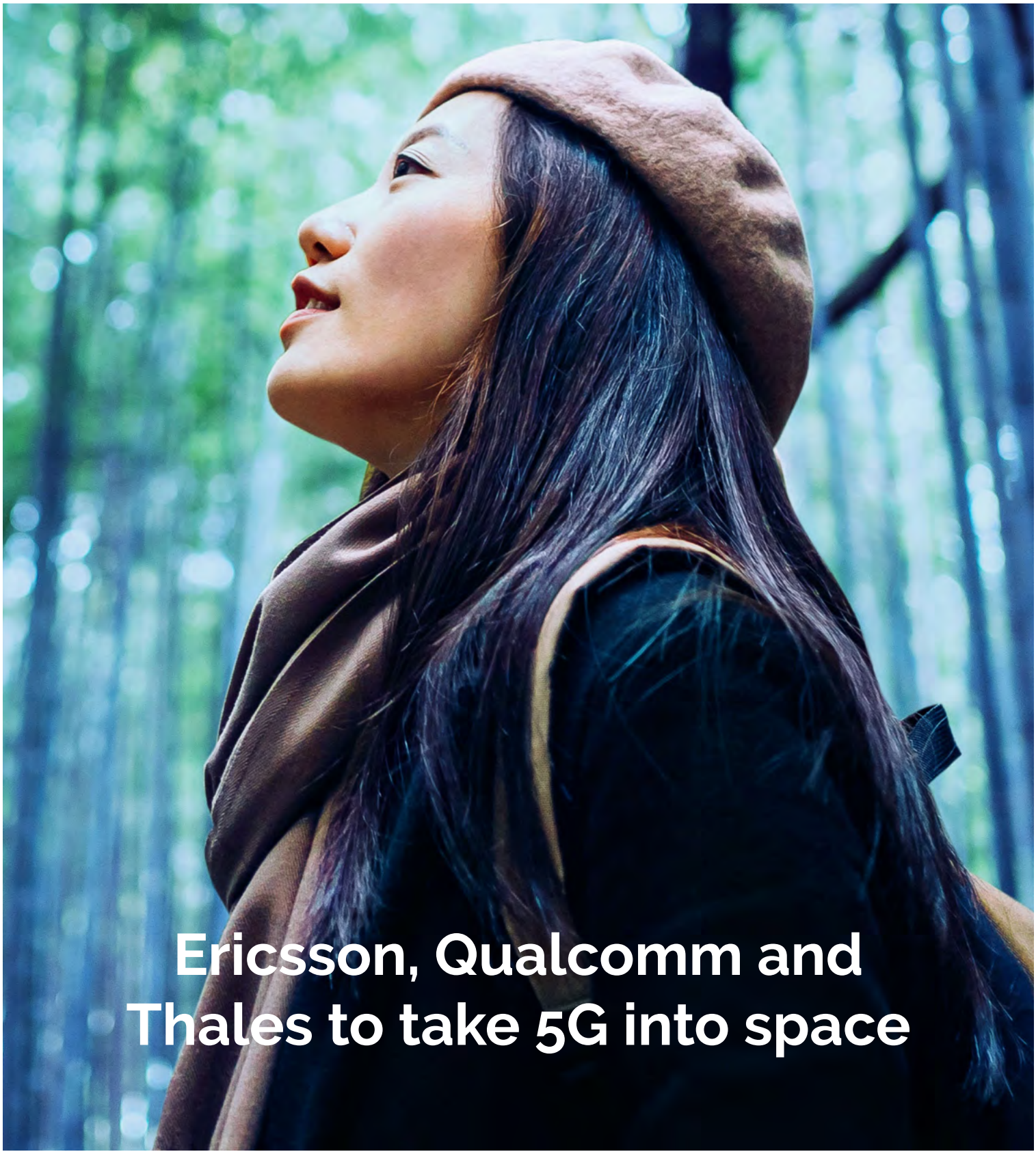
TELETIMES MEDIA LLC

INTERNATIONAL teletimes

Issue 203
July
2022

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



Ericsson, Qualcomm and Thales to take 5G into space

NO AIR OR WATER NEEDED TO COOL DATA.

Immersion4

NO GHG, CO2, microparticles emissions & water consumption to cool DATA.

www.immersion4.com

SAUDI GREEN ECONOMY CONFERENCE 2019 · AI for Good · ITU TELECOM WORLD '19 Budapest 9-12 September · Hewlett Packard Enterprise · INTERNATIONAL CLEANTECH WEEK · POWERED BY Immersion4

BOOK BY 30TH SEPTEMBER TO SAVE £100

SAE Media Group Proudly Presents its 24th Annual

Global MilSatCom

CONFERENCE & EXHIBITION 2022

The World's Leading Military Communications Event for Satellite Professionals

Pre-Conference Focus Day: Monday 7th November 2022 | St. James' Court | London, UK
Conference: Tuesday 8th – Thursday 10th November 2022 | The QEII Conference Centre | London, UK

LEAD SPONSOR

AIRBUS

SILVER SPONSOR

eutelsat

SPONSORS

BOEING · GOVSAT · HUGHES · inmarsat · isotropic systems · KRATOS · L3HARRIS · LEONARDO DRS · LOCKHEED MARTIN · NORTHROP GRUMMAN · OneWeb · Ovzon · ST Engineering iDirect · TELESAT · THALES · Virgin Orbit

EXHIBITORS

AVANTI · AvL Technologies · bfbs · global wavecom · KYMETA Making Mobile Global · MARLINK · MBS · requtech · TELEDYNE PARADISE DATACOM Everywhereyoulook

To keep updated with programme developments or to register, please visit:

www.globalmilsatcom.com/teletimes

MilSatCom Community · @SAEMGDefence

For Global MilSatCom Updates and News, follow #GlobalMilSatCom on LinkedIn and Twitter

Register online or fax your registration to +44 (0) 870 9090 712 or call +44 (0) 870 9090 711

SMi Group Ltd trading as SAE Media Group

CPD CERTIFIED The CPD Certification Service

teletimes INTERNATIONAL

Vol: 17 Issue: 07 July 2022 ABC Certified

17th year of publication

www.teletimesinternational.com
info@teletimesinternational.com

Recipient of
"MEA Business Award 2021
for Best Telecom Publication"
"Best IT & Telecoms News Outlet Award 2020"
"International Arch of Europe Award for Quality"
"Teradata ICT Execellence Award for Media"

Scan to download PDF version

TELETIMES MEDIA LLC.
P.O. Box 239031,
Dubai - UAE
+971 50 1305097

Media Partner to:

	US$	AED	SAR	PKR	€	GBP
Price per copy	8	25	25	500	7	5
One year	80	250	250	5000	70	50

2nd Edition

CONNECTED AFRICA

Africa's premier Telecom Event

" Championing Connectivity in the Digital Era "

September 29th, 2022

Join Us In Cape Town

Organized and Conceptualized by

For More Information :

www.connected-africa.com

Contents

Interviews

20 **"The key to a successful business in the new age is customer uptake"**
Albert Tan - MD, Accenture's Network Services

36 **"Satellite industry is at an important phase of transition"**
Helen Weedon - MD, Satcoms Innovation Group

Articles

09 **ORAN will erode hard-earned gains in Network Builds**

24 **Kuwait's telecom sector has demonstrated extraordinary advancement**

28 **Are Telecom Operators ready for ORAN?**

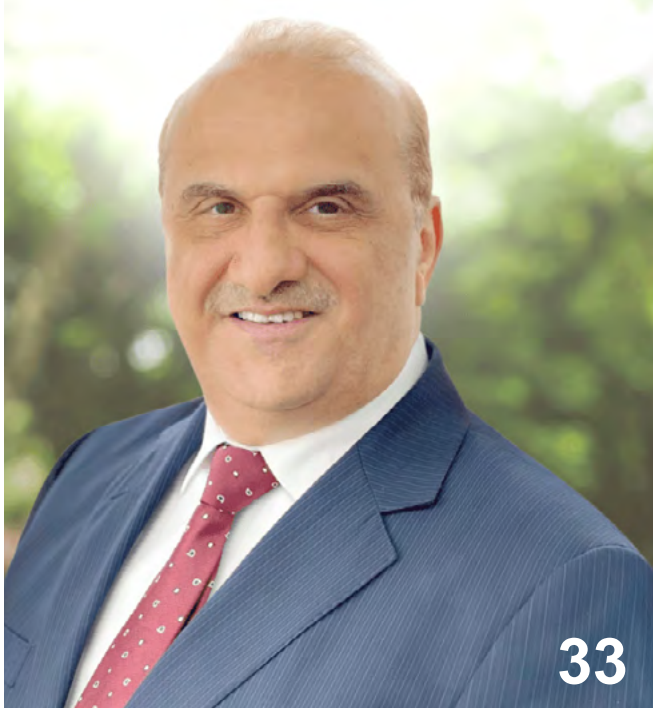
Reports

08 **World Telecommunication Development Conference forges path to meaningful Global Connectivity**

15 **Huawei partners with Saudi Space Commission to launch first technology experience center in KSA**

19 **stc Group Chairman and Group CEO congratulate the Custodian of Holy Mosques and Crown Prince on the success of the Hajj season 1443 H**

27 **Ericsson, Qualcomm and Thales to take 5G into space**



Satellite Communications

39 **Hughes successfully tests 5G Satellite Backhaul, verifies Interoperability**

40 **ST Engineering & MEASAT reaffirm partnership**

41 **ST Engineering iDirect streamlines Site Installation Process for Intelsat FlexEnterprise Customers**

News

12 **5.5G ushers the future of Digital Intelligence**

16 **MENA ISC 2022 in Riyadh to discuss network infrastructure protection**

17 **Decision time looms for MENA regulators as spectrum specifications draw near**

18 **Huawei Intelligent Net-Zero Carbon Campus Solution wins WSIS 2022 Prize Campion**

22 **Emirates NBD launches National Digital Talent Program**

34 **MEET ICT Conference in Bahrain records one more successful edition**

42 **LIVEU IBC2022 Preview**

43 **Huawei OceanProtect Backup Storage wins Best of Show Award at Interop Tokyo 2022**

44 **Annual Global MilSaTcom Conference & Exhibition returns in November**

... and much more

Editor's Note

Dear Reader,

Welcome to the latest edition of Teletimes International.

This month has been quite happening for the telecommunications space. Hughes Network Systems has announced the successful testing of 5G satellite backhaul with the company's JUPITER System ground platform which will be great news for the many operators that use Hughes for Backhaul.

Talking about 5G and space, after having each conducted detailed research Ericsson, Qualcomm and Thales plan to enter smartphone-use-case-focused testing and validation of 5G non-terrestrial networks (5G NTN). The result could effectively mean that a future 5G smartphone could use 5G connectivity anywhere on Earth.

In this edition you will also find two exclusive interviews with Albert Tan, Managing Director at Accenture's Network Services in the ASIAM region and Helen Weedon, Managing Director, Satecoms Innovation Group.

Whilst the sector is making many strides forward in terms of 5G service provision, one of the areas of concern for all operators has been deploying and managing an efficient and cost-effective Radio Access Network (RAN). On this subject, I would recommend Saurabh Verma and Sami Shaikh's article, "Are Telecom Operators ready for ORAN?".

As always, you will find a lot more interesting news, updates and interviews from major ICT players.

Your feedback is welcome on
info@teletimesinternational.com

Enjoy Reading

Khalid Athar
Chief Editor

Scan to download PDF version
Follow @TeletimesIntl on Twitter

World Telecommunication Development Conference forges path to meaningful Global Connectivity

The World Telecommunication Development Conference (WTDC) concluded in Kigali (Rwanda) with the adoption of a forward-looking agenda to address the global connectivity gap that has kept 2.9 billion people around the world from using the Internet.

Organized by the International Telecommunication Union (ITU) between 6 and 16 June, WTDC welcomed 2,152 participants in total, representing 150 Member States and 340 Sector members and partners, with 1,304 delegates present in the Rwandan capital, and another 848 joining the meeting remotely. The focus of the event was 'Connecting the unconnected to achieve sustainable development'.

The Kigali Action Plan agreed at the conference charts a course for digital development that aligns closely with the Sustainable Development Goals (SDGs) set out by the United Nations for 2030. It also defines the workplan of the ITU's Development Sector (ITU-D) until the next WTDC. Public-private partnerships were at the forefront with the conference's Partner2Connect Digital Development Roundtable; since its launch, the Coalition has to date mobilized 418 ground-breaking connectivity pledges worth an estimated USD 25.05 billion, with more pledges still coming in.

Paula Ingabire
Rwanda's Minister for ICT and Innovation

Houlin Zhao
ITU Secretary-General

"ITU has emerged as a key partner in development," said ITU Secretary-General Houlin Zhao. "The Kigali Declaration and Kigali Action Plan will guide the work of ITU also as a development agency in our ongoing efforts to put ICTs at the heart of global development."

In her closing address, Rwanda's Minister for ICT and Innovation, Paula Ingabire, who chaired the conference, told delegates, "I want to thank all delegations for the zealous effort, spirit of collaboration, consensus exerted towards making this WTDC-22 a success and all the contributions made towards the Kigali Action Plan that will move us forward to bringing connectivity and its benefits to the unconnected over the next four years...I hope we can report positive results at the next WTDC."

Committed to connectivity

In the wake of the COVID-19 pandemic, the conference set out to reinvigorate progress on SDGs and put digital uptake at the forefront for the remaining seven years of the UN's Decade of Action.

Adopting the Kigali Declaration, delegates underscored their collective commitment to universal and meaningful connectivity, and approved new Regional Initiatives. Also agreed were various new ITU-D resolutions and new sets of Questions to be investigated by the two ITU Study Groups focused on development issues.

"It has been an intensive two weeks, but thanks to the tireless commitment and hard work of our delegates we have succeeded in finding consensus and building the solid global agreement on core principles to drive connectivity that has been the great talent of ITU for more than 155 years," said Doreen Bogdan-Martin, Director of ITU's Telecommunication Development Bureau. T

Khalid Athar

ORAN will erode hard-earned gains in Network Builds

Evidence is piling up that ORAN is neither mature nor will it contribute to enriching the telecommunications sector. A recent report by the European Commission (EC) and the EU Agency for Cybersecurity lays bare the cybersecurity challenges inherent in ORAN architectures.

Open RAN, or simply ORAN, is a disaggregated RAN (Radio Access Network) functionality built using open interface specifications between components. ORAN can be implemented in vendor-neutral hardware and software-defined technology based on open interfaces and community-developed standards.

Margrethe Vestager - *Commissioner for Competition, European Commission*

Thierry Breton - *Commissioner for the Internal Market, European Commission*

Neville Ray - *President of Technology, T-Mobile*

The push for ORAN comes as 5G technologies mature in the Middle East. Regional operators were among the first globally to roll out the next-generation networks. Four years since its initial launch in the region, 5G commercialization and deployment optimization has proved to be a key driver for socio-economic growth with rapidly rising use cases across industries. With this in mind, it is vitally important to ensure we are making the right progress on 5G networks improvement within international standards and proven technology deployment models.

This is what the EC and EU analysis wanted to find out, if integrating more components from different suppliers makes networks stronger or weaker. The report revealed increased configuration complexity and the risk of misconfiguration of networks. The report adds that assorted elements from diverse vendors increase the diversity of security levels, leaving components easier to attack and further endangering the entire network security.

Margrethe Vestager, Commissioner for Competition at the European Commission, says the report raises important security challenges, especially in the short term. She says, "It is important for all participants to dedicate sufficient time and attention to mitigate such challenges so that the promises of ORAN can be realized."

