conference in the Middle East returns to dubai

#### Fostering disruptive innovations from young minds throughout the region

Dubai Electronic Security Center has organized in partnership with Comae Technologies a conference titled (OPCDE) which hosted more than 200 delegates. The technical cyber security conference (OPCDE) gathered security researchers, professionals and cyber security specialists, as part of its determined push to curb incidents of cyber security threats.

The OPCDE conference featured worldrenowned speakers who shared insights on the latest research, threats, and trends in cyber security, including experts from Google, Microsoft, FireEye, and Crowdfense.

"At OPCDE, we brought together renowned national and international experts who shared the latest cyber security practices while correlating these with emerging technologies. This will raise public awareness about risks and the important role of security in the digital age and cater to the growing demand in the market for cyber education and training." said Dr. Marwan Al Zarouni, Director of Information Services at DESC, who delivered the keynote address during the event



"This third edition of OPCDE was another successful milestone for the local ecosystem, bringing some of the best international and local security researchers together. This is another step for Dubai in nurturing. A strong local talent pool in order to become a global hub." Said Matt Suiche, founder of OPCDE

Aside from keynote speeches, one of the event's highlights was the Capture the Flag (CTF) competition, which was organized by Hackers Academy with support from NYUAD. The competition was aimed at encouraging and fostering youth talent in the field, featuring challenges in different categories like reverse engineering, web security, digital forensics, network security and others.

From the 35 participants, three winning teams emerged - PonyPaw, Team404 and WosWos, who were awarded cash prizes by Hackers Academy, Emirates Digital Association for Women, and security keys by The Kernel Dubai.

"It is important to empower the next generation of digital talent and equip them with the technical skills needed, DESC is supporting and partnering with initiatives and opportunities like OPCDE. It is events like these that help us take a step forward to realizing Dubai government's efforts and achieving our plans and initiatives for solving the cyber security challenges and building a secure and resilient cyber space for Dubai," Zarouni ended. II

# Western Union digital services enhanced in the UAE with mobile app and online access

Western Union Digital Now Live in Seven Countries Across the Middle East



Western Union's global digital moneymoving capabilities were enhanced in the United Arab Emirates (UAE), as a part of the company's deep commitment to keeping this nation at the forefront of the digital revolution.

Along with the UAE, Western Union is making significant headway across the Middle East, with more than seven countries now offering online services including Bahrain, Jordan, Kuwait, Lebanon, Oman and Qatar.

In the UAE, the company launched the Western Union® mobile app and relaunched the Westernunion.com website, in association with local Agent Al Fardan Exchange, one of the leading financial services providers in the country. Customers in the UAE can now connect to their families and loved ones around the world digitally with the choice to pay for transactions online or within the app via direct transfers from their bank accounts set up in the UAE.

Currently, Western Union offers digital service via WU.com in over 60 countries, plus territories, with mobile apps in 35 countries;

moreover, its entire network is a combination of retail Agent locations in more than 200 countries and territories, account payout in nearly 100 countries, and wallet payout in a dozen countries.

The Middle East is a vital and rising economic hub bringing people together from across Europe, Africa and Asia and lifting them toward prosperity. International migrants working and living across the region represent a large part of the population and collectively send billions of remittances back home. In the UAE, 88 percent of the population are international migrants, followed by Qatar at 75 percent, Kuwait 72 percent, Bahrain 51 percent, Oman 41 percent, Jordan 40 percent and Lebanon 34 percent, according to the World Bank1.

The UAE remits a sizeable volume of the total amount of remittances, which makes the country the third largest person-to-person remittance market in the world, according to the World Bank2.

"Our commitment to the Middle East is a step forward to a more prosperous and globally connected future. Our digital





services support globally-integrated living without leaving anyone behind. We use cutting-edge technology to simplify money transfer. Our systems automatically handle complexities from compliance to volatile currency exchanges so users can transfer money 24/7 to nearly every country across the world, with the touch of a few buttons," said Western Union President and CEO,

"Our systems are also designed so that customers at any level of financial experience can use any channel they like, be it digital or cash, online or offline," he said.

"The ability to smoothly and fluidly transfer money internationally by the latest digital means elevates our relevance to our customers across the world. We have offered our services for more than two decades across the Middle East, including the UAE and we are pleased to be collaborating with Al Fardan Exchange," said Western Union General Manager and RVP for Middle East and Africa, Alexandru Badulescu.

"Western Union's customers are multicultural, multi-generational with diverse financial and technological savviness. Our omni-channel approach is about servicing the widest group of customers by catering to their specific money transfers needs," he



Al Fardan Exchange has offered walk-in Western Union® Money Transfer Services since 2010 and now offers customers the choice to complete their transaction digitally online or commence transaction digitally and pay-in-person across 67 Agent locations.

"The UAE launch is aligned with this vision of the country, one that is staying on the edge of innovation to make a better life for all its people. This is where UAE and Western Union grow together, and we are glad to be a part of this historic collaboration," said Al Fardan Exchange LLC CEO, Osama Al Rahma.

