

Telecom Industry News - April 2017

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The last month of the first quarter saw big changes underway across the telecom industry. Global connectivity continued to make great strides and the drive to establish new standards kept pace to ensure seamless integration of new systems, devices, and networks. The Internet of Things continued to dominate industry news as the millions of devices getting connected turn into billions – an industry unto itself growing at an annual pace well into the double digits. And who can forget the government? The FCC and its position on regulations continued to evolve as the new administration in Washington gradually takes shape.



The increasingly connected world

No matter where you looked around the globe last month, new intercontinental cables, networks, and communications services were sprouting up.

The new AAE-1 [subsea cable system](#) enabled **Retelit** and **BICS** last month to launch a new premium connectivity route that will bridge Europe via Bari, Italy to Singapore and Hong Kong. Combining their respective infrastructures across Italy and Europe, Retelit and BICS have developed a new backhaul product, managed end-to-end and using premium diverse routes, to satisfy high capacity and low latency connectivity demand from Asia, the Middle East, and Africa to Europe.

Swedish Internet infrastructure specialist **Flexenclosure** has taken a firm grip on the cable landing station market in the Pacific region when it announced in March that it will deliver a [cable landing station](#) to Belau Submarine Cable Corporation (BSCC) in Palau. In February, Flexenclosure announced a separate deal for two cable landing stations in Samoa.

iBasis and **Turkcell** last month announced they are collaborating to open an [IPX point-of-presence \(PoP\) in Istanbul](#) to expand 2G/3G and LTE Signaling and Roaming services as well as stimulate further LTE services growth throughout Eurasia and the Middle East. The new IPX PoP builds on Turkcell's efforts to provide multiple services including 2G/3G and LTE Signaling and Roaming to enrich the customer roaming experience and is expected to stimulate growth in LTE services throughout the region. The PoP also expands the reach of the iBasis global IPX network, which already includes more than 450 LTE destinations worldwide.

A [new satellite service](#) to sell mobile connectivity like cellular service was introduced in March by **Kymeta** and **Intelsat** as a simplified way to buy and sell connectivity to customers and sectors that are currently unreachable or underserved by terrestrial networks.

Germany got an [ultra-fast nationwide backbone](#) last month for cloud-based entertainment services. **ADVA Optical Networking** announced its 100Gbit/s core transport infrastructure has been deployed in the country's first fully-integrated platform for IP entertainment services through digital services provider **Exaring**.

Back in the United States, a [new agreement](#) between **Alaska Communications** and **Quintillion** will, for the first time, provide competitive high-speed reliable broadband and managed IT services to education, healthcare, native corporations, and government sectors in northwest Alaska.

To help companies and countries get connected, **Epsilon** announced the launch of its new [Infiny on-demand connectivity platform](#) that provides a comprehensive set of enterprise voice, local access, cloud, and global connectivity services from a single self-service platform. The self-service platform can be used to procure local, regional and global port-to-port, port-to-Cloud, port-to-Internet Exchange, SIP Trunking and last mile DIA and SD-WAN services.

Developing standards

Increasing SDN adoption, the development of NG-PON2 technology, and the need to orchestrate services across multiple global networks spurred several standards initiatives last month.

AT&T, Orange, and Colt Technology Services announced they are working with **MEF** and **TM Forum** to release the [first set of standard application programming interfaces](#) (APIs) for orchestrated Carrier Ethernet services later this year, using MEF's Lifecycle Service Orchestration (LSO) framework and TM Forum's Open API framework. The three companies have been working to accelerate adoption of SDN across the industry. AT&T has been collaborating with Orange Business Services on standardized APIs that will enable SDN architectures from different network service providers to interoperate with each other. AT&T and Colt held the first successful SDN interoperability trial proving that SDN architectures from different network service providers can interoperate with each other across continents. Standardized APIs are critical for enabling agile, assured and orchestrated Third Network Services over networks that are more automated, virtualized, and interconnected.

The **Broadband Forum** announced it is creating a [new NG-PON2 Council](#) after integrating the Fiber Access Networks Working Group into the Forum to work on management and testing standards in support of ultra-fast broadband roll-out. Over the last 12 months, the Broadband Forum has been increasingly focused on NG-PON2 through its Fiber Access Networks Working Group. That work is a solid basis to take NG-PON2 to the next level with the founding of the NG-PON2 Council. The Broadband Forum believes industry stakeholders need to understand the capabilities of the technology and how it could improve broadband roll-out, in addition to working on management and testing standards.

The Internet of Things

The Internet of Things (IoT) continues to grow roots. On March 31, as **Verizon** launched the [first nationwide commercial 4G LTE Category M1 network](#) to provide wireless IoT access. The 4G LTE Category M1 (or Cat M1) network, which spans 2.4 million square miles, is the first and only Cat M1 network providing scale, coverage, and security for customers seeking wireless access solutions for IoT.