ORAN proponents have argued that opening the RAN market benefits operators, who can choose from multiple vendors based on their value proposition. However, the European report warns of the real likelihood of supplier lock-in as MNOs become increasingly dependent on a small number of cloud service/ infrastructure providers. Further, identifying and resolving network malfunction is likely problematic for providers while also increasing the time necessary to identify and fix issues in a multi-vendor setup.

Thierry Breton, Commissioner for the Internal Market, European Commission, said our growing reliance on digital infrastructures requires a high level of security in our communication networks. He said, "ORAN poses significant security challenges that remain unaddressed and cannot be underestimated. Under no circumstances should the potential deployment in Europe's 5G networks of ORAN lead to new vulnerabilities."

What its advocates do not reveal is that ORAN, despite the current hype, is not a new technology. Variations of it have been tried for over a decade, with no commercial success to show for it. This "open" method has yet to be verified in line with global network standards such as 3GPP and the GSMA.

These challenges are compounded by the fact that operators lack representation in ORAN deliberations. Telcos are an integral part of the current GSMA/3GPP framework. However, the report notes that crucial decision rights within the governing O-RAN Alliance are conferred to its Board, composed only of a subset of the members and only of MNOs. Further, the stringent provisions of the O-RAN Alliance Adopter License Agreement are likely to hamper knowledge sharing between adopters and

non-adopters, making discussions outside the O-RAN Alliance more difficult, it adds.

Indeed, the standards-based global consensus makes the telecom space one of the most competitive sectors in the world, which ORAN now threatens. This competition arises because the 3GPP standards are open enough, and carriers have sufficient bargaining power to check any excessive pricing of network equipment.

The drawbacks identified by the European Commission and the EU Agency for Cybersecurity attest to the fact that ORAN was never intended to solve technical or business challenges with existing Single RAN architectures. Instead, the scheme is an American-led political intervention to usurp the global commercial telecommunications order.

Simply put, the US has lost its competitive advantage in the base station R&D and manufacturing, with no low-cost manufacturing capability. America attempts to use ORAN to re-occupy a dominant position in the mobile communications industry and mobile Internet space through its IT chips and software capabilities.

But American companies recognize the reality on the ground and have refused to take the lead in commercializing ORAN. In October 2019, the Trump administration asked Cisco and Oracle to begin manufacturing 5G network equipment. Both companies say it takes too much money and time, and neither is interested. Verizon has opposed the US government's push towards ORAN and strongly urged technology neutrality. AT&T was the lead operator in the O-RAN alliance but had not put it into commercial use. T-mobile CTO has publicly opposed it, while the Chairman of Dish Network openly acknowledged that he underestimated the complexity of ORAN system integration.

T-Mobile US president of technology, Neville Ray, has raised doubts about the maturity of ORAN systems and their ability to deliver promised cost savings, arguing that "key questions around system integration and R&D have yet to be answered."

A few US operators in the US did roll out ORAN but are now realizing their blunder. Cellcom, which built one of America's first ORAN networks, is currently dismantling its ORAN network in Wisconsin due to difficulties accessing equipment. While it acquired the required software, it failed to obtain compatible radios due to vendors' minimum volume purchasing requirements. Like many smaller carriers, Cellcom admitted it lacks the purchasing power that bigger operators do.

These technology companies and operators understand the law of unintended consequences; government interference often leads to material and technical losses as it forces operators to make non-commercial decisions to satisfy official mandates.

What does this leave Middle East operators? Most regional service providers are small and medium-sized and will face significant challenges with ORAN. The smaller the operator, the greater ORAN integration and maintenance challenges. Further, the natural environment is central to the Middle East experience, and regional governments have signed on to international pledges to reduce carbon emissions, including lowering ICT energy consumption. Ericsson estimates that the power consumption of ORAN networks is about 40% higher than that of integrated networks when the whole network is considered.

A popular refrain states that if it is not broken, don't fix it. Single RAN is not broken. In fact, current technology has brought immense benefits to society. While we should all welcome progress and innovation, any new technology must be weighed against its benefit to society. ORAN fails at this fundamental measure. T

CoolLabs

WORLD'S FIRST LABORATORY

DEVELOPING IMMERSION COOLING SOLUTIONS FOR ANY ELECTRONIC EQUIPMENTS.

FEASABILITY STUDIES

- Electronic optimization
- Environmental studies
- PUE 1.0 program adaptations
- All type of electronics, PCBs, servers, miners, IoT, antennas, electrical transformers, etc.

DEVELOPMENT & TESTING

- Immersive enclosure designs for fix, mobil & onboard equipments
- Thermal & energy simulations
- Connectivity testings (data, fiber optics, electrical)
- Lab testing
- Developing immersion cooling solutions for any civil or military equipments

PRODUCTION & INDUSTRIALISATION

- Prototype design & pre-series
- Scalability studies
- Industrialisation
- Manufacturing

visit our website
www.coollabs.green

POWERED BY
Immersion4

5.5G ushers the future of Digital Intelligence

Gan Bin, Vice President of Huawei Wireless Solution, delivering his keynote speech

China Telecom and Huawei held a joint conference to launch the innovative "Super TimeFreq Folding" technology for 5G-Advanced. At the conference, Gan Bin, Vice President of Huawei Wireless Solution, delivered a keynote speech titled "Continuous Innovation, Lighting Up the Future of Digital Intelligence". In his speech, Gan Bin shared, "China Telecom and Huawei have continuously made breakthroughs in uplink capability, which has achieved Gbps uplink through innovations such as Super TimeFreq Folding — a technology that helps build 5.5G "1+1+N" networks to deepen the transformation to a digital and intelligent society."

The rapid rise of XR and 3D AI is greatly increasing the demand for better uplink capability. The 1+1+N deployment approach for 5.5G requires networks to support millisecond-level latency while providing ubiquitous uplink Gbps and downlink 10 Gbps. China Telecom and Huawei work together to continuously innovate to breakthrough bottlenecks in uplink based on customers' requirements.

In the early stage of 5G, China Telecom and Huawei jointly proposed a new 7:3 timeslot configuration to enhance uplink experience. To further improve uplink capability, China Telecom and Huawei launched Super Uplink and Super Frequency Fusion to fully utilize FDD spectrum and C-band TDD spectrum coordination, improving the uplink experience by three times.

As 5G moves to the full sub-100 GHz bands, China Telecom and Huawei have been looking to fully leverage the TDD spectrum, which provides an ultra-large bandwidth. Super TimeFreq Folding uses TDD dual-carrier time-domain folding and complementation technology, which enables all timeslots to be used for the uplink transmission, and high bandwidth is supported for both the uplink and downlink, improving the uplink capability to over Gbps while reducing the latency to less than 4 ms.

Their continuous joint work has helped enhance uplink capability significantly, leading the development of the uplink industry. The core technologies of the "super" solutions have been incorporated into 3GPP specifications, finding its way to play a bigger role in building a mature ecosystem involving devices, networks, chips, and industry applications. This will accelerate the commercial use of uplink capability.

"We will continue to work with China Telecom and other industry partners to continuously innovate and upgrade mobile network capabilities, to achieve the vision of changing society with 5G. Ubiquitous Gbps-level uplink is important for 5.5G's 1+1+N", Gan Bin concluded. T

Huawei launches new Intelligent Cloud-Network Solutions to accelerate ME Digital Transformation

With an aim to empower Middle East enterprises with super computing power and intelligence, and accelerate digital transformation across industries, Huawei unveiled three new IP networking solutions at their annual regional flagship event, held at Atlantis, the Palm, Dubai.

On day one of the Huawei IP Club Carnival MENA 2022, Huawei noted the need to keep up with ever-changing customer scenarios and launched CloudFabric 3.0, Huawei SD-WAN and CloudCampus 3.0 solutions. Held under the theme of 'Cloud-Network Synergy, Build a Deterministic Experience Network', the event saw Huawei's global and regional experts, industry analyst and Huawei's customers and partners come together under one roof to discuss the latest network technology trends and discover how enterprises can best prepare for the intelligent era and inject new momentum into their digital development ambitions.

Pawan Jain, Director, Technology Consulting, PwC Middle East, spoke at the event about network technology trends, opportunities and key enablers and added - "Adapting to the wave of emerging technology is key to drive differentiation in IT strategy, optimize cost and compete effectively in the future. True potential of these innovative technology solutions can only be realized with intelligent & cloud-ready network infrastructure."

Launching the new solutions at the event, Faisal Ameer Malik, CTO, Huawei Enterprise Group, Middle East said: "Intelligent IP networks - connecting things on one end and applications on the other end - have now become the cornerstone for digital transformation across industries. As enterprise digital transformation picks up speed, IP networks need to keep pace with the evolving cloud technologies and enterprise demands. Our new solutions aim to address these challenges; with its launch, we are reaffirming our relentless efforts to develop scenario-tailored solutions for partners and customers, creating new drivers for digitalization across industries."

The following three new solutions were rolled out at the event:

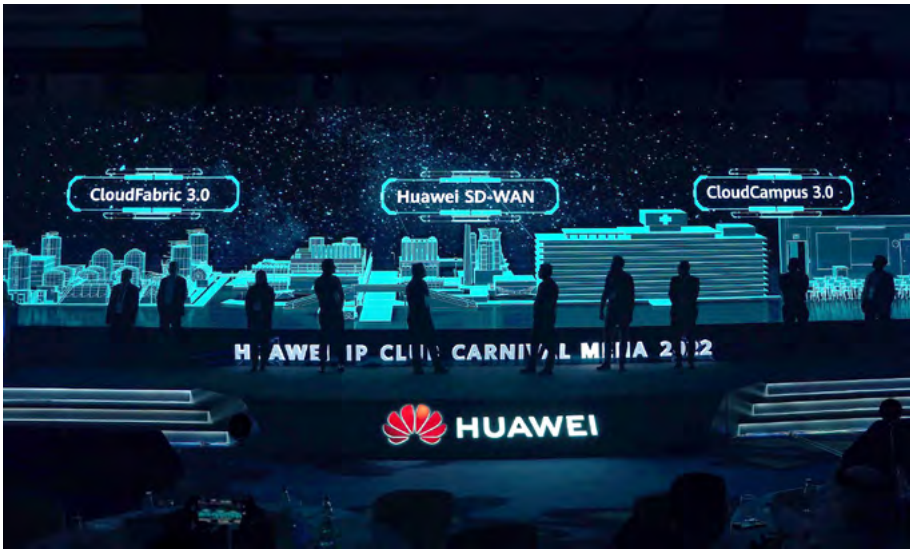
CloudFabric 3.0, Hyper-Converged Data Center Solution, which has "Fast" and "Stable" key characteristics, is ideal for building best-in-class data center networks, helping enterprises usher in a service center with super computing power. This feature-rich solution offers the industry's only L3.5 autonomous driving network, which is needed to propel enterprise data centers towards multi-clouds and multi-DCs. Another highlight Huawei's unique AIFABRIC technology, enabling data center switches to ensure zero packet loss high reliability, low latency, and high throughput, facilitating convergence to an all ethernet Datacenter.

Software-Defined (SD)-WAN is an obvious choice in the cloud era, interconnecting enterprise branches, headquarters, and

multiple clouds. Huawei's SD-WAN Solution provides powerful networking, a superior user experience, and simplified O&M capabilities, meeting WAN interconnection requirements of enterprises of all shapes and sizes, as well as carriers and service providers.

CloudCampus 3.0 Solution draws on continued innovations in the WLAN, LAN Switch and SD-WAN fields and introduces an extensive range of all-new products, including AirEngine 6761 Access Points, CloudEngine S8700 switches, and NetEngine AR6710 routers. As such, CloudCampus 3.0 stands out by offering "300 Mbps @ Everywhere" access experience for enterprises and doubling the cloud access efficiency. With these strengths, CloudCampus 3.0 can be widely used in industries like education, healthcare, finance, and energy, helping enterprises shorten time-to-market and improve operational efficiency.

Huawei also showcased its HiSec 3.0 Solution, the solution performs network monitoring and drills down network



behavior data to detect threats as early as possible and resolve problems in a timely manner. First, traditional signature-based static analysis methods cannot effectively detect new threats. Huawei introduces big data analytics to security and uses the deep neural network algorithm and machine learning technology to transform from reactive defense to proactive defense. Second, to prevent horizontal diffusion of threats on the intranet, Huawei integrates security into the network and puts forward the industry's first network + security network-wide defense solution, achieving the transformation from single-point defense to network-wide defense.

Huawei ranks No. 1 in new US research firm 5G patent survey

A US-based patent advisory firm has positioned Chinese vendor Huawei firmly atop its new survey of 5G patent owners.

The findings are noteworthy considering the advisory firm, Tech+IP, said its new rankings are derived from a careful, weighted assessment not only of raw patent filings but also their geographic location, relation to other patents and position within the 5G standard.

Further, Tech+IP is well positioned to comment. The company – with offices in Washington and San Francisco – served as the exclusive financial and transaction advisor for Canada's BlackBerry in its massive $600 million patent sale to Catapult IP Innovations and others.

The firm said it chewed through a total of 200,500 patent filings – including 24,000 filed in 2021 – to arrive at its findings.

In 4G, the firm found US chip vendor Qualcomm as the patent holder with the greatest global reach. That's no surprise given Qualcomm's longtime pioneering position in the global cellular industry.

However, in the still-evolving market for

5G patents, the situation is very different, according to Tech+IP. The firm positioned China's Huawei at the top of its 5G patent license rankings, which include patent counts, global coverage and adherence to "core" technical standards. The firm added that in 2021, 95% of newly issued and declared patents were related to 5G technology, "strongly mirroring the evolution being seen in the market to 5G deployments."

Meantime, there's plenty of action in the boardroom and the courtroom regarding 5G patents. In the courtroom, tech giants Apple and Ericsson appear to be sliding into an inevitable battle over their respective 5G holdings.

The developments indicate that the landscape for 5G patents remains hotly contested and the space is still developing. Thus, claims of victory may be premature, especially considering that Huawei – which tops Tech+IP rankings – is clearly under threat from the US government and its allies, a situation that has undoubtedly affected its sales of 5G equipment and could therefore also potentially affect its sitting in the global patent-licensing market.

Huawei partners with Saudi Space Commission to launch first technology experience center in KSA

In collaboration with the Saudi Space Commission, Huawei has launched Future Space, the first technology experience center in Saudi Arabia. The partnership aligns with Huawei's commitment to corporate social responsibility, developing local talent and actively contributing to the Kingdom's digital transformation journey.

Future Space, the largest exhibition center outside of China, will include advanced technologies including autonomous driving, 3D printing, and brainwave robot control, among other innovations. The first exhibition of its kind in Saudi Arabia, Future Space, covers 1,500 square meters and will offer speaking opportunities for young innovators. The center will be open to the public and host an estimated 200,000 visitors over the next five years.

During the launch, Eric Yang, CEO of Huawei Saudi Arabia, said: "We are honored to launch Future Space in Saudi Arabia and support the Kingdom achieve its digital ambitions as part of Saudi Arabia's vision 2030. Imagination will determine how far we can go in the future; action will determine how quickly we get there. We believe here at Huawei that the best way to predict the future is to create it."

Weiqing Chen, Ambassador of China to Saudi Arabia, said, "The firm relations between China and Saudi Arabia have brought immense benefits to both countries. As Saudi Arabia pursues digital transformation as part of its strategic national goals, public/private partnerships between technology companies such as Huawei and public agencies adds new value to the local tech ecosystem. We, therefore, congratulate the Saudi Space Commission on the launch of Future Space and look forward to more success."