"Digital tools mean, at their essence, more ways to reach more people and more opportunities for all. The more the UAE fulfills its ambitious plans for economic transformation, the greater will be its need to interact with the world. More workers from overseas, more tourists visiting its shores, more students going abroad to study all require better flows of international capital," he said.

As one of the world's most innovative nations, the UAE is striving forward with an ambitious agenda of growth and dynamism. According to the Global Competitiveness Report 2018 by the World Economic Forum, the UAE is ranked first in the world for mobile broadband subscription rate, and second in the mobile subscription index - which highlight both the country's high level of commitment to digital development and its fast rate of mobile adoption.

Western Union has been providing moneytransfer services in the UAE for over 20 years and has more than 900 retail agent locations in the country. Customers still have the choice to access these locations to send money transfers in person, reflecting the company's commitment to providing choice and options to connect to families and friends around the world.

# Thaicom reports Q1/2019 results



Thaicom has announced its financial results for the first quarter ended 31 March 2019.

Thaicom's revenue decreased compared to the previous quarter and the same quarter of last year. Due to effective cost management, the profit from normal operations improved. The company reported a net loss due to the writing-off of assets in Q1/2019.

Thaicom reported revenue from sales and services for Q1/2019 of THB 1,303 million, down 13.5% from Q4/2018, and down 13.4% from Q1/2018, mainly due to the decrease of revenue of conventional satellite services as the Company secured a long-term contract with a major customer at discounted yield. Whereas, revenue from the Thaicom 4 broadband satellite increased.

EBIT from normal operations was maintained at Baht 96 million, a significant improvement from Q4/2018 and Q1/2018 when the Company reported a loss of Baht 126 million and Baht 20 million. respectively. Thaicom reported EBITDA of Baht 559 million for Q1/2019, equivalent to an EBITDA margin of 43%, an increase from 24% for Q4/2018 and 31% for Q1/2018 as a result of cost saving measures.

The Company reported a net loss of Baht 33 million for Q1/2019, resulting from the writing-off of assets of Baht 34 million and the loss from share of profit of investment in joint venture of Baht 5 million.

The Company's sustained focus on providing managed and professional satellite services to partners in the APAC region, along with restructuring efforts, stringent cost management and lower cost of services rendered, has started to yield positive results—thus offsetting the global decline in earnings from satellite and transponder services and the challenging video market to some degree.

Anant Kaewruamvongs, CEO, commented: "Our focus on cost control and the restructuring of our organization has started to pay off. As we head further into 2019, we continue to work hard on our 3 long-term strategies. Firstly, in order to sustain our satellite core business, we have made good progress in forming new industry alliances and joint investments with other regional satellite operators. Meanwhile, we are open to discuss various forms of project collaboration to enhance public-private partnership. Secondly, we have continued to leverage our marketing and technical

strengths to develop businesses that are adjacent to the satellite business, for example in the area of satellite consultancy services, teleport services, as well as system integration of satellite and related communication networks. Thirdly, we have embarked on venturing into new business areas with a focus on digital and future technologies to diversify the Company's portfolio and reliance on the satellite business."

Lao Telecommunications Co., Ltd. (LTC), Thaicom's telecommunication and mobile service provider subsidiary in Lao PDR, reported total mobile subscribers (excluding fixed wireless) of 1.48 million. The country's leading mobile network operator reported a market share of 56% in Q1/2019.

### **EUTELSAT 7C** completing final stages of pre-launch preparation

A crucial stage has been completed in the production of Eutelsat Communications' high-power broadcast satellite, EUTELSAT 7C, serving markets across Africa, Europe, Middle East and Turkey.

As part of the environmental testing completed in early February 2019, the all-electric EUTELSAT 7C, manufactured by Maxar Technologies, was subjected to conditions simulating the launch and harsh space environment in orbit. With the loading of the spacecraft tanks with Xenon propellant now finalised, the satellite is currently undergoing final preparation operations ahead of shipment to the Arianespace launch site in Kourou, French Guiana, where it is due to be launched as a co-passenger on an Ariane 5 rocket before the end of June. I

### **Emirates NBD wins Cloud Computing Innovation** of the Year at FStech Awards



Emirates NBD, was awarded Cloud Computing Innovation of the Year at the FStech Awards in London. The award recognises Emirates NBD's success over the past two years in not only launching its own private cloud as a first in the Middle Eastern banking sector but for also progressively expanding its capabilities to include a dedicated developer portal, Continuous Integration/Continuous Delivery (CICD) capabilities, and over 250+ Application Program Interfaces (APIs).

This represents a game-changer for Emirates NBD in terms of more rapidly delivering and innovating its banking services.

Some of the benefits of the cloud adoption include auto-scaling under load, automated deployments, reusable APIs, auto-restart of

failed applications and cross-site resiliency. Moreover, the developer portal is now being used to drive new local and international FinTech and third-party relationships.

