

#### **Telecom Industry News - April 2018**

By: Scott St. John

This month, 5G updates from around the world continued to roll in, including completed 5G spectrum tests in the UK, field trial results stateside, and the vision for a path to 5G in Vietnam. New AI-enabled customer experience tools hit the market. Additionally, Nokia and STK have partnered to improve public safety technology in South Korea, and new studies from Juniper Research lift the curtain on mobile wallet spending and Mixed Reality gaming.



The top stories from the month are summarized below. To view all the news as it breaks, check out *Pipeline*'s News Center or subscribe to receive our weekly news summary.

# 5G Update

Ericsson followed up a busy March with a busy April, announcing that <u>it has joined forces with</u> <u>Vertiv and NorthStar</u> to form the Ericsson Energy Alliance. The alliance is intended to drive costeffective and sustainable service provider network evolution towards 5G within the Ericsson Radio Site System. In 5G developments overseas, leading Maltese network service provider <u>Melita</u> <u>announced it had selected Ericsson</u> to support preparations towards modernizing and expanding its network and preparing for 5G.

<u>Copper Mountain Technologies</u> launched new FET1854 extenders with frequency range from 18 to 54 GHz in addition to the existing CobaltFx mmWave frequency extension system already used by many telecommunications and consumer electronics companies. The CobaltFX system will allow engineers to build a scalable and affordable 5G testing solution.

5G tests and trials continued around the world this month. <u>Vodafone UK completed a test</u> of its new 5G spectrum across an existing live network between Manchester and the company's headquarters in Newbury, Berkshire. Meanwhile and stateside, AT&T has announced a commitment to <u>provide</u> <u>updates and new findings</u> from its many 5G field trials in a twice-monthly blog by president of technology and operations Melissa Arnoldi as 5G draws closer to reality.

In Finland, <u>Nokia, Finnish operator Telia, and Intel</u> successfully conducted an industrial trial leveraging the ultra-low latency, high-bandwidth capabilities of 5G to support time-critical applications and enhance production and efficiency in a manufacturing environment. This was the first 'real-world' industrial application of 5G for manufacturing trialed at the Nokia Conscious Factory, located in Oulu, Finland.

In Vietnam, <u>Huawei outlined the path to a 5G Era for Vietnam</u> at the 4G/5G International Conference in Hanoi. Emphasizing the value that 5G will bring to Vietnam in enhancing people's lives, improving businesses, and driving economic growth, Huawai also committed to expanding and evolving LTE network and its derivatives as the first steps on the 5G transformative road.

# **Network News**

<u>Siemens has extended its contract with Orange Business Services</u> for a global "Siemens Digitalization Network" (SDN) built on an SD-WAN infrastructure. The infrastructure will connect 1,500 sites in 94 countries on five continents. Under this new six-year contract, Orange Business Services will migrate Siemens' entire global infrastructure to a dynamic and flexible SD-WAN network, which will connect cloud applications as well as IoT devices.

In other SD-WAN news, <u>Apcela launched its Enhanced Analytics Platform</u> (EAP) to move towards machine learning. The platform operates with Apcela's Cisco SD-WAN/ELK EAP API.

Public safety technology got a boost both at home and abroad this month. In the U.S., <u>AT&T helped</u> <u>FirstNet</u> launch the country's first nationwide public safety communications platform dedicated to first responders in times of need. FirstNet was built with AT&T in public-private partnership with the First Responder Network Authority. In South Korea, <u>Nokia and SK Telecom (SKT)</u> are conducting a major trial of LTE public safety technologies to establish the application of first responders in sharing mission-critical voice, video and other data simultaneously in real-time with multiple members of first response teams.