Dr. Mohammed Altamimi, Saudi Space Commission CEO, said, "Future Space is one of the most advanced technology experience centers in the world. We want to expose young people to the most cutting-edge technologies and inspire them to imagine technology in new ways. Partnering with a global technology leader such as Huawei enables us to bring real-world and proven technology solutions that can positively impact society."

Adnan Alsharqi, Deputy Minister, Ministry of Investment, said, "Building a knowledge-based economy is a key pillar of Vision 2030. Initiatives such as Future Space help enrich our digital ecosystem and attract investment from other digital companies. As a ministry, we are keen to support public and private partnerships that have proven highly successful in accelerating innovation and boosting our talent pipeline."

A digital-led future will bring improved quality of life, sustainable and green production, more comfortable living spaces, reduced traffic congestion and pollution in cities, fully green energy, and a wide range of new digital services. Huawei will work with partners to help accelerate this transformation, aligned with its vision and mission of bringing digital to every person, home, and organization for a fully connected, intelligent world. T

MENA ISC 2022 in Riyadh to discuss network infrastructure protection amid a rise in cyberattacks

This September, Riyadh will host one of the most important cybersecurity conferences in the Middle East and North Africa – MENA ISC 2022 in September this year under one of the most relevant themes "Cyber Fusion: Converging Cyber Intel: Critical Network Infrastructure IT, OT, and IoT." The conference's diverse sessions will focus on the rising cyber attacks on network infrastructure in countries around the world, posing a significant threat to the economies of these countries.

Eng. Samir Omar, CEO of VirtuPort, said the 10th edition of the conference aims to generate an effective dialogue between C-Level executives, directors, and global cybersecurity experts with rich experiences in developing strategies and cybersecurity techniques for the benefit of digital transformation and technological advancements. He stressed the importance of the conference for the Kingdom, especially as it is the largest market for information and communication technology in the Middle East and North Africa region.

"The Saudi ICT market has been witnessing steady growth since the launch of the Kingdom's Vision 2030. This makes the IT infrastructure in the public and private sectors vulnerable to cyberattacks, where these attacks cause great damage to the economy and various sectors," Omar said.

CyberKnight stated that 88% of organizations in Saudi Arabia have reported some form of an attempted ransomware attack, according to a study by Grant Thornton KSA a relatively high number compared to the global average. It is currently estimated that companies in Saudi Arabia lose about $6.53 million per cyber attack.

Eng. Samir Omar - *CEO, VirtuPort*

It is noteworthy that Saudi Arabia has jumped 11 ranks since 2018 in the Digital Competitiveness Report, and more than 40 ranks since the launch of Vision 2030.

In 2021, the Kingdom ranked second globally among the G20 countries in the Digital Competitiveness Report, issued by the European Center for Digital Competitiveness.

The 10th edition of MENA ISC includes leading firms from around the world with CyberKnight as Diamond Distribution Sponsor and CrowdStrike as its diamond sponsor. Platinum sponsors are arcon and IT Security Training & Solutions – I(TS)2 in addition to gold sponsorships by Advanced Technical Solutions (ATS), ankura, kaspersky, MANDIANT, proofpoint, SentinelOne and Tenable, and silver sponsorships by Acronis, ANOMALI, BeyondTrust, Bitdefender, Forcepoint, ClearSkies ODYSSEY, Security Scorecard, THREATQUOTIENT,tripwire, and ZEROFOX. Marcom Arabia and NOZOMI Networks as a Strategic Partner, with many more expected to participate and be announced soon.W7Worldwide is listed as Organizing Partner and Media Sponsors. T

Decision time looms for MENA regulators as spectrum specifications draw near

In less than a year, the Middle East and North African (MENA) countries will have to make critical decisions as to how to allocate precious spectrum, particularly balancing the needs of licensed (4G and 5G) and unlicensed (WiFi) ecosystems. The 6th MENA Spectrum Management Conference took place recently to provide a platform for these discussions.

The decisions regulators make will tremendously impact the evolution of 5G and, therefore, the digital economy.

Next year's World Radiocommunication Conference 2023 (WRC-23) has an agenda item to study 6GHz targeting IMT identification of 6425-7125 MHz. The conference seeks to encourage governments and regulators to allocate RF spectrum consistently across borders, enabling global roaming, interoperability and global markets for telecom equipment.

Without a global consensus, governments are taking diverging steps around spectrum allocation. China, for instance, has announced it will issue the entire 1200MHz in the 6GHz band for 5G. Europe has split the band, with the upper part 6425-7125 MHz studied for IMT under WRC23 Agenda item 1.2, while the lower 500MHz tranche 5925-6425Mhz is made available for WiFi. Africa and parts of the Middle East are following a similar approach. Other countries in the region are awaiting WRC-23 before deciding on a plan of action. At the MENA Spectrum Management Conference, Olfa Jammeli, General Director of the National Agency of Frequencies (ANF) Tunisia, announced that the North African country has postponed considering new microwave requests until the end of WRC-23 to evaluate the results of the studies.

The decisions regulators make will tremendously impact the evolution of 5G and, therefore, the digital economy. New data from GSMA Intelligence shows that MENA's diverse economies will benefit greatly from 5G, with mid-band expected to contribute $16 billion in additional GDP in 2030, or 0.35% of the region's GDP. At the MENA Spectrum Management Conference, Mohammad Al Janoobi, Radio Communication Engineer, Spectrum Management Department, Saudi Communications and Information Technology Commission termed spectrum as a key enabler for the Kingdom's Vision 2030, cutting through different sectors beyond ICT to include space, military, security and more.

The GSMA has advocated 6GHz as the primary band for the future of 5G. The Association, which represents the interests of mobile network operators worldwide, says an average of 2 GHz of mid-band spectrum is required in the 2025-2030 timeframe for 5G. In MENA, that goal leaves a shortfall of 0.85 GHz beyond today's assignments.

The GSMA Intelligence analysis shows that under spectrum constrained to today's assignments, up to 40% of the positive economic impact could be lost. Things will get worse if the spectrum is

limited to current levels while demand for services grows as expected. In such a scenario, increased network congestion and deployment costs will stifle 5G while

> *Evidence shows that, in most markets, WiFi limitations are not based on limited spectrum.*

network quality and speed suffer, limiting 5G adoption and its economic impact.

Further harm will be done if wireless encroaches on the mid-band. Experts say allocating a 6GHz band for unlicensed/ WiFi will lead to an imbalance in mid-bands assignment to unlicensed versus licensed applications and represent a significant opportunity loss for 5G technologies and economies in the future. Further, such a decision would be practically irreversible when 5G picks up speed and requires more capacity.

The WLAN industry is clamoring for the 6GHz band. The WiFi Alliance, which represents wireless device manufacturers, says 6GHz addresses WiFi spectrum shortage by providing contiguous spectrum blocks to accommodate 14 additional 80 MHz channels and seven additional 160 MHz channels, which are needed for high-bandwidth applications that require faster data throughput such as HD video streaming and VR.

However, evidence shows that, in most markets, WiFi limitations are not based on limited spectrum. The user experience is often constrained by broadband fixed access network capacity and penetration limitations, poor WLAN network planning, or low-end WI-FI APs with poor design. Once the fixed network is reinforced (e.g., fiber, FWA), new technology solutions rather than new spectrum can ensure high-speed connectivity.

Therefore, regulators must weigh the decisions carefully when allocating frequencies. Supporting IMT identification allows them to make the right decision after WRC-23, depending on their specific situation.

The MENA region is increasingly reliant on digital services in a post-pandemic world. Therefore, regulatory policies supporting the ICT ecosystem's growth will be crucial

> *The GSMA has advocated 6GHz as the primary band for the future of 5G.*

to incentivizing the continued rollout of telecoms infrastructure. Such investments will be vital to unlocking the value of the MENA mobile economy, which will unleash tremendous new opportunities in eCommerce, digital finance, public services and more. T

Huawei Intelligent Net-Zero Carbon Campus Solution wins WSIS 2022 Prize Campion

Huawei was named Champion at the World Summit on the Information Society (WSIS) 2022 Forums Prizes Ceremony in Geneva. The WSIS 2022 Prize Campion, was presented to Huawei for its use of their intelligent net-zero carbon campus solution at the Yancheng Low-carbon & Smart Energy Industrial Park project. A total of 996 projects were considered for this award, and the selection process took five months.

WSIS is the world's largest annual gathering of the ICT for development community. The event aims at advancing global sustainable development goals is co-organized by the ITU, the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Development Programme (UNDP), and other UN organizations and WSIS action plan facilitators.

The WSIS Prizes contest awards prizes for outstanding sustainability projects in 18 categories, including information and communication infrastructure,

E-government, E-environment, E- health, and E-agriculture. Huawei's intelligent net-zero carbon campus solution was nominated for this years environment category.

The Yancheng Park project was jointly developed by Huawei and the Yancheng Power Supply Company, a subsidiary of the State Grid Corporation of China. The project uses the triple- dimensional model for energy transformation, decarbonization, and digital transformation. By focusing on the three scenarios of smart energy management, carbon management, and campus management, this project delivers real-time monitoring of energy equipment, strong carbon emission management, intelligent and convenient access control management, and intelligent and coordinated micro-grid control.

The campus is powered by complementary energy sources and integrates its energy consumption system with on-campus terminals. The project is a showcase of an intelligent and low-carbon campus that contributes to a green, low- carbon, safe, and efficient modern energy system. T

stc Group Chairman and Group CEO congratulate the Custodian of Holy Mosques and Crown Prince on the success of the Hajj season 1443

His Royal Highness Prince Mohammad Bin Khalid Al Abdullah Al-Faisal, Chairman of the Board of Directors of stc Group, and Eng. Olayan Bin Muhammad Alwetaid, Group CEO, congratulated the Custodian of the Holy Mosques King Salman bin Abdulaziz Al Saud, and His Royal Highness Prince Mohammad Bin Salman, Crown Prince, Deputy Prime Minister and Minister of Defense - may God protect them - for the great success of the Hajj season 1443 AH, which embodied the capabilities and high professionalism of the Kingdom in organizing and harnessing digital technologies to preserve safety and serve pilgrims after the increase in the number of pilgrims and enabled a large number of pilgrims to performing Hajj, which received global Islamic praise. These continuous successes of the Hajj seasons come with the grace of God Almighty, the commands and continuous follow-up from the Custodian of the Two Holy Mosques and his crown prince.

Prince Mohammad Bin Khalid
Chairman, Board of Directors of stc Group

Eng Olayan AlWetaid
CEO, stc Group.

His Highness, the Chairman of the Board of Directors indicated that stc group and its subsidiaries, in cooperation with government agencies, have harnessed the latest technologies to implement the digital Hajj system ensuring the safety and service of pilgrims, as well as to provide a set of regulatory and preventive measures in accordance with international controls and standards.

The Group CEO confirmed stc's commitment to its pioneering role in keeping pace with the latest advanced technologies and digital solutions and harnessing its human and technical capabilities for the comfort and safety of pilgrims and empowering the sectors participating in the Hajj season.

According to a press release stc's data's traffic volume over its network in Arafat, has increased by an unprecedented 40% compared to the 2019th season (pre-pandemic). The fifth and fourth generation network accounted 96% of data traffic, where the Snapchat app usage headed the top applications that were frequently used.

This rise came in concurrence with the development witnessed by the Hajj season this year from a qualitative increase in technologies and expansions that contributed to raising the experience of the pilgrim, as the number of 5G network sites increased by 132% in terms of the network's resources volume. The increase was also due to the transformation and the qualitative shift in indicators, as well as the follow up processes that allowed pilgrims have a better experience, through the central control in the Digital Operations Control Center (DOCC), in addition to the field resources within the governorate of Jeddah and the city of Makkah Al-Mukarramah.

Interview: Khalid Athar

The key to a successful business in the new age is "customer uptake"

Albert Tan

Managing Director, Accenture's Network Services in the ASIAM region spe aks with Teletimes

Accenture's Communications & Media practice has brought in Albert Tan to head up its network services offering in Australia and a lot of other regions.

The experienced international strategy consultant has joined Accenture as Managing Director of Network Services for the professional service giant's ASIAM division, covering Australia, New Zealand, Southeast Asia, India, Africa, and the Middle East. He also served as Accenture's global Communications & Media Lead on Sustainability, bringing 25 years worth of experience to the company.

Most recently, Tan was the Chief Digital & Marketing Officer for Huawei Australia. His career has seen him work with teams in Europe, North America and across the Asia Pacific, including over the past year as a freelance advisor to new digital businesses.

In his new Head of Network Services role with Accenture, Tan has been tasked with working with local and international clients on new strategies and business models in network transformation, network operation and service innovation, delivering the latest in cloud native services and technologies. Accenture has acquired three ANZ-based cloud consultancies during last one year.

Khalid Athar: Please tell us about Accenture's role in it's partnership with the telco clients, especially in respect of 5G.

Albert Tan: Accenture is a full end-to-end one-stop-shop that supports clients from consultancy to implementation. The three areas Accenture focuses on to help CSPs are 1: the network design, 2: network operations and automation, and 3: network optimization to achieve energy efficiency from the services.

When it comes to 5G, Accenture has a whole plethora of services that enable our CSP clients to drive monetization of 5G and also to drive the network transformation to enable new 5G services. We also work with CSP clients helping them drive new products and services for 5G. As the global head for sustainability, I also look at the sustainability side of all technologies we work with and it is worth mentioning that we have done three to four studies which consistently show that we can drive up to 20% carbon abatement savings through 5G. Specifically, these studies were done in UK, US and Canada.

"We have a practice called "Intelligent Network Operations" that helps 5G service providers become much more automated and more optimized".

"We in Accenture pride ourselves to be able to help our telco clients and CSPs to manage what we call the 2-Speed migration".

"We bring in a team and make the entire digital transformation process smooth; helping our clients transform, outsource what they need to and optimize what they have".

KA: How do you think will 5G transform network operations?

AT: Network Operations are already being transformed as we speak with 5G and all the automation that is now available. 5G will drive further automation, more customer-centricity, and it will be able to drive more predictive analysis to drive optimization of the network. And this is what we are very passionate about in Accenture. We have a practice called "Intelligent Network Operations" that helps 5G service providers become much more automated and more optimized.

KA: Can you briefly describe your own approach towards 5G? How did you gear up for this market?

AT: We have built competencies from all the best of breed partners. So we've gone around to the market to work with chipset companies, we have worked with OpenRan services, we have worked with energy companies, battery providers, various digital solutions providers and we have synthesized it all in three areas:

1: How to drive operational efficiency.

2: Driving energy management.

3: Driving network traffic management to optimize throughput.

KA: How will network transformation and operations be affected by the rollout of 5G?

AT: You will see that a lot of telcos, when they start migrating to 5G, they might have a two-fold approach that we call "2-Speed migration". You still have the legacy migration that you have to manage, and many of the telcos are still maintaining the 2G for financial services and SMS, but are now moving, shutting off their 3G and moving to 4G/5G for digitalization. We in Accenture pride ourselves to be able to help our telco clients and CSPs to manage what we call the "2-Speed migration" and outsource a lot of debt services and support them in this really difficult transformation journey in changing skills, changing processes and changing asset base.

KA: What challenges do businesses face when it comes to service innovation and digital transformation?

AT: I think the most critical part of service innovation is human skillsets because once you move into digital, it requires a lot of software skills, especially from the digital transformation aspect and automating the network. Coordinate with engineering teams is also complex - software engineers are not radio engineers. I believe that this is also where Accenture really helps its client. We bring in a team and make the entire digital transformation process smooth; helping our clients transform, outsource what they need to and optimize what they have.