"Emirates NBD is honoured to receive this award from FStech for our cloud adoption, which reflects a key milestone of the bank's AED 1 billion digital transformation," said

#### Abdulla Qassem, Group Chief Operating Officer at Emirates NBD.

"We will continue working to ensure that cloud is an intrinsic part of our enterprise's landscape to deliver the highest level of agility and speed to market for new digital products. This will help to further solidify Emirates NBD's position as an innovationdriven bank," he added.



# Hispasat and hiSky to offer IoT and MSS in Mexico



HISPASAT has completed the successful installation of a hub at its gateway in Ixtlahuaca del Rayón (México) to manage the Smartellites™, hiSky terminals that offer MSS (Mobilesatellite services) and IoT solutions through Amazonas 5 satellite Ka band, which covers 79% of Mexican population. Both companies signed an Agreement in 2017 to jointly commercialize this solution in Spain, Portugal, Latin America and North Africa.

hiSky Smartellite™, a small portable easy-to-use terminal, includes a small, flat antenna based on phased-array technology to provide low-capacity MSS (Mobile Satellite Services) and IoT by using the Ka band of HISPASAT satellites. With the new HUB installed in Mexico, hiSky's unique NMS (Network Management System) is capable to control thousands of terminals in the Amazonas 5 Ka band footprint, by that providing hiSky's services to all, and in low prices to areas with no or low connectivity.

Both companies made several demonstrations in Mexico City of the Smartellite™ MSS and IoT solutions to leading international telecom companies. Thus, more than 12 companies, among them AT&T, Telefónica and iDirect witnessed how the Smartellite<sup>™</sup> can offer excellent solutions, emphasizing the scenario of remote monitoring and control system sensors. An accurate, reliable and up to date data is available via satellite without compromising on the location of the sensors or monitoring system and the terminals can interface via WiFi, Bluetooth and LoRaWAN/LoRaPRIVATE. hiSky Smartellite™ terminals also demonstrated the simplicity of making calls by the satellite Ka band link.

### NovelSat unveils Video delivery solution for 4G/5G mobile networks

NovelSat has unveiled a comprehensive satellite broadcast/multicast solution for the delivery of live TV and OTT video services. The innovative satellite-to-mobile video solution now enables mobile service providers to roll out TV and video services on a large scale while optimizing network investment.

As mobile video dominates mobile data traffic, a mobile service provider using a hybrid satellite-terrestrial network can now keep pace with traffic growth while introducing new video services such as live TV channel bundles.

Complementing existing backhaul links with a satellite broadcast overlay enables service providers to leverage 4G infrastructure while

evolving to 5G networks and services.

The broadcast overlay network delivers new levels of video quality and volume for OTT distribution to remote cache storage and for live TV streaming, thus offloading broadband backhaul connections.

The NovelSat satellite-to-mobile video solution incorporates all core-to-edge video delivery functionalities including highefficiency multi-stream, multi-profile video encoding/decoding, multi-channel video transcoding, multi-profile video packaging, high-efficiency satellite modulation/ demodulation, the highest level of content security and protection, content entitlement and scheduling tools, resource management and optimization and more.

The comprehensive solution comprises a Video Core, a Video Edge Gateway, a Video Manager and a Network Management System. Utilizing software-based modules, the solution is highly scalable and enables large-scale deployment of ample bandwidth to numerous cell sites and locations.

"Users now want to consume video when they want it, where they need it, in the device of their preference, and they expect live TV and video with the consistency and quality they experience at home. As general viewing habits continue to favor linear video consumption, live streaming will be the fastest growing component in IP traffic," said Lluc Palerm, senior analyst at NSR -Northern Sky Research.



The Communications Regulatory Authority (CRA) hosted a delegation from the GSM Association (GSMA) at its headquarters The two parties discussed a number of matters of mutual interest and ways to activate cooperation in different fields and issues related to the mobile industry.

Head of Middle East and North Africa (MENA) at GSMA and the accompanying team presented a brief overview of GSMA's industry programs such as Future Networks, supported by the GSMA like bringing the views of the policymakers closer, promoting sustainable investment in the vital mobile At the end of the meeting, the two sides

sector, in addition to the role of mobile telecommunications in the economic and social development as well as some topics related to spectrum.

CRA from its part provided an overview on some of the regulatory instruments that are going to be developed in accordance with the new government legislation as well as some of strategic plans related to spectrum and telecommunications infrastructure, which are in line with Qatar National Vision Identity and the Internet of Things as 2030. In addition, CRA presented a number well as the advocacy initiatives that are of its future projects for FIFA World Cup

expressed their interest to activate a future cooperation, especially in the area of institutional capacity building for knowledge acquisition as well as to host number of future workshops in Qatar, specially the one related to the impact of telecommunications towers and mobile stations on the socio of health and environment.

