

Major Announcements, Technology Display and Product Launches

Company Name	Major Announcements
Nokia	Nokia Chennai factory first to manufacture 5G radio equipment in India
Huawei	Announced the launch of Huawei's first OpenLab in India
Ericsson	First export shipment of telecom gear manufactured at Ericsson's Pune facility delivered to Indonesia, Singapore and Thailand. Exports include Ericsson's 5G-ready
One Million Wi-Fi Hotspots across India - BSNL, Airtel, RJO, and Vodafone Idea	The telecom industry will install one million Wi-Fi hotspots in the next 12 months. Interoperability across different Wi-Fi networks thereby enabling smooth experience for subscribers, as he or she will be able to use the data plan taken from any TSP for all the Wi-Fi Hotspots deployed across India. Besides offering consumer delight, this industry initiative will create additional 3 lakh jobs.
Sterlite	Sterlite Tech plans Rs 1,200 crore investment for new OFC plants
UT Starcom	Global Centre of Excellence for Telecom R&D Exporting active

Company Name	Technology Display / Product Launches	Details
Nokia	Immersive Telepresence	Surveillance, Hazardous condition , Assisted Maintenance
	Smart Ambulance	Equipped to collect Patients Vital data and emergency support
	Smart Education	Interactive classes and labs, Quality Education for all
	Public Safety	Ultra-Compact Network, Mission Critical Network, Disaster Management
	Smart Manufacturing	Industry 4.0 use case with smart factory line running on a private LTE network
	Smart Pole	The crucial element in building the smart city network in 5G Era
	Live Football Stadium	Revolutionary inhouse entertainment
	Haptic Demo	Nokia Bell Labs #5G innovations enable safe, efficient production environments using tactile internet
Huawei	AR Holographic Communication	"AR Holographic Communication" demo in partnership with Bharti Airtel using 5G NR non-standalone architecture (NSA).
	A showcase of India-Centric Smart City Innovations	Water and gas metering, street parking, Smart Pole street lighting, and smart campus enablement. The Solutions use the latest Information and Communications Technologies (ICT) to build a 'nervous system' for smart cities using real-time situation reporting and analysis that combines cloud computing, Internet of Things (IoT), Big Data, and Artificial Intelligence (AI).
	5G Telemedicine Use Case in Remote Medical Ultrasound using Robotic Arm' in collaboration with Reliance Jio	In this use case, remote diagnosis depends on interaction between doctor side device terminal and patient side robotic machine.
	VR gaming use cases powered by 5G network	

Cisco	Optimize Customer-Centric Networks with SONFlex	Demonstrate how Operators can use Cisco SONFlex and SONFlex Studio to quickly and easily incorporate their knowledge together with capabilities specifically oriented to their deployment providing a customized cSON functionality.
	Cisco Ultra 5G SA Packet Core on Google Cloud Platform	Instantiation of the Cisco Ultra 5G Standalone packet core functions and 5G SA call using simulators on Google Cloud Platform
	5G Services Orchestration – end-to-end network slicing demo	Demonstrating Auto deployment of 5G B2X services with end-to-end lifecycle visibility, reducing deployment of new services from months to minutes. Enabling service providers to offer agile Mobility Services through Automation. Creating services on Network as fabric with unified platforms converging Transport, Data Center, Application Services.
	SRTE leveraging IGP Flexible Algorithms	Demonstrating the newest SRTE building block: Segment Routing IGP Flexible Algorithms. In this demo, SR Flex Algorithms are used to create delay-optimized network slices created according to measured per-link delay using MPLS Performance Management. Also , solution can leverage SR on-demand next hop (ODN) and Automated Steering for intent-based instantiation of traffic engineered paths.
	Journey to Self-Healing Networks	Intent assurance with CNAE for ACI Fabric. A network that predicts, protects and adapts.
	IoT – Cisco Kinetic for cities	Demonstrate integrated solution (i.e., Jasper + Kinetic for Cities) for Smart Lighting, Waste Management, Smart Car Parking, Video Surveillance. Kinetic for Cities – City Live Dashboards.
	Cisco Jasper Control Centre	Dashboard for operating, charging and billing systems for lot devices, Use case - Lifecycle of Connected Car Management.
	Think Cloud. Think Meraki	100% Cloud Managed IT - showcasing the powerful dashboard which can manage Meraki Wireless, Switching, Security/ SD WAN, IP Surveillance and MDM from a Laptop/ iPad/ Mobile Device.
	SDWAN	Meraki MX/ SD WAN - showcasing Transport Independence, Application Optimization, intelligent Path Control and Secure Connectivity all bundled in the same device which can be managed from a laptop/ iPad/ Mobile Device
	Umbrella, AMP for Endpoints	Actual subscriber experience for DNS protection & insight and remote user for IP blocking.
	Webex board with DX 80 and Room kit	Power of Webex and new Video EPs like - Room Kit with DX 80 Webex & Webex team
Broadsoft	Single number reachability on multiple devices	