Ericsson Media Solutions launched its MediaFirst End-to-End Ultra High Definition (UHD) solution, the industry's software-based, multi-application media processing and encoding platform to deliver UHD content from camera to consumer, across the entire media delivery landscape. Two announcements on implementation at home and in Latin American followed. <u>AT&T chose Ericsson</u> <u>Media Solutions</u> to help reliably deliver high-quality UHD encoding to enhance its coverage of a premier golf tournament, after success leveraging the solution for a major winter sports event in February. <u>Ericsson has also been selected by Telefonica</u> to power a range of advanced TV services across its operating businesses in Latin America. The solution will be available in Argentina, Brazil, Chile, Colombia and Peru by the end of this year, with eight other Latin America countries to follow by the end of 2020.

<u>Mapcom Systems</u>, a global leader in visual OSS and BSS software solutions for telecommunications service providers, announced that Conterra Networks has begun the implementation of Mapcom's M4 Solutions Suite to accelerate the service fulfillment process and manage the planning, build-out, and maintenance of its broadband network. Conterra is a fastgrowing company that provides service in almost half the United States.

To address the needs for critical infrastructure communications, <u>RAD released the Megaplex-1</u>, a compact, highly reliable multiservice pseudowire access gateway that addresses the needs of critical infrastructure utilities, transportation and government network operators migrating to Carrier Ethernet or IP/MPLS communications.

VIAVI Solutions announced that its Wireless Business Unit, formerly the network validation division of Cobham Wireless, is now able to offer RANtoCore<sup>™</sup>, a full suite of end-to-end mobile network testing capabilities. The solution can validate mobile network performance from the radio access network (RAN) to the core, via the mobile edge. It offers operators and network equipment manufacturers the most realistic test environment for optimizing 4G and 4.5G, while enabling the development of 5G technology.

This month, the Federal Communications Commission (FCC) approved an application by <u>Space</u> <u>Exploration Holdings</u>, doing business as SpaceX, to provide broadband services using satellite technology in the United States and around the world. This development is a step forward to increase high-speed broadband availability and competition in the United States.

<u>TELUS debuted Boost Wi-Fi</u> this month, a powerful system that extends the reach of in-home Wi-Fi signals to ensure every corner of the house has a strong and reliable Internet connection—and to eliminate dead zones. Boost Wi-Fi enables recreational and entertainment while ensuring smart home IoT devices remain connected throughout the home.

Updates rolled in from Europe, the Middle East, and Asia this moth. <u>ADVA announced that</u> <u>VERBUND</u>, one of Europe's largest hydropower energy producers, has deployed the ADVA FSP 3000 to enhance and future-proof its backbone network. The technology will drive VERBUND'S ambitions of providing Austria's electricity through entirely renewable sources. The new solution features ADVA's flexible optical transport technology, boosting the capacity of VERBUND's national infrastructure to 10Gbit/s and enabling 100Gbit/s connectivity between its data centers. ADVA also shone the spotlight this month on its <u>FSP 150 ProNID range of network edge devices</u>, which now features zero touch provisioning. This automated deployment capability offers a huge boost to communication service providers (CSPs) as it accelerates new service activation while at the same time driving down operational costs. NEC/Netcracker as the prime solution provider for its multivendor telecom cloud program. Etisalat is the Middle East's leading communications provider, offering services to more than 160 million customers.

To address the growing appetite for cloud services among its enterprise customers, China Mobile Communications Company (CMCC) is expanding its software-defined networking (SDN) support for new private/public cloud services. <u>China Mobile has tapped Nokia's Nuage Networks</u> <u>Virtualized Services Platform</u> for a suite of cloud-based services that include virtual machines, containers and bare-metal based servers.

### **Mobile and Wireless**

Juniper Research released two new studies this month that provide a peek behind the curtain of the digital future. Juniper's study on consumer behavior predicts that by 2019, nearly 2.1 billion consumers worldwide will use a mobile wallet to make a payment or send money, up by nearly 30% from the 1.6 billion recorded at the end of 2017. The research firm's second April release, *Augmented & Mixed Reality: Innovation, Disruption & Future Prospects 2018-2022*, found that the total number of MR (Mixed Reality) applications will reach 9 billion within 4 years, rising from an estimated 3 billion in 2018, a growth rate of 212% over 4 years. Commitment by Apple, Google, and Facebook will foster content development and propel the smartphone MR games market to a value of \$2.3 billion by 2022.