KA: What do you think is the key to a successful business operation?

AT: I think the key to a successful operation in the new age is "customer uptake". Ability to constantly cross-sell customer service from connectivity to digital to ICT services in a term that I call "Growing from our pool to our path". It's about growing the average revenue per unit to every revenue per account. The next level is around customer satisfaction and quality; making sure there's enough support, self-service support, and digitalization that keeps the customer retention high. T

Emirates NBD launches National Digital Talent Program

The Minister of State for Artificial Intelligence, Digital Economy and Remote Work Applications Office along with Emirates NBD, a leading banking group in the Middle East, North Africa and Turkey (MENAT) region, has launched a first of its kind 'National Digital Talent Program', as part of ongoing efforts to support UAE government's National Strategy for Artificial Intelligence 2031, which aims at developing a world-class national workforce proficient in AI and related technologies.

With the aim to nurture a pool of UAE interns over the course of the next four years, the banking group has signed a memorandum of understanding (MoU) with partners including Higher Colleges of Technology (HCT) and University of Sharjah (UoS). The joint initiative will contribute to building and growing local digital talent by providing the necessary resources and equipping young UAE nationals with critical skills and practical knowledge needed to flourish in the field of digital and information technologies including Artificial Intelligence, ultimately contributing to priority sectors of the national digital economy.

A high percentage of the UAE student population is pursuing core STEM areas including Information Communication Technology (ICT), Engineering, and Natural Sciences. This presents a good opportunity to upskill STEM graduates by applying the skills they have learned, into real-life work experiences with experts in the industry, providing a stronger pool of UAE talent able to build the next era of technology solutions primarily, Artificial Intelligence. Emirates NBD, through its new talent program aims to nurture and develop young Emiratis, making them future-ready to support the digital economy, while bridging academia and industry.

Omar Sultan Al Olama, Minister of State for Artificial Intelligence, Digital Economy and Remote Work Applications, affirmed the UAE's keenness to prepare future generations, building their capabilities, and equipping them with advanced knowledge, enabling them to contribute un the UAE Government mission in building an innovative future, enhancing its global status. Adding that ensuring qualified digital talent is a responsibility that falls on all sectors in the UAE, which will support national efforts in building a strong digital economy.

He added that the UAE government is committed to supporting programs and initiatives that develop national talent akin to the industry level. Emirates NBD sets a great example of developing local skills to the industry standard and leading positive efforts in the banking sector to develop talented nationals by enabling them to learn, train and enhance their readiness to work in various industries and raise the level of our digital economy.

Commenting on the launch, Abdulla Qassem, Group Chief Operating Officer, Emirates NBD said: "We are extremely pleased to support the UAE's mission to become one of the world leaders in Artificial Intelligence by 2031. As a leading regional bank and a pioneer in the digital services industry, we are confident that in partnership with Minister of State for Artificial Intelligence, Digital Economy and Remote Work Applications Office and prestigious institutions such as Higher Colleges of Technology and University of Sharjah, we can help develop the digital capabilities of young UAE talent, who form the future of the nation and will contribute to building an agile, future-proof economy."

He added, "As a bank that has always championed innovation and is a leader in digital banking, we are committed to catalysing the digital capabilities of our future workforce and will continue to invest in building the national digital economy."

Over the years, Emirates NBD Group has launched a number of development and training programs specifically for Emiratis, as a part of its commitment to UAE talent development. Last year, the bank had also partnered with the Minister of State for Artificial Intelligence, Digital Economy and Remote Work Applications Office to support the National Program for Coders, the largest ever UAE initiative to foster the development of coding talent in the country. The bank also launched a new and exclusive graduate program called "Ruwad", to propel young Emiratis into leadership roles. The program was the first of many initiatives to be introduced in response to the government's federal NAFIS program and also the largest investment the bank has ever made in a single talent management program. T

stc increases 5G sites by 132% and records a growth of 55% in its network usage on perfusion day

The volume of stc's network usage, increased on the perfusion day, after pilgrims' arrival to Mina during the early hours of the 8th Dhu al-Hijjah 1443, where the pilgrims' movement rate in Mina exceeded more than 55% compared to the same time of last years. The number of 5G sites in Makkah, Madinah and the holy sites increased by 132%. stc's digital operations control center monitored the increase in services' usage as well as transferred more services through its innovative networks, according to group's strategy. The stc Digital Operations Control Center monitored the transfer of more services through the latest networks according to the strategy set by the group, where voice traffic recorded a growth of more than 57%, while the fourth and fifth generation networks carried more than 96% of the internet traffic in Mina.

stc also worked on preparing an emergency plan with the relevant authorities to achieve rapid response to emergency situations

and enhance the stability of its network. The plan included the preparation of 75 maintenance centers spread across the holy sites, Makkah and Madinah, in which 50 fully equipped maintenance teams work on rapid intervention, and 235 equipped vehicles are present in the field, ensuring speedy involvement in the event of any emergency, in addition to securing backup devices for the exchange units, cabins, mobile generators, spare batteries, spare parts, spare mobile carts and mobile carts connected via satellite.

Through the Digital Operations Control Center in Riyadh, the Hajj Business Center and the Support Center and Technical Support Center in Makkah, stc monitors the status of services and anticipates the occurrence of any internal and external risks, ensures rapid response to emergencies, and secures operation and monitoring of the network, to provide the best service to pilgrims throughout the Hajj season. T

Gulraiz Khalid

Kuwait's telecom sector has demonstrated extra-ordinary advancement

More spectrum for 5G could lay the basis for continued growth

The quality of internet services in Kuwait has significantly improved over the past two years, thanks to 4G and 5G networks. Before 2020, Kuwait's 4G experience trailed leading 4G telecom markets such as Korea & Singapore, with an average download speed of 40 to 50 Mbps. A massive shift has since occurred, with the 4G user experience speed increasing 2.76 times from 6 Mbps in 2015 to 16.2 Mbps in 2019, based on independent OpenSignal reports.

Mobile broadband dominates internet access in Kuwait due to low fiber penetration; CITRA's latest figures show that 84.8% of Kuwaiti families access the internet through their mobile devices. Mobile broadband penetration now exceeds 100% in Kuwait. Operators have invested significantly in infrastructure to sustain this growth. Large-scale 3G to 4G user migration quickly drove 4G to the maturity stage and spearheaded a true smartphone revolution. Multimedia sharing, social media, e-commerce and online gaming powered by 4G laid the foundation for the eventual 5G roll-out.

The Kuwaiti telecom market has traditionally been very competitive. An HSDPA 7.2 Mbps service was available as early as 2007, followed by the region's first nationwide 4G network in 2013. Meanwhile, Kuwait launched the region's first commercial 5G service in 2019.

Mobile broadband dominates internet access in Kuwait due to low fiber penetration.

Operators have since rolled out the region's first commercial deployment of advanced 5G technologies to enable better 5G indoor customer reach and additional 5G capacity to cater to the unexpected 30% surge in traffic during the pandemic. Ookla highlighted in their recent report that Kuwait has the region's highest 5G network availability at 35%. Kuwait ranks within a list of top six countries with the fastest 5G worldwide, while "Kuwait City" ranks as the fastest city in the world. In addition to 5G quality of service development, Opensignal shows that 4G internet speed reached around 40 Mbps average download speeds and 94.4% 4G availability, respectively, in February 2022. Kuwait networks are, therefore, one of the leading mobile broadbands worldwide, based on global user experience platforms.

Mobile operators' continuous 4G and 5G network improvement measures have

provided noticeable capacity improvement in Kuwait's 4G and 5G Mobile infrastructure. CITRA's latest QoS Audit network report shows that 4G/5G Internet services from the three operators improved significantly in 2021.

It is worth noting that 5G capability goes beyond traditional 4G connectivity; it is the next step in the evolution of mobile technology that can enable different vertical industry use cases in the business-to-consumer, business-to-home and business-to-business domains. Data shows that 5G subscribers in Kuwait have already reached 1.2 million subscribers and are expected to grow exponentially in the foreseeable future to get above 50% penetration rate. Nationwide 5G coverage, fast internet speed, a wide range of affordable 5G devices, competitive 5G offerings and reasonable pre-paid and post-paid packages are key drivers for customers to switch their subscription plans to 5G.

In the enterprise space, services such as 5G Dedicated Access (DA) connectivity, IT solutions, IoT, security solutions and cloud have proved popular. Advanced services such as drones, 5G live Bus and virtual reality for healthcare, financial, education, hospitality, Oil & Gas, retail, and government sectors have attracted new future-oriented customers.

However, enterprise 5G services, in particular, demand strict attention to detail to prevent O&M failures. This has led to an increased demand for advanced 5G features such as large uplink bandwidth, low latency, multi-connection, and 5G network slicing, now widely required in many mission-critical scenarios. For example, an aggregated uplink broadband connection of only three

Kuwait launched the region's first commercial 5G service in 2019.

remote industrial HD video surveillance cameras will need 75-120 Mbps to stream concurrent video channels. The significant uplink bandwidth demand would encounter an uplink capacity issue under the 5G base station, resulting in an operator's inability to

commit to SLAs required by an enterprise.

Continued development of 5G requires allocating more than one spectrum block to operators to maximize 5G's potential and improve the user experience. Having multiple licensed 5G spectrum blocks will

In the region, Saudi and UAE regulators have already awarded local mobile operators the second 5G spectrum band in 2020.

improve experience capabilities as follows:

•In hotspot areas where many people are using 5G services simultaneously

•In radio cell edges where subscriber locations are far away from 5G radio sites

•An overall experience improvement in sites that utilize more than two large 5G spectrum blocks

•Enabling operators to have much more flexibility in provisioning their networks and to deploy the latest 5G technologies, such as 5G carrier aggregation (CA) – 5G carrier aggregation is an essential tool that can significantly impact 5G mobile performance for the end-user by concatenation of multiple 5G carriers. It can improve network capacity and enable 5G carriers to deliver increased speeds, lower latency, more comprehensive coverage, and enhanced user experience. 5G CA features are already available in commercial 5G phones and routers, such as the latest models of iPhone, Samsung Galaxy series and Huawei CPEs. 5G subscribers can enjoy its experience as soon as the 5G networks offer it

In the region, Saudi and UAE regulators have already awarded local mobile operators the second 5G spectrum band. In 2020, Saudi became the region's first country to successfully commercialize 5G carrier aggregation services. The Communications Regulatory Authority of Qatar has recently allowed implementation on the second C-band spectrum for mobile operators. Meanwhile, the Communications and Information Technology Commission of Saudi Arabia has awarded multiple 5G spectrum bands this year.

Sustaining and improving quality of service (QoS) are critical factors in supporting subscription growth and boosting 5G's contribution to digitalization goals in the public and the private sectors. Continuous

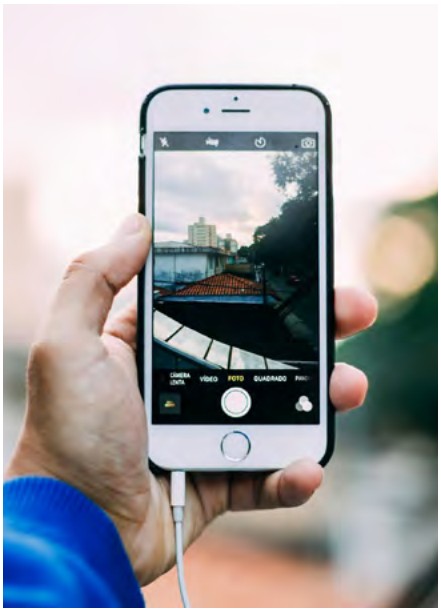
The Kuwaiti telecom market has traditionally been very competitive.

development of the 5G network experience will maintain Kuwait's leadership position in 5G and support the telecom industry's contribution to Kuwait's digital transformation plans in line with Vision 2035. T

GCC Smartphone Market suffers decline as demand continues to weaken

Newly released data from IDC's shows that shipments of mobile phones to the Gulf Cooperation Council (GCC) region declined 0.8% quarter on quarter (QoQ) in Q1 2022 to total 6.10 million units. Smartphone shipments were up 0.4% QoQ to 5.47 million units, while feature phone shipments decline 9.8% over the same period to 0.63 million units. In terms of value, the GCC smartphone market was worth $2.09 billion in Q4 2021, a decrease of 4.5% QoQ, while the feature phone market totaled $11.16 million, down 25.9%.

Samsung and Xiaomi channels reported improved supply across the GCC for the quarter. Samsung saw its most significant growth in the low ($100<$200) and premium ($800+) ends of the market, while Xiaomi saw growth in the midrange to high-end category ($200<$600). Apple faced shortages stemming from delayed shipments, which impeded the vendor's overall unit and value growth during the quarter.



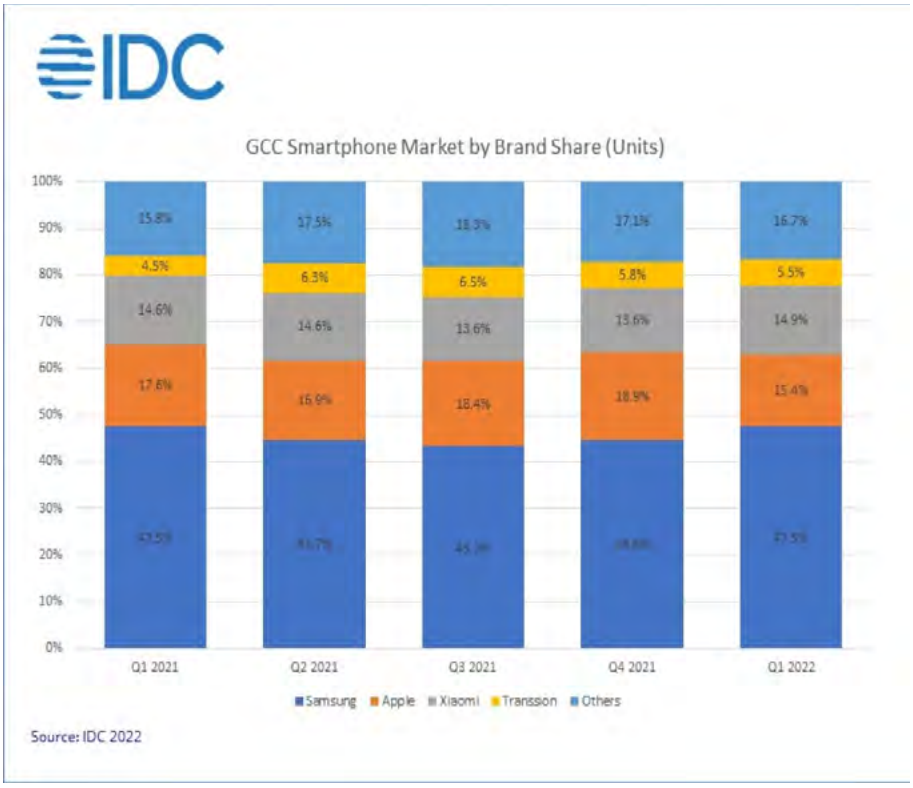
Smartphone shipments to Saudi Arabia declined 4.9% QoQ in Q1 2022, although the Kingdom still accounted for 53.3% of all smartphone shipments to the GCC. The UAE, the region's second-largest market, saw shipments increase 11.2% QoQ for 24.9% share.

"Q1 2022 saw a drop in shipments to Saudi Arabia with partners reporting excess inventory in the channel and lagging demand," says Akash Balachandran, an analyst at IDC. "However, the 'Other GCC' countries (Bahrain, Kuwait, Oman, and Qatar) saw a mild pickup after having experienced constrained supply in previous quarters. The UAE's smartphone growth stemmed mainly from an improved supply of low-end and premium Samsung devices, as well as from Xiaomi's concerted focus on promoting its midrange devices."