The GSMA represents the interests of mobile networks operators around the world, and includes under its umbrella more than 750 operators including 400 companies from manufacturers of mobile phones and private software companies, equipment suppliers and Internet companies, as well as institutions working closely with the sector. **I** 

### CRA publishes a consultation on the proposed Class License for WHANs

The Communications Regulatory Authority (CRA) launched a public consultation for the proposed Class License for Wireless Home Area Networks (WHANs). The aim of the consultation is to receive views and comments on the content of the Class License from multi-stakeholders including consumers, telecom service providers, or suppliers and manufacturer of Radio & Telecommunications Terminal Equipment automation systems. (RTTE) no later than May 21, 2019. The proposed Class License is for WHANs and covers Smart Home Area Systems, which are anyone in Qatar to possess, use, operate,

electronic devices that work interactively. Despite its small size, it has the ability to connect with other smart devices through WHAN, which connects between various devices and systems at the house, so that the user can control it remotely through simple orders. This includes automated electrical home appliances and heating systems, wireless alert and sensors, as well as lighting

The Class License for WHAN will enable

and install the approved class of devices for personal use according to the frequencies specified in the License, without having to apply for a License or paying License or spectrum fees. However, the user must ensure that the devices are compatible with CRA's Regulatory Framework, and follow the necessary procedures for customs clearance. In case of importing WHAN devices for commercial purposes in Qatar, it is obligatory to obtain Type Approval Certificate, Import Authorization License and Customs Clearance Certificate from CRA.



### du wins Seamless Award for Blockchain Initiative

du covets the prestigious Seamless Award for Blockchain Initiative for its BPaaS (Blockchain Platform as a Service) platform. The award was presented at the 2019 Seamless Awards, which took place at the Armani Hotel in Dubai and recognized the telco's role in supporting the UAE's Blockchain Strategy.

du launched an initiative to build the first

Blockchain Platform as a Service (BPaaS) in the UAE, in partnership with global blockchain solutions provider ConsenSys, to improve the everyday life of the citizens of Dubai and acknowledge the Government of Dubai's pioneering blockchain vision. Leveraging the powers of blockchain, the service offers the ideal basis for a secure, easy-to-deploy, decentralized platform.



Marwan Bin Dalmook, SVP ICT Solutions & Smart City Operations, EITC said: "We are extremely proud to receive the Blockchain Initiative Award for BPaas this year. Blockchain technology is at the heart of innovation as it plays a key role in authorization, identity management and digital payments. In fact, BPaaS is estimated to produce AED5.5 billion in annual savings for document processing alone. We aim to make blockchain the backbone of Dubai's smart transformation."

Blockchain Platform as a Service (BPaaS) is a cloud native blockchain infrastructure that can provision private blockchain networks with a high level of customization, support multiple consensus algorithms with monitoring, and manage capabilities and smart contract capabilities on two blockchain protocols Ethereum and Hyperledger.

The solution allows government employees to attest or accredit documents and stamp documents on the blockchain once validated.

From there on, any employer or individual can instantly verify the validity of the attested document via a web browser or by scanning the QR code on the document and verifying it using a mobile-based application.

### Osman Sultan honored with a Lifetime Achievement Award

Osman Sultan, CEO, Emirates Integrated Telecommunications Company (EITC) received 'Lifetime Achievement of the Year' at the Arabian Business Technology Awards. The award recognized 35 years of outstanding service in the ICT sector.

The Lifetime Achievement Award acknowledges Sultan as an industry pioneer who has helped shape and inspire the Middle East and Africa region's telecommunications market. In receiving the Award Sultan credited his success to Passion and People.

Passion for his job, for an industry that is changing everything and more importantly for people. He thanked his family and all the people he worked with throughout his illustrious career.

He highlighted that one of his greatest prides is having 22 persons who worked with him throughout different stages of his career and who have now established themselves as leaders in their field across the world.

Recounting his successes, Sultan recounted his journey since the launch of du in 2006 and its role in one of the region's fastest-growing and rapidly changing telecoms sector. "The road to success is never easy. It has been a rough journey yet a very rewarding one. EITC has been at the vanguard of the UAE transformation agenda since its inception, and it has been my great honor to have been the founding CEO of something that became a vital part of the UAE infrastructure and economic fabric.

I thank Arabian Business for this distinction and our loyal customers for their support in this auspicious journey. My sincere thanks also go to my exceptional team at du together we stand committed to continuing our efforts in offering unparalleled value, availability and choice of telecommunications products and services across the region."

The ceremony brought together the leading companies and pioneers that are making their mark on the way technology achievements are effecting business in the region.

"It is fair to say that by being at the helm of one of the largest technology companies in the country, Osman Sultan has been one of



the main personalities who has helped steer that revolution and bring about positive change for almost every resident in the UAE," said Shane McGinley, Editorial Director, Arabian Business.

The award reaffirms the visionary leadership of Osman Sultan's under whose quidance du has quickly consolidated its position as the forward-thinking telecommunications provider of the UAE, offering smart, userfriendly telecom solutions to individuals, homes and businesses, as well as carrier

services and broadcast services. Since Sultan founded du-EITC, it has risen to gain a 47% stake in the UAE telecommunications market. The company reported a net profit of AED1.78 billion in 2018.