Last month, connectivity solutions provider **Laird** announced the launch of its [new low-power, long-range multi-interface platform](#) that enables enterprise IoT network deployment even where there is no traditional communications infrastructure. Its new Enterprise Internet of Things (EIoT) Low-Power, Long-Range LoRa gateway can be deployed in practically any geographic location.

FreeWave Technologies, Inc., announced in March the [industry's first IIoT Programmable Radio](#) (IPR), which supports third party software applications for Edge and Fog Computing in IIoT communication networks. FreeWave's IPR can support JAVA, Python, C, and C+ and connects to any IP device or sensor. The platform can host third party and proprietary IIoT applications for energy, utility, municipal, smart city, government, military use cases and more.

"Our IIoT Programmable Radio is a key component in driving high-speed data transmission and connectivity from the Edge to the end-user – it serves as the '2' in Sensor-2-Server," said Scott Allen, FreeWave Technologies' CMO.

AT&T and **IBM** launched a [new collaborative IoT data analytics initiative](#) that combines their strengths in IoT, cognitive computing, global connectivity, and the cloud. The goal is to help clients drive actionable insights and unlock more value from their data in a simpler way, using AT&T's IoT

solutions and IBM Cloud. The new AT&T IoT analytics capability, a pilot collaboration between the two companies, aims to help AT&T's enterprise customers transform their industrial IoT data into analytic insights so they can take immediate action to improve business operations.

According to a new report released last month by **Technavio**, the [global LTE base station market will experience double-digit growth](#) over the next five years driven by rising demand for high-speed broadband services and growing use of IoT applications. The global LTE base station market is expected to grow at a CAGR of more than 17% during the forecast period.

With expanding network availability and the ability to gather, analyze, and utilize IoT data better, it's no wonder more machines are getting connected, faster. **Juniper Research** released a new report in March that predicts [retailers will connect over 12 billion assets](#) such as products, digital signs and Bluetooth beacons by 2021 from just under 3 billion last year, a 350 percent increase. Juniper also predicted that RFID (radio-frequency identification), will re-emerge as the industry's "killer app" becoming the key factor in the IoT retail ecosystem.

Indoor mobile improvements

Communications service providers are still struggling to deliver [reliable wireless signals in congested urban settings](#). As increasing numbers of businesses and organizations come to rely on mobility for their workforces, frustration levels are rising. According to a new study released in March by **Zinwave**, almost three-quarters of office workers complain about in-building cellular coverage and nearly 60 percent are likely to blame employers.

To help resolve the problem, last month **Whoop Wireless** launched its new Small Cell Interface Head-End designed to cost-efficiently improve service for wireless carriers inside mid-sized commercial buildings. The company claims its [amplifier array](#) provides reliable mobile reception to mid-sized buildings at a fraction of the cost of traditional systems.

In March, mobile connectivity solutions provider **Laird** introduced a small, 7-millimeters-thick, ceiling-mount [wideband antenna](#) designed for more efficient and effective wireless connectivity that meets the aesthetic needs of commercial and residential building designs. Laird's new CFSA Low Passive Intermodulation (PIM) Ultra-Low profile antenna is about the thickness of a smartphone, creating an ultra-low profile that provides buildings with an inconspicuous yet high performance antenna for enhanced wireless connectivity.

The new FCC

With a new federal administration in Washington, D.C., sea changes are occurring throughout various federal departments and agencies, including the **Federal Communications Commission** (FCC). Under the guidance of recently-appointed Chairman Ajit Pai, the Commission in March continued to [shake up policies and regulations](#). It announced several changes to current rules, including a proposal to streamline and eliminate certain international reporting requirements and reforming outdated 800 MHz Cellular Service band rules. Specifically, the Commission proposes to eliminate the annual Traffic and Revenue Reports, and seeks comment on whether there are ways to further streamline the Circuit Capacity Reports. The Commission believes these reports may no longer be necessary in their current form.



The commission also took steps to reform certain outdated rules applicable to the 800 MHz Cellular Service band to facilitate the use of Cellular spectrum for mobile broadband services such as long term evolution (LTE), which provides high-speed connectivity to today's mobile consumers. To accommodate continued skyrocketing demand for mobile broadband, the revisions adopted last month will allow providers to use Cellular spectrum to provide mobile broadband service to the public more efficiently, reduce barriers to innovation and investment and ease administrative burdens. At the same time, the rules will continue to safeguard public safety operations.

Also, Pai issued a statement last month supporting Congressional disapproval of current [FCC broadband privacy regulations](#) and siding with Congress on the return of jurisdiction over broadband privacy regulations to the **Federal Trade Commission**. "Moving forward, I want the American people to know that the FCC will work with the FTC to ensure that consumers' online privacy is protected through a consistent and comprehensive framework. In my view, the best way to achieve that result would be to return jurisdiction over broadband providers' privacy practices to the FTC, with its decades of experience and expertise in this area," stated Pai.