Samsung led the GCC smartphone market in terms of shipments in Q1 2022 with 47.5% share. The vendor posted 6.9% QoQ growth in shipments as supply improved, especially for its S-series devices. Second-placed Apple, with 15.4% share, saw shipments decline 18.2% QoQ, with channel partners reporting supply constraints and delays in shipments. Rounding out the top three, Xiaomi accounted for 14.9% of the GCC smartphone market in Q1 2022, with its expanding portfolio of midrange to high-end devices driving a 9.3% QoQ increase in shipments to the region.

The GCC smartphone market is forecast to decline 4.8% QoQ in Q2 2022 due to rising inflation, declining consumer demand, and growing inventory in the channel. Travel and tourism will continue to increase but will not be sufficient to improve the quarter.

"5G shipments to the GCC in Q1 2022 were down 3.4% QoQ and accounted for 35.9% of overall smartphone shipments," says Ramazan Yavuz, a senior research manager at IDC. "This was due to higher shipments of entry-level 4G Android devices in conjunction with shortages of iOS 5G devices. While ups and downs are expected in the short term, 5G penetration is forecast to continue at its previous rapid pace over the medium and long term and will make up 80.6% of total GCC smartphone shipments in 2026."



GCC Smartphone Market by Brand Share (Units), Q1 2021–Q2 2022

Ericsson, Qualcomm and Thales to take 5G into space

French aerospace company Thales and Qualcomm Technologies are planning to take 5G out of this world and across a network of Earth-orbiting satellites.

After having each conducted detailed research, which included multiple studies and simulations, the parties plan to enter smartphone-use-case-focused testing and validation of 5G non-terrestrial networks (5G NTN).

The result could effectively mean that a future 5G smartphone could use 5G connectivity anywhere on Earth and provide complete global coverage for wideband data services, including places normally only covered by legacy satellite phone systems with limited data connectivity capabilities.

The benefits of 5G connectivity via Low Earth Orbit (LEO) satellites are expected to include coverage in extreme geographies or remote areas across seas, oceans and other locations where terrestrial coverage is absent.

Such widespread connectivity would boost 5G smartphone subscriber roaming service capabilities, as well as enabling global connectivity for transportation, energy and health sector 5G use cases.

Erik Ekudden - *Senior VP & Chief Technology Officer, Ericsson*

The space-based network could also be used as back-up support to terrestrial networks in the event of major network outages or disasters.

The expected security capabilities of 5G NTNs mean that national government communications may be a main use case, to enhance safe and secure national security and public safety government networks.

Erik Ekudden, Senior Vice President and Chief Technology Officer, Ericsson, says: "This testing and validation cooperation between Ericsson, Thales and Qualcomm

Philippe Keryer - *EVP, Strategy, Research & Technology, Thales*

Technologies will be a major milestone in the history of communications as the ultimate result could effectively mean that no matter where you are on Earth – in the middle of an Ocean or the remotest forest – high-end, secure and cost-effective connectivity will be available through collaborative 5G satellite and terrestrial connectivity."

John Smee, senior vice president of engineering, Qualcomm Technologies, Inc., says: "For 5G to fulfill on the promise of ubiquitous connectivity, it is imperative that it can also deliver network coverage in areas where terrestrial cellular networks do not exist, whether that be over oceans or in remote areas. Our planned research with Ericsson and Thales will kick off an important step in making this vital technology a reality. We are looking forward to what this collaboration can accomplish."

Philippe Keryer, Executive Vice-President, Strategy, Research and Technology, Thales, says: "The deployment of 5G networks marks a step change for the telecoms industry. It is a game changer, not only in terms of business opportunities but also in the skills required to connect and protect billions of people and things. Thales is deeply involved in it through the different activities of the Group. The research collaboration with Ericsson and Qualcomm Technologies will demonstrate the belief of our companies that 5G non-terrestrial Networks will contribute to this revolution and will take network resiliency and security to the next level. "

Are Telecom Operators ready for ORAN?

By - Saurabh Verma, Director ICT and Sami Shaikh, Consultant ICT, Frost & Sullivan

The rapid wireless technology development enabled more people and things to be connected. With the ever-changing demands for a better experience anytime, anywhere and with more connected devices, telecom operators worldwide have to balance between meeting the needs and investing in network infrastructure. Moreover, with the commercialization of 5G, the need for this change is now more critical than ever. While Telcos have been exploring various options to bring down their CAPEX and OPEX, one of the areas of focus has been deploying and managing an efficient and cost-effective Radio Access Network (RAN).

In searching for a better price through a more competitive market and avoiding locking down in RAN infrastructure build, some telco operators have started exploring the concept of Open RAN (ORAN), which has promised to improve market competition and bring cost-saving benefits. Compared to the conventional single RAN, ORAN is based on disaggregated architecture, with open interfaces and open-source software implemented on non-proprietary white box hardware. The implementation allows different vendors' software. This allows the Telcos to adopt an integrated approach to use the best technology at the lowest possible cost.

ORAN as a concept has been around for some time now. It all began in 2016 with the formation of The Telecom Infra Project (TIP), which brought together operators, traditional equipment vendors, and startups that were working concepts leveraging on open source technologies and open applications. Furthermore, AT&T, China Mobile, Deutsche Telekom, NTT DOCOMO and Orange established O-RAN ALLIANCE in February 2018. The alliance aims to standardize and support ORAN deployments. Its current members include more than 200 companies across the tech sector, from telco operators, equipment vendors, chipmakers, software firms and cloud service providers. Rakuten Japan is the only known operator that deployed the large scale of virtualized, cloud-native greenfield 4G network based on ORAN in 2019.

While ORAN is one of the 3GPP implementation concepts in RAN technology, given its numerous promised benefits, such as lower costs and, a broader, more diverse ecosystem of equipment suppliers, It also would be a completely different RAN configuration than what exists today, and could lead to service and performance issues if mismanaged. Transitioning to ORAN is a significant undertaking, and certainly comes with tradeoffs that need to be kept in mind. On the one hand, ORAN ecosystems could lower the initial cost of equipment and software, improve flexibility. But, there is also the potential for increased complexity. Historically Telcos have struggled to integrate different vendor technologies into the same network. Moving towards ORAN would without a doubt require a very cautious approach where Telcos and System Integrators need to test if at all of these different RAN technologies can really work together before it goes live into the network. This it-self would require a lot of time and resources spent of testing and ensuring the desired performance can be met. Therefore, would erode the initial cost benefit.

> *Telcos are not clear if ORAN can really meet the requirements of network construction in multiple scenarios.*

While many Telcos are joining forces in industry alliances like O-RAN and TIP to drive growth and maturity in the Open RAN ecosystem but very few have actually deployed ORAN. Inspite of being around for several years, the technology has not matured. Although Telcos are seeing this as an opportunity to explore various vendor selection and deployment strategies – The distant road ahead is much more complicated and unchartered as of now. Deploying ORAN is no simple task and will prove to be more complex and tedious than it seems at this stage. Given the performance, security and complexity related issues foreseeably arising out of ORAN deployments, raises the question

whether Telcos should really consider ORAN? And if so are they really ready for ORAN? Or is ORAN just a concept that would fade away like many others?

What Telcos need to keep in mind before deploying ORAN

While ORAN promises to offer Telcos the benefits of market competition, improving network performance, and reducing equipment costs but as of now these implementation techniques have not been widely adopted and are distant from achieving a stage of maturity. While operators are supportive of ORAN and vRAN, both are in their infancy and have not yet proven to be fully ready for large-scale commercial implementations, especially in existing multi-vendor environments. There are challenges in attempting to deploy such an ambitious combined transformation with unproven architectures, new vendors and little previous experience to lean on.

Complexity in Deployment

Telcos must consider the increased complexity of having multiple vendors. This mix of vendors would exponentially increase the integration effort and require more resources. Additionally the management of ORAN would also require new platforms and skillsets for the orchestration and automation of networks, resulting in additional costs. Similar challenges will arise in ensuring effective operation and maintenance of the network. When an issue arises in the network, identifying and isolating the issues become more difficult because the environment is more complex. And even once the issue is found, a vendor can pass the blame to another vendor because of the complexity. Theoretically, open standardized interfaces should allow Telcos to mix and match best in class RAN solutions. However, in-practice, ensuring multi-vendor interoperability can get enormously complex, especially when implementation standards are not yet complete or have reached maturity stage.

Security is a particular area of concern with the decentralization of functions with Open RAN.

Telcos also have to keep in mind that vendors might adhere to basic requirements of standards but to differentiate themselves from competition they could end up creating their own proprietary flavors of ORAN technologies, undermining the benefits of openness. Similar complications were faced by Cellcom, who had setup America's first ever ORAN. However, Cellcom is taking down its ORAN network in Wisconsin due to its difficulties accessing equipment. Parallel Wireless provided software for the network, but Cellcom couldn't obtain compatible radios due to vendors' minimum volume purchasing requirements. Like many smaller carriers, Cellcom said it doesn't have the purchasing power that bigger operators do.

Telcos also have concerns around RAN disaggregation. When a BTS is disaggregated, it needs to be logically "re-aggregated" for ensuring network performance, inter-operability between different suppliers, feature and roadmap alignment, network operations process alignment, and lifecycle management alignment. There is a lack of concrete assurance that RANs composed of different vendor components, deployed in disparate locations, can truly meet the demanding synchronization and performance requirements of production networks.

While many Telcos are joining forces in industry alliances like O-RAN and TIP to drive growth and maturity in the Open RAN ecosystem but very few have actually deployed ORAN.

Moreover, even if ORAN is introduced in 4G/LTE and/or 5GNR, many operators have the legacy and installed base of 2G/GSM, 3G/WCDMA, 4G/LTE, and even "classic 5GNR", and they could lose the benefits of Single RAN for 2G/3G/4G/5G.

In a multi-vendor deployment the role of a system integrator becomes very critical. The system integrator has to work very closely with the vendors in their system to make sure that everything can work together seamlessly. Telcos, System Integrators and Vendors will have to work in collaboration to create testing methodologies for the interfaces, establish testing centers, and form working groups to continue research into this topic. Telcos are not clear if ORAN can really meet the requirements of network construction in multiple scenarios. Considering its inability to support GULNR due to the lack of multi-frequency and multi-mode, lack of solutions such as high power and dynamic spectrum sharing, incompatibility with current inventory which makes it challenging to overlay inventory network and lack of E2E life cycle service capability, have made Telcos rethink their approach towards ORAN.

Security Related Challenges

Security is a particular area of concern with the decentralization of functions with Open RAN. Separating single RAN into separate components, from different vendors expands the RAN threat surface. More vendors and more software means a broader attack surface with increased risk for end-to-end supply chains. Telcos need to be wary of the fact that the cost of adding these new safeguards could erode the ORAN savings they expect to realize. Telcos should also take into consideration the level of support they can expect from new startups and smaller vendors in ensuring end-to-end security. More often Telcos could find themselves shouldering this responsibility of filling in the gaps for new smaller vendors.

The Cybersecurity concerns associated with ORAN have been recently highlighted in a report published by European Commission (EC) and the EU Agency for Cybersecurity. As per the report and some views shared by industry leaders that, cybersecurity is seen as a significant challenge for ORAN architectures. The report emphasizes on the fact that ORAN deployment expands thereat surface, diversified components from different vendors increase the diversity of security levels, leading to weak security level components being easier to attack, further endangering the entire network security. The report also highlights that the technical specifications developed by the O-RAN Alliance are not sufficiently mature and secure. Considering the security related challenges that come with ORAN have forced several Telcos to rethink their approach towards ORAN or adopt a more cautious route.

Cost Related Challenges

Telcos need to really evaluate if ORAN can deliver on the promise of CAPEX and OPEX reductions for both brownfield and greenfield deployments. It is quite challenging for smaller vendors to compete with traditional hardware vendors. These large traditional vendors benefit from the economies of scale and optimized value chains. Additionally, technology providers could lose the scale cost dividend and technology cost dividend due to the fragmentation of base station components.

While deploying ORAN, Telcos aiming for short term CAPEX and OPEX savings might not be the best approach. A long-term vision with a future oriented plan is required to overcome the cost challenge of Open RAN. Running ORAN requires two sets of parallel base stations, one for 2G/3G and the other 4G/5G. Running two parallel networks increases rental and energy costs over one network, which increases OPEX. While deploying ORAN cost reduction is among the most desirable outcomes. However, this outcome is far from guaranteed as Telcos could end up bartering one challenge for another or take on other overhead of new technology deployments.

While deploying ORAN, Telcos aiming for short term CAPEX and OPEX savings might not be the best approach.

The multi-vendor openness and broad architectural flexibility that come with ORAN have their benefits for Telcos but using an ORAN in reality comes with the need to learn new operational, automation, and DevOps software models that this new architecture comes with. It represents the need for a major organizational change and Telcos will need to add new knowledge and technical capabilities to tackle this change.

The Future of ORAN

The migration to ORAN demands a careful, skilled and well-thought-out strategy from the early stages of design, engineering, testing, integration and deployment. Implementing new technology always comes with challenges and pushbacks. This makes it easier for some businesses to stick with the technology they are comfortable with, rather than learn to use a new one. ORAN could offer Telcos the required flexibility to pick and choose the required hardware and software in each geographical area types.

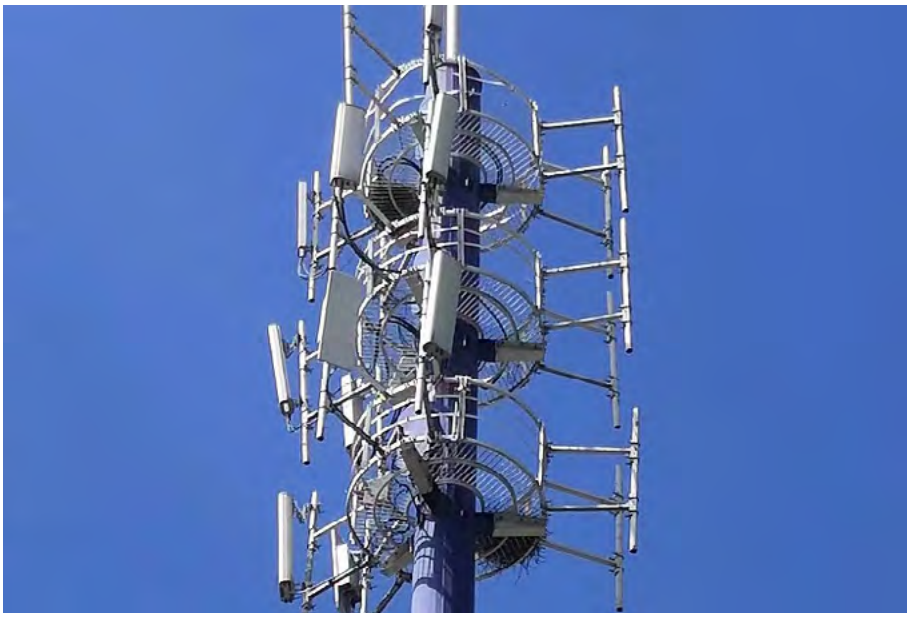
Increased completion amongst more vendors could potentially bring down the software cost for a telco RAN. But it is still to be seen whether the benefits coming from ORAN will be able to offset the costs due to the increased complexity, and the resulting overheads. ORAN deployments could come with higher integration and maintenance costs. Additionally, vendors like Ericsson estimate that the power consumption of ORAN networks could be 40% higher than that of integrated networks.