The Arabian Business Technology Awards recognized achievements in AI, digitazion, e-commerce and individual excellence. Winner were selected by the Arabian Business editorial panel and announced at a lavish gala dinner, following the Arabian Business Technology Forum.



# STCPay appoints a new Board of Directors Chaired by Khaled Al Jasser with 6 expert members















STCPay has announced the appointment of a new Board of Directors headed by Khalid Bin Sulaiman Al Jasser and memberships of six experts in banking services and information technology.

Khalid Al Jasser has over 30 years of experience in the banking field, during which he was the CEO and Board Member of AlBilad Bank, Vice President of Human Resources at Riyad Bank, the CEO of the Arab Centers and member of the Board of Directors.

In addition, he was a member of the Board of Directors of Qassim & Al-Jasser Cement Company. He holds a Bachelor's degree from King Saud University in Financial Management.

The new Board of Directors of STCPay included the CEO and board member of startup eco-system and former CEO of Beam Payments Alejandro Carbon and Abdullah Al-Abdaljabbar, one of the founding partners of Marco Strategic Consulting, a member of the Board of Directors of Saudi Gas, a member of the Board of Directors of Saudi Cargo, member of the Board of Directors of NCB Capital, in addition to 4 executives from STC Group, the former CEO of Viva Bahrain and the Senior Vice President of STC Group, Eng. Ulaiyan Al-Wetaid, the Vice President for Strategy and Executive Affairs and former President of CISCO Systems in Saudi Arabia Mohammed Al Abbadi, as well as the Strategic Operations Chief Jeremy Sell, and Vice President of Corporate Finance and Investment Operations Ali Al-Harbi.

# Emirates signs MoUs with three teams from Dubai **Future Accelerators programme**





Emirates has demonstrated its commitment to fostering innovation in the global aviation industry by signing MoUs with three teams from the sixth cohort of the Dubai Future Accelerators (DFA) programme. The companies, hailing from the USA, Germany and the UK, were selected from the pool of seven participant teams that worked with Emirates through DFA for nine weeks between March and May 2019. The MoUs were signed by Adel Al Redha, Emirates' Executive Vice President and Chief Operations Officer and by representatives from the shortlisted companies - Opinsta (UK), Predapp (Germany) and Verusen (USA).

The DFA programme builds on Dubai's position as a leader in stimulating innovation and creativity by bringing the best of innovative start-ups from around the world to work with corporate entities and government agencies in Dubai

Emirates joined the DFA programme in 2017. In what was a first earlier this year, Emirates and the Dubai Future Foundation announced that all the teams participating in the sixth cohort of the DFA programme would be dedicated to addressing three challenges set forth by Emirates in the domains of B<sub>2</sub>B procurement, seamless customer experience, and an integrated system for crew duty travel.

The teams from Cohort 6 of the DFA programme worked with stakeholders from Emirates to map out requirements, refine their proposals and develop prototype solutions. Opinsta, Predapp and Verusen were chosen based on the fit of their proposed solutions, and broader application and scalability within Emirates.

Adel Al Redha, Emirates' Executive Vice President and Chief Operations Officer said: "Over the course of nine weeks, the interactions between the teams at Emirates as well as the participants of Cohort 6 of the Dubai Future Accelerators programme have resulted in a number of options we can explore to address the challenges we had defined. All the participating teams were actively engaged in the challenge and were able to gain considerable insights into the functioning of the world's largest international airline in the areas outlined in the challenges. This by itself has sparked off

a number of ideas for further innovation both within and outside of the aviation industry.

"Even though all the proposals were interesting, we signed MoUs with three shortlisted companies to explore their solutions in depth and evaluate the outcomes to provide our customers a better experience and implement more efficient process," he

HE. Khalfan Belhoul, CEO at Dubai Future Foundation said: "What we are witnessing here is the advancement of the next wave in aviation innovation led by the UAE government by adopting and testing emerging technologies, and reiterating once again Dubai's role in shaping the future of humanity.

"The MoUs signed today are the outcome of DFA's offering of an ideal setting for Emirates, the world's largest international airline, along with the brightest and most innovative minds, to work hand in hand in finding transformative solutions to key challenges in the aviation industry," he added.

Verusen will be working on using Artificial Intelligence to support more agile procurement and supply chains for Emirates. Opinsta will be working on enhancing the internal processes and systems for crew duty travel and Predapp will work on developing an Emirates AI Assistant that will assist airline customers from pre-flight to post-flight.



### Parallel Wireless wins 2019 **Leading Light Award**

Parallel Wireless was awarded top honours at the 2019 Leading Lights Awards last night, for its Unified 2G/3G/4G/5G (All G) software. Walking away with the Most Innovative Mobile/ Wireless Product or Service Award, continues a strong streak of international recognition for the US-Based company that is busy helping telecommunication providers across the globe, deliver better services and achieve economic sustainability.