<u>EE announced that BT</u> has secured 40MHz of 3.4GHz spectrum, which is suitable for 5G services and will strengthen EE's mobile network leadership.

The proliferation of irritating—and sometimes malicious—robocalls continues. To combat these calls, <u>Verizon has introduced a new Caller ID tool</u>, Spam Alerts, to help protect landline phone customers. Spam Alerts will now show "SPAM?" before a caller's name on the Caller ID display if the calling number matches Verizon's spam criteria.

<u>Telenor Maritime</u> has expanded its long-term partnership with Stena Line and announced the introduction of a mobile ecosystem onboard Stena's passenger ships. The mobile ecosystem is based on a connectivity platform with Mobile/3G/4G, Premium Wi-Fi, Ka-VSAT and mobile broadband backhaul and augments the existing system to improve the customer experience. Stena is one of the largest ferry companies in the world, with Europe's most comprehensive route network, consisting of 21 strategically located ferry routes across Northern Europe, operating in Scandinavia, the Baltics, the North Sea and the Irish Sea.

This month, <u>ETSI released the Technical Specification TS 103 478</u>. Developed by the ETSI special committee on Emergency Communications (EMTEL), the specification defines the requirements and architecture of Pan-European Mobile Emergency Applications (PEMEA). This new specification provides a solution that will enable emergency apps interoperability within Europe and beyond, freeing the hundreds of emergency calling applications currently in use across the continent from their restriction to a particular Public Safety Answering Point (PSAP).

NEC Corporation and Netcracker Technology announced that <u>Etisalat has selected</u> <u>NEC/Netcracker</u> as the prime solution provider for its multivendor telecom cloud program. Etisalat is the Middle East's leading communications provider, offering services to more than 160 million customers.

#### Connected Devices and the Internet of Things (IoT)

It's been another exciting month for developments related to connectivity and IoT. A new study released by <u>Juniper Research found that domestic aide robotics</u> will drive revenues in the consumer robotics sector to increase by over 250% in the next four years, from an estimated \$6.4 billion in 2018 to nearly \$23 billion by 2022. Much of the growth will come from the increasing popularity of domestic aide devices from *iRobot*, *Dyson* and *Samsung*. These have been joined by lower cost devices, which will broaden the segment's appeal.

In Japan, <u>Nokia and KDDI</u> have successfully demonstrated the use of LTE to deliver cost-efficient, low-latency connectivity for vehicles. These proof-of-concept trials evaluated the role of cellular

technology in enabling safe, cost-efficient, low-latency car connectivity. The trials were the world's first use of LTE broadcast for vehicle-to-network-to-vehicle connectivity and network Real-Time Kinematic for location awareness and accurate navigation.

This month, <u>Senet and Inland Cellular</u> announced a partnership to deliver Low Power Wide Area Network (LPWAN) connectivity across Inland Cellular's coverage areas and extend Inland's branded services to support the rapid growth of IoT applications. This partnership significantly expands Inland Cellular's portfolio.

<u>Deutsche Telekom has announced an investment in Axonize</u>, a startup specializing in IoT services based on Microsoft Azure. Deutsche Telecom will invest \$6 million in Round A financing in the Israeli start-up.

## Security

In security news this month, Meta Networks Ltd., the technology leader in secure cloud-native networking, launched its <u>flagship network and security platform – Meta NaaS</u> (Network-as-a-Service). The platform delivers zero-trust and always-on network security.

<u>Orange Business Services announced a collaboration with CERT NZ</u>, a cybersecurity unit in the New Zealand government that supports businesses, organizations and individuals affected by cybersecurity incidents. Orange will provide automated threat intelligence services for CERT NZ to enhance cyberdefense.