Telcos in the Middle East being small to medium sized must take this into consideration while planning their ORAN strategy. Taking the potential complexity and costs into consideration, the best approach for Telcos in the Middle East could be to adopt a technology-neutral approach. Whether ORAN or SingleRAN is implemented, selecting a comprehensive choice based on performance, power consumption, CAPEX, and OPEX will maximize benefits.

Every Telco looking at potential ORAN deployment will have to build their own business cases and will have to address specific technology challenges that come with it. Deployment models will also significantly differ from greenfield, brownfield and mixed networks. ORAN based solutions are slowly moving from testing towards the maturity phase. However will it be able to deliver on all that has been promised remains questionable. T

China Unicom and Huawei roll out 1,000 MetaAAUs

China Unicom Beijing and Huawei have created the world's largest commercial MetaAAU network as part of a project that has deployed MetaAAUs at over 1,000 rural network sites on the outskirts of Beijing. This new network has already seen a 38% increase in traffic per site by improving 5G services in rural areas. The MetaAAUs used by this network also reduce site energy consumption by 5% under the same network load compared with previous-generation AAUs, bolstering network energy efficiency. Their deployment represents an important step towards the green and digital village goals of the 5G Capital project.



Ritchie Peng - *President, Huawei 5G*

MetaAAUs are the third-generation of 5G AAU developed by Huawei. They use the company's new extreme-large antenna array (ELAA) architecture to double the scale of arrays compared with the previous-generation AAU. This innovation results in extended coverage because channel beams are narrower and energy is more focused. The new architecture, combined with innovative algorithms, improves network performance while slashing energy consumption. China Unicom Beijing's has leveraged these advancements to hit its 2022 5G construction targets for small towns and rural areas which face unique challenges when it comes to inter-site distance, gigabit user experience, and green networking. China Unicom Beijing deployed these MetaAAUs at over 1,000 sites in July in towns and rural areas including the Shunyi, Huairou, and Pinggu districts of Beijing. The MetaAAUs have delivered a 40% increase in coverage area, increased uplink and downlink user-perceived rates by 10%, and lowered network energy consumption by 5% over previous-generation AAUs, achieving optimal network performance and energy efficiency. Since their deployment, user traffic has increased by 38% in their coverage areas and the carrier's user base has increased by 37%.

5G coverage has continuously expanded, bringing more people better Internet experiences, since commercialization efforts began three years ago. Now, 5G networks are becoming increasingly available outside of urban areas. For example, in Foyukou, a village outside Beijing, users have many more sales channels at their disposal thanks to the HD live broadcasts and direct photo posting on WeChat enabled by 5G. This has boosted sales and promoted the construction of "digital villages." New applications for 5G are also emerging in areas like smart agriculture, remote education, and telemedicine. These scenarios require gigabit networks with smaller carbon footprints that perform at levels seen in urban areas.

Fan Liqun, the head of China Unicom Beijing's 5G co-construction and sharing work team said their mantra for this endeavor is, "Quality first, experience foremost. For years we have been committed to building a world-leading, experience-centric 5G network. We are amazed how well MetaAAU is performing at the more than 1,000 sites on the commercial network, cementing its place in our digital village strategy. This achievement marks a key milestone in our 5G Capital project, and is a testament to our constant pursuit of a ubiquitous high-quality 5G network. We have explored various scenarios based on high bandwidth and iteratively adopted innovative Massive MIMO technologies to ensure the best possible 5G and digital experience to our customers."

Ritchie Peng, President of Huawei 5G Product Line, said, "MetaAAU is one of our major innovations. With MetaAAU, we achieve great breakthroughs in network performance and energy efficiency, and this is attributed to our strong investment and continuous innovation in Massive MIMO. We are glad to cooperate with China Unicom Beijing on the thousand-site MetaAAU project, and proud to see that MetaAAU achieves the desired performance across the entire network. We believe this can provide a useful reference for global operators in selecting Massive MIMO technologies for different scenarios." T

The Leading ICT Event in Bahrain

11th EDITION

MEET ICT BAHRAIN 2023

CONFERENCE

BITEX 2023 BAHRAIN INTERNATIONAL TECHNOLOGY EXHIBITION

EXHIBITION

6 - 8 JUNE 2023
Gulf Convention Centre, Gulf Hotel, Kingdom of Bahrain

Connect with IT Professionals

Lead Generation

Networking and Business Matching

REGISTER FOR 2023!

FOR INQUIRIES:

KORINA DELA ROSA
Project Manager

korina.delarosa@gfbholdings.com
+973 667 08 601

www.meetict.com
www.bitexbh.com

meetictbahrain
bitexbahrain

Etisalat by e& supports digital transformation journey of Juma Al Majid Group

Etisalat UAE, branded as etisalat by e&, has announced the successful implementation of an end-to-end MS Teams Direct Routing in the UAE for Juma Al Majid Holding Group supporting the digital transformation journey of the group by moving from an on-premise legacy telephony to a cloud-based solution.

The implementation follows e&'s recent unveiling of "etisalat by e&" as the new brand identity for Etisalat UAE, in line with the Group's positioning as the global technology and investment conglomerate that digitally empowers people and societies. This illustrates the company's continuous efforts to provide creative offerings that best support its customers' requirements and enhance the customer experience.

Etisalat by e& provided a hosted end-to-end solution including voice infrastructure, managed Session Border Controller (SBC), and MS Teams integrated with MS Office 365. This will offer interoperability by delivering calls directly to Juma Al Majid's business locations with MS Teams as an office phone system, making the workforce more productive. This is in line with Juma Al Majid Holding Group's future goal of adopting a fully agile way of working and seamless interaction, with the installation of softphones on mobile, thus eliminating the traditional desk phones and giving employees the freedom to communicate and collaborate from any location leading to higher productivity between cross-functional teams.

Jawad Abu Farha, Group Chief Information Officer - Juma Al Majid Holding Group highlighted that this implementation is an essential building block in the group's digital journey as the organization transitions to the cloud for all its operations. "The group's partnership with Etisalat by e& is supporting our journey in achieving our strategic digital goals. The deployment of this end-to-end solution is the first in the country, and we are proud to have set a benchmark for our peers in adopting this agile solution that enables cross-functional team productivity and increases operational efficiency."

Ragi Magdy - Senior *VP, Enterprise Sales, Etisalat*

Etisalat by e& operates and manages the most advanced network and voice infrastructure in the UAE, but it also brings robust end-to-end managed solutions to its government and enterprise customers. Moreover, in its position as a leading digital enabler, it gives large-scale organizations like Juma Al Majid ample leverage to fast track their journey to the cloud, facilitating faster time to market and supporting multiple lines of businesses.

Ragi Magdy, Senior Vice President, Enterprise Sales, Etisalat UAE said: "We are committed to enhancing customer experiences across all our business operations at e&, by ideating, designing and delivering a range of innovative technologies that make a difference. We are proud of our partnership with Microsoft to deliver the first end-to-end MS Teams Direct Routing solution in the UAE to our long-term customer Juma Al Majid Holding Group. This reinstates Etisalat's capabilities as an ICT conglomerate that combines technological competencies with robust telecoms expertise for a brighter, digital future. The implementation of this project highlights our 24x7 fully managed operational capabilities and epitomises our strategic vision of driving the digital future to empower societies. We look forward to working closely with Juma Al Majid Holding Group as they adopt innovative technology solutions across their business segments, ultimately driving positive change across their operations."

Jawad Abu Farha - *Chief Information Officer - Juma Al Majid Group*

MEET ICT Conference in Bahrain records one more successful edition

500 participants and more than 40 technology companies

The Information and Communication Technology Conference (MEET ICT) concluded in Bahrain recently after being held over three days from 14-16 June 2022. About 500 dignitaries and decision-makers from several public and private sector institutions related to the ICT sector and digital transformation participated.

In parallel with the MEET ICT Conference, the Bahrain International Technology Exhibition (BITEX) was held with the participation of about 40 Bahraini, regional and international technology companies.

The event was organized by Bahrain Technology Companies Society (BTECH) in partnership with "WorkSmart for Events Management".

MEET ICT Conference was held this year under the slogan "Leading the way towards the digital economy through artificial intelligence" while celebrating its 10th Edition following the economic recovery plan's ICT sector strategy 2022-2026.

The event featured over 30 sponsors and partners, including Platinum Sponsor, Batelco, Gold Sponsors, Huawei and Indra | Minsait, Silver Sponsors Site24x7, Almoayyed Computers Middle East, Microsoft, ID Sports Ventures, Computer World, Bronze Sponsors, Alba, KPMG, Innovation Partner, CTM360, Internet Partner, Etisalcom, Strategic Partner, Tamkeen. This is in addition to 20+ Event Partners including the University of Bahrain, Information and eGovernment Authority, ThinkSmart for Training and Development, TechoSmart, Teletimes, Bahrain This Month, LocalBH, CXO Knowledge Club, Gulf Future Business, Internet Society Bahrain Chapter, IEEE Society Bahrain ComSoc, Arab ICT Union, IDC, UNIDO, American Chamber of Commerce Bahrain, and more.

Teletimes is being awarded as International Media Partner to the event, during MEET ICT

Ahmed A. Al Hujairy - *CEO, WorkSmart*

The participants in this event called for more financial support for artificial intelligence research at the level of Bahrain and the region, in addition to conducting more economic research through AI techniques. They also highlighted Bahrain's use of artificial intelligence techniques to support digital transformation and build a knowledge economy.

Furthermore, the participants recommended the employment of AI more effectively to drive digital transformation, maximizing the capabilities of the digital economy for innovation, enhancing e-commerce, as well as ensuring 5G networks' resilience and security.

As much attention was devoted to the manufacturing and programming of robots, as the participants encouraged more startups to enter this sector and discussed the economic effects of the emergence of AI such as its impact on prices and wages, productivity increases, and the potential impact on unemployment and changing labour market requirements.

At the "Meet ICT" conference, the participants also praised the Kingdom of Bahrain's efforts in human resources development to keep up with the demands of Industry 4.0, highlighting particularly the efforts of the "Tamkeen" labour fund to facilitate these efforts.

The Chairman of The Bahrain Technology Companies Society, Tareq Fakhroo explained, that the importance of the recommendations arising from the Meet ICT Conference is due to the increasing presence of AI in the economy, business, and personal lives. He quoted a McKinsey Global Institute study concluding that by 2030, robotics and AI may replace 30% of the world's current human labour.

"There is great value in benefiting from Bahrain's digital transformation model, given that Bahrain has been able to build very advanced Internet infrastructure, as well as the development of legislation in the ICT sector, and in the existence of national competencies that can support the digital transformation process." Fakhroo said.

On his part, Ahmed A. Al Hujairy, the CEO of WorkSmart affirmed that the success of this year's event is owing to the event's prominence and importance as the largest of its kind in the field of ICT in the Kingdom of Bahrain. Adding that this event returns to being held in person after being halted due to the pandemic. He explained that efforts have been arranged to make the tenth session unparalleled in terms of organization and program of events, as well as keynote addresses.

"This event is a platform that gathers decision-makers from the private and public sectors, key players, IT experts, and those interested in networking, and building valuable partnerships, to achieve common goals of highlighting innovative trends, services, and products for ICT companies and promoting private sector institutions in ICT field." Al Hujairy added.

According to the Sr. Events Manager of WorkSmart, Muktar Mirza, "This year's Meet ICT Conference included six comprehensive conference sessions with 25 influential speakers from inside and outside Bahrain discussing topics such as Digital Transformation, FinTech, cybersecurity, blockchain, smart cities, and others. This is in addition to 50 exhibitors from Bahraini, regional, and international companies working in the field of ICT".

Next edition of the event will be held on 16th to 18th May 2023 in Bahrain.

Satellite industry is at an important phase of transition

Point-to-multipoint is extremely important especially for Broadcast

Helen Weedon, Managing Director, Satcoms Innovation Group

Teletimes Interview

Helen Weedon is Managing Director of the Satcoms Innovation Group (SIG) which is dedicated to promoting innovation within the satellite industry. Helen has been involved with SIG since 2011, previously supporting the group with marketing, PR, and admin activities. Helen has over 15 years' experience within the satellite and broadcast industries. She is also the founder of Radical Moves. Helen regularly addresses the industry on the challenges faced by the satellite industry and the innovative approaches needed to resolve them.

During CABSAT 2022, Helen discussed the core issues of satellite industry and working of Satcoms innovation group in an exclusive interview with Teletimes International.

Teletimes : Can you tell us about Satcoms Innovation Group and what it does?

Helen Weedon: The Satcoms Innovation Group is a not-for-profit satellite industry group aimed at solving technical challenges and promoting innovation within the satellite industry. Originally the Satellite Users Interference Reduction Group, we widened the remit because we realized that there are so many other areas where it would be useful for technical operations people to collaborate across companies. Interference does however remain an important part of our remit. What is key is that we bring together technical people to discuss all of these important challenges and opportunities. That makes it easier for them to work together as problems arise and very often it has led to manufacturers releasing new tools to target the problems being experienced by operators.

CABSAT 2022 5G session

TT: How do you think the satellite industry will evolve over the next five years?

HW: The satellite industry is at an important phase of transition. Traditional operators are faced with growing competition from new mega constellations as well as other connectivity technology such as 5G. At the same time, satellite has a unique position to enable much of the new technology thanks to its reliable and ubiquitous nature. This means that traditional operators are having to evolve their approach to remain relevant and competitive.

> *"Satellite has a unique position to enable much of the new technology thanks to its reliable and ubiquitous nature".*

It seems likely that this will manifest in a few ways. Firstly, there will be a massive transition to cloud-enabled satellite networks. Secondly, satellite operators will for the most part more closely resemble ISPs in five years' time. This will include a shift in the way services are managed and delivered, adopting a model much more akin to mobile service provision, giving users access to manage their own services. A number of operators are already making these transitions which will eventually alter the satellite landscape quite significantly. At the same time, some customers will continue to need a more traditional approach to service provision.

TT: How does Satcoms Innovation Group plan to promote innovation within the satellite communication industry with the aim of improving operational efficiency and reducing impact?

HW: We promote innovation in a number of ways. Our events offer solution providers unique insight into the everyday challenges facing operators. They are also very discussion-led, making it easier for the technical teams to delve into a lot of detail around challenges and possible solutions. This often leads to vendors being able to highlight existing technology as well as being able to bring innovative solutions to market that are much needed by the industry.

We also promote many of our member's technology through our website, social channels, and newsletters to members and highlight in articles and blog posts.

TT: Do you think that the point-to-multipoint capabilities of satellite offer it a unique advantage?

HW: Absolutely. Point-to-multipoint is extremely important especially for broadcast, and there isn't really another technology to do this as well as satellite at the moment.

TT: What impact does the advent of data and video-on-demand have to the traditional delivery of satellite?

HW: The way in which video is produced, distributed, and consumed has changed dramatically over the years. Of course, the global pandemic accelerated many of the shifts we were already seeing. In an environment where live events could be cancelled at any moment, satellite is challenged by its inflexibility. And so we are seeing IP becoming more widespread for contribution and distribution of video. However, while certain broadcasts lend themselves to IP, others will continue to need satellite, especially in those hard-to-reach areas or for point-to-multipoint. While we will certainly see a change in where satellite is used, I think it is unlikely to lose its importance for broadcast.

Satellite can also enable different use cases around data and video on demand. For example; remote training centers in difficult to access areas could use satellite bandwidth to download training videos and content overnight and cache them for use during the day. The Satellite link is now

available for data services during daylight hours which maximizes the network utilization.