The biggest expense for Mobile Network Operators (MNOs) has always been the Radio Access Network (RAN), accounting for around 60 % of CAPEX and 65 % of OPEX. With successive upgrades from 2G to 3G, 4G and now 5G, there was a correlating replacement of the RAN. On receiving the award, Christoph

for Parallel Wireless in Africa remarked: "We are delighted to have been acknowledged by the industry as a Leading Light. "The possibilities of OpenRAN are endless and we are excited about what the future holds for all of us. Open access provides the opportunity for greater collaboration and therefore greater innovation of products and services, which we can in turn, advance to more people on the planet."

Fitih, Director, Africa Sales

Lux Maharaj, Director: Africa Sales for Parallel Wireless concurs: "Providing the means with which, the old and the new, can be integrated with one another to provide a seamless output, is only just the beginning and Parallel Wireless is proud to be a pioneer in this space."

no dedicated hardware is

required, and flexible, scalable

price models offer highly cost-

efficient solutions that can be

tailored to each user's specific

monitoring needs. Within

minutes, R&S PRISMON.cloud

users can deploy virtual sensors

throughout their distribution

broadcasters, content creators,

network operators and service

providers can guarantee the

Quality of Service to their

customers. In highly competitive

markets, this translates to a

superior Quality of Experience for

the consumers and consequently

advanced

capability,

Through

monitoring

reduced churn. **II** 

### Rohde & Schwarz selects Microsoft Azure

Rohde & Schwarz has announcd that its first ever Monitoringas-a-service solution - R&S PRISMON.cloud - will be based on Microsoft Azure.

Building on the success of its market-leading R&S PRISMON monitoring system, R&S PRISMON.cloud leverages from cloud-infrastructure possibilities to tackle the age-old monitoring challenge. Provided in a Monitoring-as-a-Service (MaaS) form, it enables broadcasters and content providers to quickly integrate advanced monitoring, analytics and trouble-shooting within their content creation and distribution workflows.

PRISMON.cloud

## US pledges billions in fresh 5G push

United States president Donald Trump insisted the country must win the race to 5G, as regulator Communications Commission (FCC) announced plans to hold a third mmWave auction and pledged to invest \$20 billion for rural deployments of the technology.

the White House alongside FCC chairman Ajit Pai, Trump underlined the importance of 5G to the US, stating his administration was freeing up spectrum to encourage investment in the technology. "5G networks must be secured, they must be strong...they must also cover every community and they must be deployed as soon as possible," he said.

In a press conference held at

Pai unveiled plans to launch

a new \$20.4 billion subsidy programme to support broadband deployments in rural

Over the next decade, he said the Rural Digital Opportunity Fund will distribute monies to help companies finance construction of new fibre infrastructure with the aim of connecting up to 4 million rural homes and laying a foundation for future 5G sites.

Pai also announced a third mmWave auction, covering licences in the 37GHz; 39GHz; and 47GHz bands, will commence on 10 December. The proceeding will offer largest amount of spectrum (3,400MHz) ever auctioned at one time in the nation's history, following sales in the 24GHz and 28GHz bands held earlier in the year. lacksquare

## **OPPO** becomes Wimbledon's Official Smartphone Partner

OPPO has been announced as the first Official Smartphone Partner of The Championships, Wimbledon, through partnership with the All England Lawn Tennis Club (AELTC).

Partnering with one of the world's most renowned sporting events amplifies OPPO's global expansion, which has recently seen the company join forces with several global partners, as well as establishing its presence in the Middle East with a new regional hub in the UAE.

With an established strong pedigree of partnerships in global sports, including working with FC Barcelona and the International Cricket Council (ICC) as the

official mobile phone partner, the new five-year relationship with AELTC marks OPPO's first move

Speaking on the partnership, Alen

Wu, OPPO Global Vice President, President of Overseas Business, "We are committed to pushing boundaries and redefining standards when it comes to smartphones. In this sense, we are well-aligned with Wimbledon and its motto of 'In Pursuit of Greatness', which emphasizes our pursuit of delivering an exceptional smartphone experience to users around the world, as demonstrated by our latest Reno series, and by our earlier groundbreaking Find X."

# Can security beat the well-armed adversary?

By Mahmoud Mounir, Regional Director Secureworks META, Secureworks



To combat threats in today's environment, organisations must understand that from tools to tactics, the security game is Secureworks Chief Threat Intelligence

There is an adage in the information security profession that loosely states a security team must be right every time while a threat actor just needs to be right once. The odds are unfairly stacked against organisations fighting to protect their brand, their clients and their employees' livelihood.

Organisations are continuously bombarded by a changing threat landscape and evolving adversary tactics. An organisation's attack surface shifts – and even expands -- as quickly as the business itself changes direction, yet security budgets often remain stagnant at best. Ambiguous and often contradictory viewpoints in the security industry often confuse and frustrate organisations about what 'right' looks like as they defend their networks. Even worse, the industry perpetuates an unrealistic notion that organisations can protect their environments 100% of the time. In theory that sounds like an ideal goal, but in reality, it

sets organisations up for failure.

