

Featured: Telecoms' list of innovative companies to watch in 2021



By [Ryan Daws](#) | 5th March 2021 | TechForge Media

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Wherever you are reading this, every country has rightly cheered its frontline healthcare workers over the past year amid the coronavirus pandemic. But just as vital have been another frontline group; those people and companies keeping us connected when we've needed it most.

In this feature, Telecoms will be looking at some of the vendors delivering the innovations that are enabling people to work, learn, and live, even in the midst of a global pandemic. In alphabetical order:

Alcatel-Lucent Enterprise



[Alcatel-Lucent Enterprise](#) requires little introduction. With over 100 years of experience, the company is a trusted solutions provider which has thrived through ongoing innovation.

“We serve 830,000 customers and our innovation has been acknowledged through numerous awards and industry accolades. For example, the 2020 Global Communications Platform as a Service Enabling Technology Leadership Award from Frost & Sullivan; and inclusion in the Gartner UCaaS Magic Quadrant 2020 as a Niche Player, focusing primarily on a singular group or sector,” Gert Jonk,

senior vice president of EMEA at Alcatel-Lucent Enterprise, tells Telecoms.

The company’s solutions are available “off-the-shelf” or can be tailored for the needs of specific projects—including cloud-based, on-premises, or hybrid solutions. Furthermore, the solutions are fully compliant with specific regulations (like [HDS](#) for healthcare.)

“We deliver unique telecoms services to the education, healthcare, hospitality, government, and transport sectors. Our deep understanding enables us to support organisations in these sectors and effectively tackle pain points.”

Among the most interesting work Alcatel-Lucent Enterprise is carrying out at the moment is in the healthcare, government, and education sectors. In the UK, for example, the company is working with the East Sussex Healthcare NHS Trust, the Scottish Government, and Loughborough University.

Over the coming year, Alcatel-Lucent Enterprise will be laser-focused on ensuring businesses can continue operating whatever lies ahead.

“The current crisis is incredibly challenging for all of us, but it has underlined the crucial importance of technology. It is one of the main reasons that businesses can continue to generate revenues, retain employees, and to carry on operating in these difficult market conditions. Our technology can support business growth, whatever the state of the market.

“In 2021, you can rely on Alcatel-Lucent Enterprise to carry on fulfilling the vital task of helping our customers achieve their digital transformation.”

Enea Openwave



[Enea Openwave](#) provides 5G data and video traffic management solutions to some of the world’s leading operators.

“We’re at the core of the 5G Core. None of the use cases for additional revenues from 5G will work unless the management of subscriber data and every other form of data is done right,” explains Indranil Chatterjee, Chief Customer Officer at Enea.

“We’ve got the leading position in 5G data and rivals may struggle to catch up with us. Besides that, we’ve also got the leading position in traffic management, with 8 out of 10 global mobile operator groups now having deployed our technology to manage their 5G network traffic.”

Operators are wanting to avoid vendor lock-ins as they move forward, exploring more solutions like OpenRAN for more flexibility.

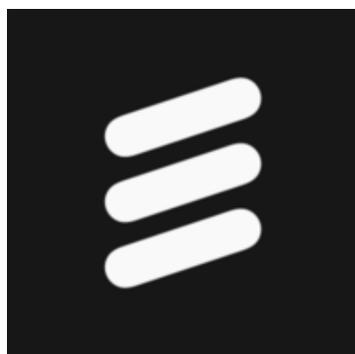
Chatterjee says Enea recently won two contracts with tier one operators to dislodge “a large vendor” that a number of operators are having to replace “owing to political sensitivities” (no prizes unfortunately for guessing the vendor.) The company expects that trend to continue throughout 2021 and beyond.

Another prediction Enea is making this year is that OTTs will introduce new encryption protocols this year, even before standards have been agreed upon.

“While China and Russia have banned these protocols, we expect this new encryption to go mainstream later in the year and operators can rely on us to address this challenge in 2021.”

Enea Openwave plans to push the boundaries of congestion management this year by honing-in on individual user sessions. The company will also be releasing the first virtual schema to help operators rollout IoT and connected services faster to begin monetising from 5G.

Ericsson



Swedish vendor [Ericsson](#) continues to deliver ground breaking innovations almost a century and a half after it was founded— helping to retain its place as the largest non-Chinese telecoms vendor by marketshare.

“Our investment in R&D has been pivotal in enabling the most significant advances in mobile technology across the globe and affords us the world’s leading cellular patent portfolio. Our technology also interoperates with all third-party equipment and we have more 5G devices working on our equipment than any other

vendor,” Bjorn Odenhammar, CTO of Networks and Managed Services at Ericsson UK and Ireland, tells us.

Ericsson is the only vendor working with all four of the major operators in the UK for their 5G rollouts, a testament to the trust the vendor has built up over the more than 120 years it has operated in the country.

One particularly interesting project Ericsson is currently working on is in Essex, in partnership with Vodafone. The partners are attempting to create the UK’s first 5G connected automotive centre at one of Ford’s local facilities.

“This is an important project not only for Ford but for the whole nation. With the world shifting towards electric vehicles, the long-term future of car production in the UK relies on the country rapidly scaling up battery production over the coming years.

“5G can have a transformative impact by reducing delays, improving reliability, and accelerating production capabilities in plants. This particular project with Vodafone and Ford has received £2m funding from the UK Government and will inspire transformation projects across the automotive industry.”

Over the course of this year, Ericsson will be continuing to support 5G rollouts to help economies to bounce back from the pandemic. In the UK alone, Ericsson is planning to deploy 5G across more than 20,000 network sites by 2024.