TT: Do you think that Satcoms Innovation Group is well-positioned to capitalize on the growth of 5G and IoT?

HW: The Satcoms Innovation Group is a not-for-profit organization and our focus is on bringing members together for the good of the entire satellite industry. So in that respect, I hope that our members can capitalize on these technologies and our working group for 5G is aiming to nsure that is the case by looking at how satellite can fulfil its role as an enabler of 5G technology.

TT: With the advent of 5G, there will be a lot more devices connected to the internet that may put a lot of pressure on our current satellite infrastructure. What do you think needs to be done to prepare for this surge in demand?

HW: You only need to look at the operators plans for new high capacity satellites and the move to Q/V band for gateways to understand the industry is preparing itself. Couple that with evolutions in the ground stations and orchestration of software services that mirror the 5G telecoms infrastructure. The challenge for our industry will be to cross the boundary from what has been stagnant long lived satellite services to a more dynamic extension of the terrestrial telecoms networks.

TT: Do you think that low-earth orbit satellites will become more popular for providing broadband services and how will the help bridge the digital divide?

HW: Absolutely. Satellite is already important for helping connect those communities without good infrastructure. LEO satellites will deliver better connectivity at a lower cost and will make that even more attainable, helping connect more of the world.

What we think will happen is a blended offering from providers; those use cases that require low latency applications will pay a premium for LEO and those application that are more latency tolerant will use MEO or GEO offerings.

TT: What do you see as the biggest challenges facing the satellite industry in the coming years?

HW: There are a number of challenges that we are aiming to tackle with our current working groups. We see 5G as both an opportunity (for satellite to enable these services) and a potential threat (due to interference for example). The transition to cloud-enabled networks will be ultimately beneficial but the industry is challenged with managing that shift and understanding new technology in order to do that. The sheer rise of satellites in space is also a massive challenge both for spectrum and the potential of collision. It seems as if interference has become less of a problem over recent years but it remains a challenge and will likely become even more so as the amount of satellites increases.

SIG workshop at Micro-Ant

We are also looking at Flat Panel Antennas. This technology is drastically needed, especially for comms on the move, however unless the equipment is of high standard and can operate seamlessly, there is a huge potential for errors, causing further interference and other problems. At the same time manufacturers are challenged with varying demands from different operators so we need to find some level of standardized approach.

> *"LEO satellites will deliver better connectivity at a lower cost and will make that even more attainable, helping connect more of the world".*

TT: Real-time communication with satellites, especially those that are part of Low-Earth Orbit (LEO) constellations is a growing challenge. How is SIG helping mitigate this?

HW: This is not currently an area we are focusing on but I will bring this to the technical board to see if there is a role for SIG to explore.

TT: Are there any other companies in the satellite or telecommunications industries that you think would be a good fit for a partnership with Satcoms Innovation Group?

HW: Our members are made up of a wide variety of companies within the satcoms space and we are always looking for more people to join us. We would really love to see more engagement from the LEO operators so we can share experiences for the mutual benefit of everyone involved.

We do also work closely with other industry associations, such as the Global VSAT Forum, when the opportunity and need arises. T

Hughes successfully tests 5G Satellite Backhaul, verifies Interoperability

Khalid Athar

Hughes Network Systems has announced the successful testing of 5G satellite backhaul with the company's JUPITER™ System ground platform. Over a series of tests at its Germantown, MD, gateway, Hughes engineers connected 5G smartphones to the internet with JUPITER System infrastructure – including a very small aperture terminal (VSAT), gateway and high throughput satellite. The tests validated the compatibility of the Hughes technology with a 5G open radio access network (O-RAN) system, representative of any 3GPP standards-based, standalone 5G deployment.

"These interoperability tests confirm the suitability and ease of employing the JUPITER System for 5G cellular backhaul," said Bhanu Durvasula, Vice President, International Division at Hughes. "We've built our ground platform to be future-proof, so customers have a roadmap to transition from LTE traffic today to 5G tomorrow, with the ease of a software update."

Around the world, mobile network operators currently employ JUPITER System equipment to power thousands of backhaul sites for 2G, 3G and LTE traffic – now with a clear path to 5G.

"In our ever-connected world, satellite plays an essential role in helping mobile network operators serve customers everywhere, even in places where terrestrial solutions are not feasible," continued Durvasula. "Satellite provides resiliency for terrestrial networks during peak hours and emergencies and, as part of the 5G network of networks, will also fill the gaps in terrestrial systems."

The tests were conducted across the deployable, standards-based 5G Open RAN-compliant system from COMSovereign, a U.S.-based developer of 4G LTE advanced and 5G communication systems and solutions. The same system is in use by the National Institute of Standards and Technology ("NIST") for evaluation and demonstration of 5G systems.

Bhanu Durvasula - *VP, International Division*

"We look forward to potential opportunities to work with Hughes and to assist the entire satellite communications industry in harnessing state-of-the-art 5G and beyond technology," said Dr. Dustin McIntire, CTO of COMSovereign. "Satellite and mobile operators can deploy our 5G solution on their existing hardware without disrupting their architectures, along with excellent quality of experience and maximum utilization of available bandwidth."

Dr. Dustin McIntire - *CTO, COMSovereign*

In use on more than 75 satellites worldwide, the JUPITER System is the most widely used ground platform, setting the de facto standard for conventional and high-throughput implementations such as satellite internet, enterprise networking, community Wi-Fi hotspots and cellular backhaul. T

ST Engineering iDirect and MEASAT reaffirm partnership

ST Engineering iDirect, a global leader in satellite communications has announced that Malaysian satellite operator MEASAT, is significantly expanding its iDirect Evolution-based satellite network to deliver a plethora of services to enterprizes and communities located in rural and ultra-rural areas across Malaysia. MEASAT-3d, launched on June 22, 2022, will provide C, Ku and Ka-band HTS capacity so that users will be able to enjoy high-speed broadband regardless of their location within Malaysia. The contract was sealed in partnership with Datacom, a regional service integrator and long-term partner of ST Engineering iDirect, that will carry out the upgrade, activation and support of the network.

The Evolution platform already underpins MEASAT's network which serves thousands of remote sites across Malaysia, making it one of the largest globally deployed networks. This upgrade will now expand

delivery of consumer and enterprise broadband services for farms and plantations, community Wi-Fi broadband for rural underserved regions, cellular backhaul to MNOs, government and soon, land and maritime mobility services. The Evolution platform supports MEASAT's true multiservice offerings.

"Having operated the Evolution platform for years, we are well-acquainted with its multi-band, multiservice capability, scalability, flexibility and efficiency as well as its ease of management," said Jeevan Rao, Associate Vice President, Network Engineering & Operations, MEASAT. "The Quality of Service capabilities within the platform allow us to differentiate and manage different Service Level Agreements and services for our customers, no matter how simple or complex their needs may be. T

MEASAT announces new appointments

Ganendra Selvaraj
Chief Commercial Officer

Ganendra Selvaraj first joined MEASAT in 2004 and holds a Bachelor of Science in Aerospace Engineering from the University of Kansas. With close to 20 years of experience in the Telecommunications industry, Ganendra has performed a broad spectrum of technical and commercial roles within MEASAT leading up to this appointment.

In his new role, Ganendra will oversee MEASAT's Sales, Customer Engineering, Business Development and Corporate Communications functions. As a member of the MEASAT's Executive Committee, he will focus on building the MEASAT customer base and expanding its commercial activities in support of the MEASAT Group's long-term strategy.

Jeevan Rao has been with MEASAT since 2008 and holds a Bachelor of Engineering in Electrical Engineering (Mechatronics) from University Technology Malaysia and Master of Science in Communications & Network Engineering from University Putra Malaysia.

With close to 25 years of experience in satellite communications, broadcast and telecommunications industry, he brings experience in both space and ground segments; video broadcasting and DTH; VSAT and cellular backhaul networks. In his new role, Jeevan will oversee MEASAT's Service Delivery, Network Management Centre, Remote Site Support, System Development and Information Technology departments. T

Jeevan Rao
AVP - Network Eng & Op

teletimes INTERNATIONAL

ST Engineering iDirect streamlines Site Installation Process for Intelsat FlexEnterprise customers

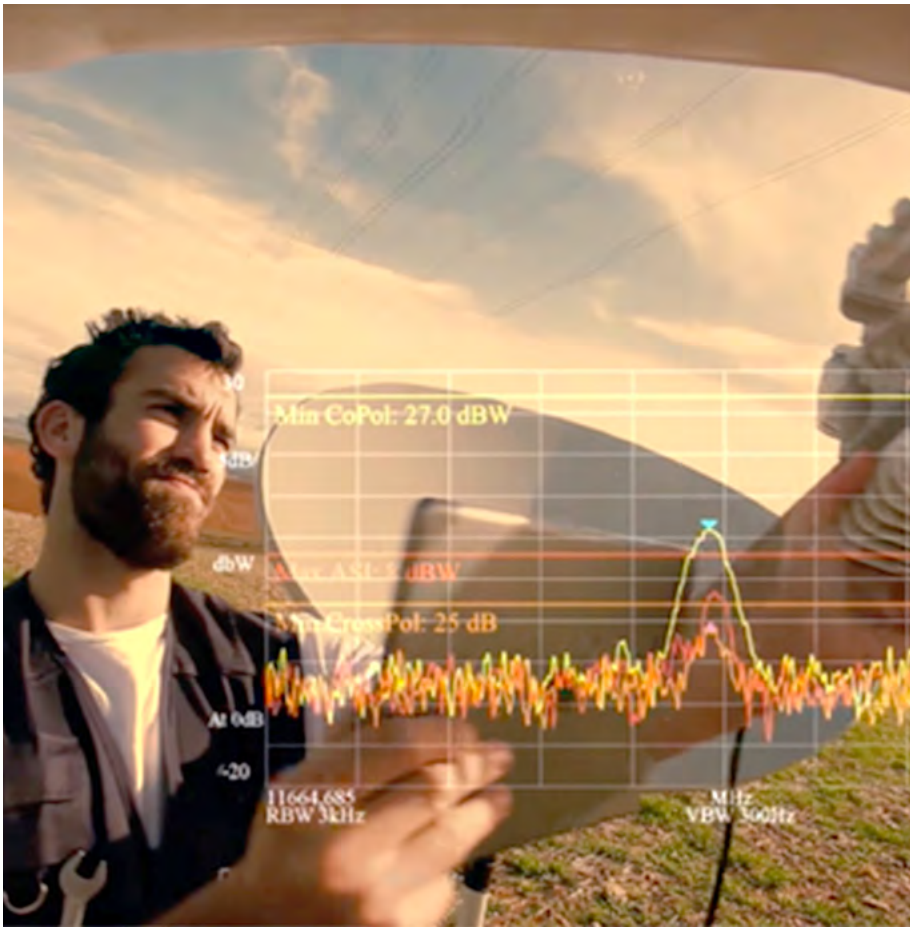
ST Engineering iDirect, has enabled a simplified site installation solution for Intelsat's FlexEnterprise platform, reducing the amount of coordination required to quickly activate new sites. The Satmotion solution, developed by Integrasys, is now integrated into iDirect's Velocity platform which underpins the global FlexEnterprise service fabric to enable even faster deployment of connectivity services for enterprise locations practically anywhere in the world.

This software-based solution eliminates the requirement for a separate communications channel and coordination between a central operations center and remote sites, making it faster and more cost-effective to deploy services. The capability will accelerate time-to-market for service providers and reduce time-to-deploy for individual sites, a critical need when establishing services to new areas.

The new feature allows remote-site installers to accurately point antennas and autonomously enable service. Upon detection of ST Engineering iDirect's persistent multicast signal, installers are guided through the equipment commissioning process without the need for coordination with the Intelsat Network Operations Center (NOC), saving significant time and resources while bringing needed flexibility to the process of delivering service to new locations.

"This is a proven solution that significantly simplifies the deployment of VSAT systems like FlexEnterprise," said Tim Winter, Vice President Global Accounts at ST Engineering iDirect. "By removing the need for real-time coordination between the remote installer and NOC personnel to line up the antenna, the number of labor hours are reduced, which can be a significant portion of the overall cost to get sites up and running. The rapid roll-out and subsequent cost savings equal a faster Return on Investment for service providers, accelerating time-to-market and increased revenue."

Alvaro Sanchez - *CEO, Integrasys*



"The FlexEnterprise solution is already deployed by service providers to extend resilient internet, private network, and cloud connectivity to enterprise locations around the globe, and a key benefit of the service is the ability to bring sites up quickly," explained Gerry Collins, Director Network Product Management, Intelsat. "Satmotion is an important addition to the FlexEnterprise platform, enabling our expanding base of customers to streamline service delivery and making it easier to deploy services to support more enterprise use cases."

"Working with ST Engineering iDirect and Intelsat has introduced us to a new set of market requirements, and we are pleased to have been able to adapt to serve these needs with our technology", said Alvaro Sanchez, CEO at Integrasys. "It has been a great pleasure to work with such leaders in their respective markets." T

LIVEU IBC2022 Preview

Moving Live to the Cloud

The cloud will take center stage on the LiveU stand at IBC with innovative cloud workflow solutions. LiveU will be highlighting its end-to-end live video and remote production (REMI) solutions, powered by the LiveU cloud video platform, enabling new levels of reliability, flexibility, and cost savings.

For the first time, LiveU will be showing its end-to-end cloud production workflow with easylive.io, which the company acquired in May 2022, enabling innovative and interactive live experiences. With the easylive.io integration, LiveU aims to offer a full end-to-end solution for live contribution, cloud production, orchestration, ingest and distribution, serving the needs of every type of customer from global broadcasters to niche sports and entertainment.

With the accelerated adoption of remote production workflows, LiveU will also be presenting its cloud-based solutions for sustainable live productions. Leveraging its IP technology to reduce travel, power and equipment costs, LiveU helps to lower each organization's carbon footprint – while enabling them to produce high-quality content in the cloud.

In the run-up to the show, LiveU will unveil its new 5G live video transmission solutions as part of its complete 5G product suite for broadcast-quality coverage.

Show highlights:

LiveU will showcase its end-to-end cloud solutions for the video production workflow, including:

• Contribution – unlocking the potential of live video with 5G, 4K and multi-cam

LiveU will demonstrate its native 5G live contribution and distribution solutions including the multi-cam LU800 5G production-level field unit, small-sized LU300S 5G video transmission solution and rich remote production tools, using the LiveU Reliable Transport (LRT™) protocol.

•Production, Management & Orchestration – for greater engagement, and increased efficiency

LiveU will present the easylive.io all-in-one cloud-based live streaming production studio, alongside its latest cloud-based solutions. These include the new LiveU Ingest solution for automatic recording and story metadata tagging of live video, and the award-winning LiveU Air Control solution, serving as a single collaboration solution to get remote guests on-air and live feeds into the system in broadcast-quality.

• Distribution – expanding the reach for live content, at a fraction of the cost

Increasingly used for global news and sports coverage, the LiveU Matrix IP cloud video management and distribution solution offers significant cost savings compared to satellite and fiber. LiveU Matrix will be demonstrated with its new Dynamic Share service, enabling users to share and receive an exponential number of live feeds using the Global Directory of 10,000+ customer endpoints in news, sports, entertainment, and other vertical markets. T

Huawei OceanProtect Backup Storage wins Best of Show Award at Interop Tokyo 2022

At Interop Tokyo 2022, the largest ICT trade show in Japan, Huawei OceanProtect Backup Storage won the Best of Show special award in the Server & Storage category. This was the first world-class award won by Huawei OceanProtect Backup Storage, demonstrating its high-end and competitive advantages.