Officer Barry Hensley is often heard reminding security teams: "You cannot secure a network, but you can defend one." Technologies and tactics are improving, providing more visibility and context, but organisations still struggle to rapidly take risk-reducing actions with confidence.

#### More Noise Doesn't Guarantee More Signal

Consider this common scenario which plays out at organisations around the world every day. Company X spends \$3M USD on SIEM licensing annually and an additional \$8m annually on staff, tools and other security licensing. They realise after installing the SIEM that the out-of-the-box use cases provided are not applicable or do not work in their environment, requiring them to figure out how to apply intelligence about the threat landscape to their environment. Alert fatigue and false positive rates become overwhelming and unmanageable, so they start turning down logging levels and disabling signatures. Now to get the value from their investment, they decide to add external intelligence to make the tool smarter and increase efficacy. This drives the costs up even further. But threat intelligence still doesn't solve the ineffectiveness of their tool's use cases so the organisation opts for added professional services from their SIEM provider to help solve the problem that the tool inadvertently helped to create in the first

Though SIEMs can be tremendous security assets, return on investment can be disappointing without the proper context and threat knowledge. Costs continue to stack up as security leaders realise that existing controls are being bypassed by the latest adversary tactics. Increases in licensing costs drive up budget, leading to what can easily become a \$20 million annual budget request. Meanwhile, risk hasn't been measurably reduced, and the strain on staff results in turnover, reducing the level of business knowledge and environment expertise on the security team.

### "Starve Your Distractions. Feed Your

The security industry and organisations alike are failing - online criminals outnumber ethical hackers, are better funded and can evade many security defenses by making the smallest tactical changes. In every industry, across the globe, one of the most chronic cybersecurity health epidemics is the irrational manner in which security controls are applied to organisational environments.

When layer after layer of disparate tools are implemented in an effort to react to the latest risk factor, environments become noisy and complex. Difficult to manage and sometimes incompatible, those layers become riddled with gaps caused by uncoordinated technology, people and processes. As a result, risk reduction reaches a point of diminishing returns, meaning that adding another control to the environment does not reduce risk to a level which justifies the spend. Many organisations also often fail to widen their framing of the threat landscape and understand how quickly it changes – it's a



struggle for many to understand how fast adversaries change tactics which is critical to defending against them. Instead, they react to trends in their vertical or get distracted by emerging threat topics that may or may not be relevant to the organisation's unique risk profile. Keep in mind there is nothing inherently wrong with information sharing across your networks and keeping up with trends that could impact your organisation, but tactics should be contextualized by how they fit into your overall security program, your own evolving threat landscape and what is likely to reduce the most risk.

#### The Reality of Game-Changing Conditions

Organisations are the masters of their business and environment, but most struggle to keep pace with an ever-evolving threat landscape, despite investment in tools and talent. The bottom line is that for most organisations, the investment needed to build out an effective internal security program are allocated to business units that more directly contribute to business growth. And when you think about it, why wouldn't you want to focus on what makes your business money?

But to best defend your organisation, companies must prioritise not only security tools but also the context – both security and business context - needed for those tools to help you reduce risk without stifling innovation. And the security industry itself must innovate faster and with more confidence to provide that context. Security technologies have improved but have yet to reach their full potential, providing more intuitive, responsive and integrated solutions. The game is changing and only by working together can we make it harder for the bad guys to score.

## Zain Group and EXFO honored at 5G MENA awards

"Winning in the Digital Revolution" with Best Telecom Service Innovation



Zain Group and EXFO have been jointly recognized with the 5G MENA award for Best Telecom Service Innovation.

The award was presented at 5G MENA 2019, the largest event in the Middle East and North Africa region to focus on advancing and commercializing 5G networks. It recognizes the operator "winning in the Digital Revolution by utilizing existing technology capabilities or developing new ones to introduce new products and services for consumers and customers."

"Zain's innovative digital strategy is built on solid customer experience management and

evolving the existing telco core to maximize value," said Khawla Al-Jaber, Zain Group's Technology Strategy and Performance Director. "The customer intelligence provided by EXFO is one of the crucial factors in achieving this goal and in helping Zain turn this data into service differentiation and efficiency improvements that impact our

"EXFO has been Zain's close partner for more than a decade, supporting their operations in technology and business transformations with our test, monitoring and analytics," said Abdelkrim Benamar, EXFO's Vice-President of Service Assurance, Systems and Services.

"Using technologies such as AI and machine learning helps us take predictive analytics to the next level. Our customers get a deep understanding of an increasingly complex ecosystem; actionable insights to automate network operations; increased subscriber satisfaction; and the ability to monetize their investments. These are the foundations you need to do 5G right."

# Rohde & Schwarz wins major DVB-T2 terrestrial transmission contract in Egypt



Egypt's ENMA has selected an advanced system solution from Rohde & Schwarz. To be installed at nine sites across the country to provide DVB-T2 coverage, the contract comes with strict timescales. All equipment will be installed and commissioned by mid-June 2019 so that DVB-T2 SD and HD broadcasts are on air before the start of the 2019 Africa Cup of Nations soccer tournament.