“We also want to build on our work with the likes of Ford, Bosch and Digital Catapult, to help businesses identify the use cases that can have a transformative impact for businesses and society.

Our research has found that 5G-powered manufacturing, construction and agriculture could lead to nearly £15bn in growth for the UK economy.”

Ericsson will also be doing its part to reduce its carbon footprint. The company’s new 5G RAN solutions boast a 15-20 percent reduction in energy consumption.

Huawei



There’s no getting around the fact that [Huawei](#) has had a particularly rough few years—facing bans in several countries and fighting an ongoing case against the company’s CFO on fraud allegations.

Whether you believe the claims against the company are credible, or the result of a tense political climate, the Chinese telecoms giant refuses to be knocked down and continues to innovate.

Huawei remains the largest vendor by marketshare with its cost-effective and ground breaking equipment. In 2020, the company managed to increase its profits and revenue despite the pressures it faces.

“Every year, 10 percent of our global sales revenue is reinvested back into research and development to ensure we continue to innovate and lead the way in creating a world for the better,” Henk Koopmans, CEO of R&D at Huawei UK, tells Telecoms.

“During the past 20 years, Huawei UK has played a role in helping to build the nation’s digital infrastructure and contribute to economic growth. This includes several state-of-the-art R&D facilities and partnerships with universities across the country, which is a big part of what makes us stand out.”

Huawei recently partnered with the Manchester Tech Fund to give five schools across Greater Manchester over £60,000 worth of connectivity and computer equipment to help some of the students most impacted by the COVID-19 pandemic.

“One of the many tragedies of COVID-19 is the impact it is having on school children. We recently commissioned research which found that one-in-four UK parents believe a poor-quality internet connection has negatively impacted their children’s ability to complete lessons or schoolwork.”

This year, Huawei will be looking to use its technology and expertise to help tackle some of the world’s most pressing issues and enable exciting new possibilities across various industries.

“As we emerge from the pandemic, more industries will look to technology to help tackle urgent issues like climate change and sustainable development. Huawei will continue to play a role in industrial transformations across a wide range of sectors, from healthcare to manufacturing.”

Juniper Networks

Juniper Networks' solutions are used by tens of thousands of global service providers, enterprises, educational organisations, and federal, state, and local government agencies.



The company started its journey manufacturing core routers in 1996 and by 2001 was challenging Cisco's once-dominant marketshare. Since then, Juniper Networks has expanded its portfolio with edge routers, IT security solutions, and more. In recent years, the company has focused on software-defined networking products.

"Juniper has the size and scale to power the largest networks on the planet and the agility to rapidly adapt to customer requirements and market inflexions. And both scale and agility were on full display in 2020!" comments Mike Marcellin, SVP and CMO of Juniper Networks.

"Over the past six months, Juniper has made strategic acquisitions to accelerate our strategy to deliver simplified network operator experiences and superior end-user experiences. Netrounds, 128 Technology and Apstra all bring unique software-based automation and closed-loop assurance to critical network use cases across the data center, WAN and customer-premises and, combined with our market leadership in secure, AI-driven networking, ensure that Juniper will continue to lead the industry for years to come."

Four of the Fortune 10 companies recently switched to Juniper Networks, in part due to the company's Mist AI technology.

"We are seeing a massive decrease in IT support requirements and increasingly delighted patients, students, shoppers and consumers. For example, ServiceNow used Juniper's Mist AI to cut its IT helpdesk tickets by more than 90 percent in just eight months.

"Stopping the user support treadmill frees up IT to focus on growing the business. And we now have Wi-Fi, network switching and SD-WAN under the Mist AI operations umbrella, with more solutions on the way."

In 2021, Juniper Networks will be helping service providers rearchitect their networks to better leverage scale-out cloud approaches to ensure their increasingly demanding customers are served with a great experience.

"Our Paragon Automation suite, unveiled just a few weeks ago, is a modular portfolio of cloud-native software applications that deliver closed-loop automation in the most demanding 5G and multi-cloud environments.

"These solutions translate business intent into real-world performance across the lifecycle of a network and services. They eliminate manual tasks and processes, empowering operations teams to work more quickly, efficiently and accurately. And they protect customers and business by measuring real service quality on the data plane, assuring that users have a consistent, high-quality experience throughout the life of their service."

Nokia



It seems a press release drops in *Telecoms'* inbox daily from [Nokia](#). The company delivers cutting-edge innovations every year, especially from its storied Bell Labs subsidiary.

Bell Labs' work has been awarded nine Nobel Prizes (but who's counting?) and four Turing Awards with its researchers credited with inventing radio astronomy, the transistor, the laser, the photovoltaic cell, the charge-coupled device (CCD), information theory, the Unix operating system, and the programming languages B, C, C++, S, SNOBOL,

AWK, AMPL, and others.

In 2016, Nokia Bell Labs teamed up with Technische Universität Berlin, Deutsche Telekom T-Labs, and the Technical University of Munich to develop a ground breaking new modulation technique called constellation shaping that achieved a data rate of one terabit per second by improving transmission capacity and spectral efficiency.

We'll have to wait and see what Nokia has in store for us in 2021, but early signs suggest the company will continue delivering the innovation we expect from it.

In the past week alone, Nokia has announced:

- A 5G Innovation Lab in collaboration with the University of Technology Sydney;
- An Industry 4.0 project in Brazil using a private 5G standalone network;
- The first local 5G private wireless network in Kyushu, Japan (along with a partnership with the Kyushu Institute of Technology for the first industry-academia collaboration in Japan for a local 5G university campus environment);
- Two new 5G certifications and associated training.

... we did say a lot of Nokia press releases drop in our inbox.

(Photo by [Gary Yost](#) on [Unsplash](#))