Award-winning review: Unmatched backup storage performance. With fast backup speeds and high data reduction rates, the system can revolutionize applications and system designs and propel a new model of backup storage into the future.

Interop Tokyo is the largest and most influential ICT exhibition in Japan. Each year, the best technology companies from around the world showcase their cutting-edge solutions and technical prowess, to compete for positive Interop reviews. Huawei OceanProtect backup storage has been praised by IT experts and reviewers for its unique, industry-leading solution and flawless on-site demonstration.

Hao Maoquan, Product Manager of Huawei Japan Data Center Solution Sales Deptt (right), accepts the judge's representative Awards

The traditional Disk-to-Disk-to-Tape (D2D2T) model for data protection faces problems such as long backup window and recovery time, while the new era of Flash-to-Flash- to-Anything (F2F2X) redefines the model as backup solutions go flash, further unlocking the value of data. Huawei OceanProtect Backup Storage, as a next-generation smart all-flash benchmark product, is designed for the F2F2X era, featuring fast backup and restore, efficient shrinkage, and high reliability.

Why Huawei OceanProtect Backup Storage was crowned the winner

The first benefit is fast backup and restore. Upstream, OceanProtect uses a DTOE smart network interface card (NIC) to optimize protocol computation and free up CPU computing resources, doubling the array bandwidth compared to the traditional network card. Additionally, OceanProtect supports high performance SSDs on the back. The full end-to-end acceleration feature enables backup bandwidths of up to 155 TB/hour and recovery of 172 TB/hour, respectively.

In terms of reduction efficiency, multi-layer in line variable-length deduplication, feature-based compression, and byte-level compaction achieve a data reduction ratio of up to 72:1, which contributed to significant total cost of ownership savings.

In addition, 6-nine high reliability is based on active-active redundancy hardware architecture and RAID-TP technology, which can tolerate three disk failures and implement fail over in seconds in the event of one failure single controller, for high availability and reliability.

In the F2F2X era, data protection encompasses a new ecosystem and new challenges. Huawei OceanProtect Backup Storage adapts to high-speed backup patterns in various industries and application environments, providing superior backup and recovery to protect your data assets in the smart world. T

Nutanix creates a Data Fortress for protection against Ransomware attacks

Meet the nemesis: Ransomware

Cybersecurity Ventures predicts that Ransomware will cost its victims around $265 billion (USD) annually by 2031. Businesses will face a new attack every 2 seconds as Ransomware perpetrators progressively refine their malware payloads and related extortion activities. The data clearly suggests that it is not the question of if, but when a business is attacked by ransomware.

Shared storage has been an especially rich target for cybercriminals to hijack valuable customer, financial or sensitive information and extort payment in return for access to the data. Hence, revving up ransomware defense is a top priority for CIOs and other business leaders who are actively looking for storage security strategies against malicious cyber-attacks.

Ransomware is a type of malware that attacks storage systems by encrypting user file shares and volumes. Victims are denied access to the encrypted data and make the data unrecoverable without paying a ransom for a decryption key. There is substantial uncertainty that even if the ransom is paid that the data will be restored or that the attack is ended.

Ransomware attacks cannot be detected by antivirus software or firewalls and cause tremendous losses, including lost productivity costs, forensic investigation costs, data restoration costs from backup, and the costs of hiring emergency consultants and crisis managers.

What businesses need is a cyber-security and Ransomware protection plan that is integrated with the storage system to detect, prevent, recover, and analyze cyber-attacks so that structured and unstructured data is protected, no matter where the data resides.

Nutanix Files Offers Integrated Ransomware Protection

The Nutanix Files software-defined storage solution has integrated Ransomware protection to help customers secure unstructured data. The latest version, Files 4.1, offers improved network isolation with network segmentation, better resource

By: Tuhina Goel - *Director, Product Marketing*

management with enhanced multi-network support, enhanced security with WORM support and Ransomware detection.

When combined with our Nutanix Data Lens SaaS-based data management and governance application, Nutanix Files delivers a full spectrum of Ransomware protection aligned to key defense-in-depth and critical cybersecurity initiatives like a Zero Trust Architecture (ZTA) spanning the NIST Cybersecurity Frameworks of Identify, Protect, Detect, Respond and Recover.

Annual Global MilSaTcom Conference & Exhibition returns in November

SAE Media Group has announced that the 24th Annual Global MilSatCom Conference and Exhibition will return to London on 08-10 November 2022, alongside a SATCOM On-the-Move Focus Day on 7th November.

As Europe's leading military communications event for satellite professionals, Global MilSatCom is one of the world's leading events on military SATCOM and draws in 600+, truly global representatives from the military, industry, government, and research communities to create an event that is not to be missed. Attend the conference to benefit from exclusive updates, insights, and discussions with the pre-eminent names in the world of SATCOM.

With briefings from senior officials from the world's leading militaries and solution providers, discussions on key issues, attendance from almost every significant MILSATCOM program, dedicated exhibition halls, and a whole day on SATCOM On-the-Move, Global MilSatCom will shape the way ahead and provide an unrivalled opportunity for collaboration and partnership.

•Chairing on the Focus Day will be Major General (Ret'd) Bill Robins, Managing Director, BRL

•Chairing on Day 1 will be Dr Joanna Hart, Harwell Space Cluster Development Manager, UKRI – STFC

•Chairing on Day 2 will be Mike Nichols, Deputy Director, Commercial Satellite Communications Office

•Chairing on Day 3 will be Nigel Chandler, Key Account Manager, Airbus Defence & Space.

Help AG and Cribl announce partnership to strengthen Data Security and Cost-Effective Observability in UAE and KSA

Help AG, the cybersecurity arm of e& enterprise (formerly known as Etisalat Digital) and the region's trusted security advisor, has announced a partnership with Cribl, the leader in observability ecosystems and unified data pipelines. The partnership will enable customers of Help AG in the United Arab Emirates and Saudi Arabia to adopt cost-effective data flow management tools and drive higher efficiency in secure data interpretation across their services.

The need to deliver the right data to the right place in the right format with fit-for-purpose solutions has increased exponentially over the past few years, especially in the data security landscape, as Security Operations Centre (SOC) data volumes grow at an unprecedented pace and data budgets struggle to keep up.

The partnership between Help AG and Cribl will leverage the unmatched expertise of both companies to enhance data fidelity for threat hunting and compliance through smart routing technology. Through its bouquet of three core products, Cribl will support Help AG's mission in making sure customers in the UAE and KSA are getting the fastest detection of any security threats through managed data flow, while equipping them with the most optimised and efficient managed security services (MSS).

The key component of the partnership will be Cribl Stream, a streaming data processor which reshapes, enriches and routes data to manage logs from Help AG's security information and event management (SIEM) and security orchestration, automation and response (SOAR) solutions more efficiently. Additionally, Cribl's other two core products – Cribl Edge and AppScope – will deploy vendor-agnostic agents to send observability data to any destination and enable the collection of advanced system metrics and data from Help AG client endpoints.

Stephan Berner - *CEO, Help AG*

Hash Choudhuri - *GM, Cribl*

Commenting on the partnership, Stephan Berner, Chief Executive Officer at Help AG, said: "We are very pleased to work together with Cribl in our mission towards making data flow management tools more efficient and observability data more secure, while significantly reducing the cost of managing this data for our valued clients in the region. Cribl's bespoke big data analytics solutions will grant our customers more visibility and control while maximising value from Help AG's existing range of services, making observability even more beneficial and profitable for them.

Hash Choudhuri, General Manager EMEA at Cribl, said: "We founded Cribl with the firm belief that collecting, analyzing, and storing observability data does not need to be a trade-off for digital enterprises. That is why our agreement with Help AG will add value to their overall offering by making vendor and client data more secure and easy to interpret in the most efficient way. We are delighted by this opportunity to serve a rapidly growing base of customers and enterprises in UAE and KSA.""

Help AG launches Analytics Powered Next Generation Cloud SOC

Help AG, the cybersecurity arm of e& enterprise (formerly known as Etisalat Digital) and the region's trusted security advisor, has launched a fully cloud-delivered, Next-Generation SOC (Security Operations Center). The Help AG Cloud SOC will modernize security operations of the largest enterprise infrastructures in the region with analytics-powered solutions that uncover unknown threats, provide powerful anomaly detection, and user and entity risk profiling, to ultimately thwart attacks on enterprise assets.

The SOC utilizes next-generation security information and event management (SIEM) coupled with user and entity behavior analytics (UEBA) to address critical use cases like insider threats, lateral movement detection, and data exfiltration in modern enterprise environments. Curated threat intelligence from the local managed security service provider (MSSP) helps to deliver high fidelity alerts and provides an unmatched range of services such as threat detection and hunting, network traffic analysis (NTA), and data enrichment.

Commenting on the launch, Stephan Berner, Chief Executive Officer at Help AG, said: "Our cloud-delivered, analytics powered, Next-Gen SOC is a fully managed service deployed to match our customers' overall hybrid and cloud IT strategies. Built on the foundations of next-generation SIEM, integrated with UEBA capabilities and delivered through local cloud infrastructure, Help AG's Next-Gen Cloud SOC ensures enterprises get the protection and assurance they need."

AVEVA Unified Supply Chain infuses refinery scheduling with Artificial Intelligence capability

AVEVA has elevated refinery scheduling with the addition of the AVEVA Unified Supply Chain, Schedule AI Assistant. Using the power of artificial intelligence (AI), Schedule AI Assistant analyzes hundreds of scenarios within seconds to provide a choice of optimized schedules, doing away with the need to manually run repetitive tasks.

"Schedulers' strategic capabilities will be transformed by the latest offering as they will be supported by an AI-powered system that recommends the most practical course of action, saving time and enhancing productivity by allowing schedulers to focus on value-added tasks and encouraging them to exceed objectives. This can be a huge enabler of enterprise agility, allowing operations to respond faster to market changes or disruptions in the supply chain," said Harpreet Gulati, Senior Vice President, Planning, Simulation and Optimization Business, AVEVA.

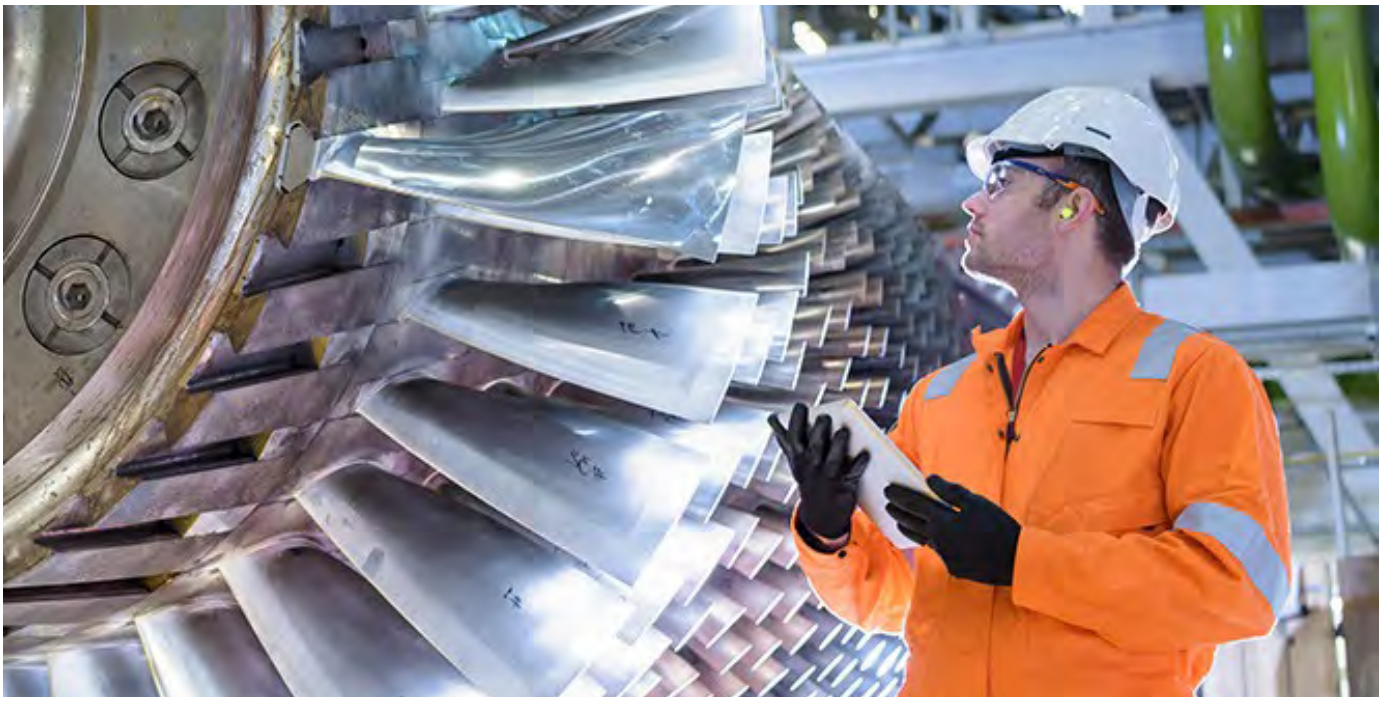
Scenarios ranked for efficiency, profitability, and emissions

AVEVA Unified Supply Chain, Schedule AI Assistant, is an optimization and AI-infused cloud-based solution. The offer is designed to enable operational schedulers at refineries and petrochemicals plants to explore and rank various scenarios for efficiency, profitability, and emissions. The new solution accomplishes days' worth of work in mere seconds, optimizing decision-making and boosting business agility.

Across the entire supply chain, analytics automatically produce and assess multiple schedules and anticipated events, offering planners a range of choices for optimized schedules. AVEVA's Schedule AI Assistant then recommends a scheduling strategy that best meets the organization's safety, sustainability, and value chain optimization objectives.

To increase productivity and stabilize production flows, refineries attempt to enhance their planning and scheduling operations. Management teams can take responsibility and prepare for changing situations by optimizing schedules. A production scheduler coordinates the flow of crude oil through a refinery, from the point of unloading through transfer to storage tanks. They prepare charging schedules for distillation units, perform tank maintenance, and manage end-product delivery to maximize spot market profitability – all while taking into account unit capacity, flow, and compositions. Along the way, human fallibility and time limits can hinder efficiency. The multi-step procedure and multiple variables can lead to mistakes, making overall optimization challenging. T

Harpreet Gulati - *Senior VP, AVEVA*



GLOBAL ICT, TELECOM & SATCOM EVENTS 2022 - 23

09 - 12 September 2022

Amsterdam, Netherlands

28 - 30 September 2022

Las Vegas, USA

29 September 2022

Capetown, SA

04-05 October 2022

Nairobi, Kenya

09 - 13 October 2022

Dubai, UAE

18 - 20 Oct 2022

Amsterdam, Netherlands

18-20 October 2022

Seoul, Korea

02-03 November 2022

Riyadh, Saudi Arabia

07 - 11 November 2022

Cape Town, SA

08 - 10 November 2022

London, UK

27 Feb - 02 March 2023

Barcelona, Spain

06 - 09 March 2023

Dubai, UAE

13 - 16 March 2023

Washington, DC

14 - 16 March 2023

Dubai, UAE

10 - 12 May 2023

Dubai, UAE

23 - 24 May 2023

Dubai, UAE

06-08 June 2023

Manama, Bahrain

06 - 08 Dec 2023

Baku, Azerbaijan

IBC2022

BACK AT THE
RAI AMSTERDAM | **9-12 SEPTEMBER 2022**