## **Mergers and Acquisitions**

Vodafone Group announced the <u>sale of Vodafone Qatar</u> with the Qatar Foundation's completion of acquisition of Vodafone Europe B.V.'s 51% stake in the joint venture company. Vodafone Group and Vodafone Qatar have entered into a five-year Partner Market agreement so that Vodafone Qatar will continue to use the Vodafone brand and tap the expertise and marketing assets of the global company.

## **Digital Transformation**

Digital transformation news percolated along this month with several interesting news updates. <u>Calix and Infosys</u> announced a strategic multiyear partnership to accelerate communications service provider (CSP) adoption of AXOS, its Software Defined Access (SDA) platform. Calix and Infosys will jointly invest to co-create new services and value-added offerings.

<u>Square Box Systems</u> is previewing a range of groundbreaking new content analysis capabilities for its flagship CatDV media asset management (MAM) solution, leveraging the latest artificial intelligence (AI) technology for speech recognition and image analysis.

In another example of the implementation of AI and machine learning, <u>Apcela announced the</u> <u>launch of its Enhanced Analytics Platform (EAP) with SD-WAN API</u>. Built for complex enterprise IT environments, EAP assesses real-time event and metric-driven data between networks, applications and tools, bridging the gap between data silos due to limited analytics, while addressing enterprises' need for dynamic, predictive, automated analysis across networks.

<u>AT&T</u> will provide advanced technology solutions for more than 1,100 branches of Citizens Bank, one of the largest retail banks in the U.S. This initiative aims to transform the customer experience through technology, including state-of-the-art digital signage and network services while also wrapping all digital touchpoints in security.

### **Customer Experience**

Customer experience news this month included new solutions to deliver superior and personalized customer messaging and interaction at scale. Telefonica's wholesale business unit, <u>Telefonica</u> <u>International Wholesale Services</u>, announced the launch of a brand new service, Marketing

Campaigns Manager, a fully virtualized solution designed to enable any mobile operator to enhance the mobile customer experience with location, time relevant and personalized content at any time—giving operators additional tools to build connection with customers.

<u>Helpshift unveiled SensAl</u>, an artificial intelligence natively built for customer service. SensAl uses Al to automate certain parts of the customer service experience, making it possible for brands to deliver highly personalized messaging-based support to their customers at scale. Additionally, <u>Nokia released the latest version of its Cognitive Analytics for Customer Insight</u> software. Alpowered analytics provide powerful new capabilities to service provider business, IT, and engineering organizations to deliver superior real-time and personalized customer experiences.

<u>Flexenclosure</u>, a designer and manufacturer of prefabricated data centers and telecom site power systems, has received a multi-million dollar eCentre data center order for Globe Telecom in the Philippines. The facility will be deployed on the southern island of Mindanao. Prefabrication of the center has begun at Flexenclosure's manufacturing plant in Sweden.

Comarch, a global supplier of IT solutions for business, announced that <u>Orange Luxembourg</u> <u>selected Comarch BSS products</u> to improve billing and customer management processes for Orange mobile services, Internet, TV, VoIP, and cloud and third-party services in Luxembourg.

## Video

<u>VUBIQUITY</u>, now part of Amdocs, has extended its long-standing relationship with Turner as the primary distributor of its on-demand content. Vubuquity/Amdocs distributes TBS, TNT, Cartoon Network, CNN and other Turner networks to 60M+ households across North America and Canada.

At the 2018 NAB show, <u>Harmonic</u> addressed the challenges in OTT video delivery and showcased its targeted, software-centric solutions. Harmonic's solutions in UHD, ATSC 3.0, IP video and content-aware encoding technologies set the benchmark for the future of OTT and broadcast delivery. These solutions are offered as appliances or SaaS for business agility and provide exceptional quality of experience (QoE) at low total-cost-of-ownership.

<u>Verizon Communications</u> announced a commitment to invest more than \$200 million in additional funds towards Verizon Innovative Learning, providing immersive next-gen technology, teacher training, STEM curricula and connectivity to under-resourced students across the United States. The program is committed to reaching five million students in the next five years.

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