Throughout the contract negotiations and the project, Rohde & Schwarz is working closely with its local partner, Egypt-based Integrated Communication Systems (ICS).

One of its most advanced large-scale DVB-T2 transmitter systems, the project sees R&STHUgevo 2KW UHF transmitters installed at nine sites across Egypt. The R&S THU9evo UHF high-power transmitter family is designed to minimize operating costs for terrestrial broadcasters whilst maintaining performance and reliability. With overall efficiency values of up to 40 per cent for COFDM and 43 per cent for ATSC, this product family represents the market-leading DVB-T2 transmitter solution.

"ENMA is planning to cover Egypt with DVB-T2 transmission and the current project will cover part of our plan," commented Mrs. Mervat Hassan, Chairman of Broadcast Engineering Sector at ENMA. "This project is very important for us and we are looking forward to cooperating with Rohde & Schwarz to execute this project on the timeline as scheduled. ENMA is looking forward to Rohde & Schwarz support in the next two phases also."

An important consideration for ENMA was the measures that Rohde

& Schwarz can employ to assure the Quality of Service (QoS) that the broadcaster can provide to its viewing audience.

To this end, each transmitter site will employ R&S PRISMON base multiviewers, which are configured to monitor and analyze eight SD and one HD television channels. Also, the system will include five R&S ETL TV analyzers - a universal reference receiver which will be configured for DVB-T2 measurement together with power sensors.

In addition to transmitters, the project involves supply of UHF DVB-T2 antenna systems from Kathrein, RF feeders from RFS, combiner systems from Spinner and various auxiliary systems.

 $The project comes with a demanding {\tt 10-week delivery to Cairotime line}$ which is governed by the 2019 Africa Cup of Nations, scheduled to take place from 21st June to 19th July. An important element of Rohde & Schwarz's contract with ENMA covers the provision of professional services. Through its local team of engineers and product specialists, Rohde & Schwarz will provide factory acceptance testing as well as project management services. In addition, Rohde & Schwarz Middle East & Africa staff will provide local installation supervision, onsite configuration and commissioning.

"This is an ambitious project and will position ENMA as a leading broadcast service provider in the North Africa region," commented Rommer Balanon, Bid Manager at Rohde & Schwarz Middle East & Africa. "We are delighted that ENMA has selected Rohde & Schwarz as their technology partner and we look forward to a busy period

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# Dubai Economic Department honors Huawei CBG for support on IP management



The Intellectual Property (IP) Rights Management of the Commercial Compliance & Consumer Protection (CCCP) sector at the Department of Economic Development in Dubai has honored Huawei Consumer Business Group's (CBG) UAE team for its continuous support and cooperation with the UAE government.

The DED team visited Huawei's head office in Dubai to present Huawei officials with a certificate of gratitude for helping manage IP rights and combat counterfeit goods in the retail sector in the UAE.

"IP management is a very important aspect in the modern world and at DED, we do not tolerate any kind of commercial fraud. To achieve this, we rely on strict compliance and cooperation from commercial companies to protect the consumers and we wish to extend our gratitude to Huawei CBG for their continuous support to combat IP issues and fake goods. Our partnership has strengthened over the years and we expect it to grow stronger in the future," Ibrahim Behzad, Director of Intellectual Property Protection division at DED said.

IP is a topic broadly discussed amongst companies and consumers in the UAE as it impacts business revenues and customer satisfaction. Counterfeit goods worth hundreds of millions of dirhams are seized by DED officials every year. These raids are part of DED's campaign to protect both brands and consumers.



## GLOBAL ICT, TELECOM & SATCOM EVENTS

17 June 2019



**Satellite Industrial Forum** Singapore

18 - 20 June 2019



CommunicAsia Singapore

26 - 27 June 2019



Seamless Asia Singapore

26 - 28 June 2019



**GSMA MWC** Shanghai, China

August 2019



TechExpo Brunei Darussalam

09 - 12 September 2019



**ITU Telecom World** Budapest, Hungary

10 - 12 September 2019



5G Asia Singapore

12 - 17 September 2019



**IBC** Amsterdam, Netherland

18 - 20 September 2019



**Huawai Connect** Shanghai, China

22 - 24 September 2019

Critical Communications

**Critical Communication MENA** Dubai, UAE

24 - 25 September 2019



**Telecoms World ME** Dubai, UAE

06 - 10 October 2019



**GITEX** Dubai, UAE 15 - 17 October 2019

Broadband **World Forum** 

**Broadband World Forum** 

Amsteradam

05 - 07 November 2019



**Global Milsatcom** London

12 - 14 November 2019

**Africa** Com

AfricaCom Capetown, South Africa

26 - 27 November 2019



Mobile 360 Mena Dubai, UAE

03 - 06 December 2019



**Bakutel** Baku, Azerbaijan

24 - 27 February 2020



**MWC** Barcelona, Spain



# A new record for excellence with 6 trophies at the Dubai Lynx