Ciena		<p>Ciena's 5170 Service Aggregation Switch addresses the increasing need for high-bandwidth services at the edge of the network. Capable of delivering up to 100GbE to enterprises, mobile backhaul sites, and data center interconnect applications, the 1RU device provides a low-footprint, low-power solution addressing today's key network challenges.</p> <p>Ciena's 3928 Service Delivery Switch is a cost-effective platform for 10 Gb/s Ethernet service delivery in a variety of business or mobile backhaul environments.</p> <p>Ciena's 3905 Service Delivery Switch (SDS) is a hardened Ethernet platform purpose-built to address small cell mobile backhaul network needs by helping mobile network operators upgrade their networks for improved coverage, bandwidth, and overall quality of service.</p>
	Datacenter solutions	Waveserver® Ai delivers unmatched capacity—up to 2.4 Tb/s in a single rack unit—with a familiar operational toolset to tackle the largest scalability and automation challenges in the Data Center Interconnect (DCI) market.
	Automation solutions	Blue Planet MCP for unified service and network management, resource control, and planning through a single interface.
Samsung	5G Kiosk & Skyship	Samsung's 5G skyship, stationed at the exhibition center enables a systematic and organized rescue in emergency situations.
	5G Connected Car	The solution is demonstrating ultra-high speed data transmission between road infrastructure and vehicles. This enables instant download of High Definition videos, and upload blackbox footage, update driving software and smart navigation.
	5G Farm	Smart sensors placed in the farm can gather soil status, humidity and temperature to measure and inform the farmers about what needs to be done to keep their crops healthy.
	5G City	Samsung 5G city zone showcases a model of a city connected by Samsung's 5G Connectivity Node, which will link a wide range of technologies such as drone cameras, sensors and vehicles to 5G networks. The model is demonstrating how by using 5G network, smart cities can detect mishaps and relay the footage and location information to relevant authorities, automatically. With connected sensors, humidity, temperature and pollution of the area can also be monitored, making roads and streets much more safer and convenient.
	5G FWA & 5G Home	Using key 5G technologies, 5G Fixed Wireless Access (FWA) services will provide Gigabit speed to households. With Samsung's Cloud Platform, high-capacity, high-quality contents and services will be provided to users, enabling benefits like multiple UHD TV streaming, cloud gaming etc.
	5G Stadium	A Demonstration illustrating how 5G will work in crowded areas like stadium, with wider bandwidth and massive MIMO technology.

11ax	11ax is the next generation standards in Wi-Fi that delivers High efficiency Wi-Fi for high density connectivity
CV2X	Cellular vehicle-to-everything (C-V2X) will serve as the foundation for vehicles to communicate with each other and everything around them—providing 360° non-line-of-sight awareness and a higher level of predictability for enhanced road safety and autonomous driving. This demo will showcase (plays video) the multiple C-V2X use cases that have been accomplished in real time / on road Automotive vehicles in collaboration OEMs and Tiers1.
Small cells (T&W)	T&W enterprise Small Cell provides cellular indoor coverage via broadband IP backhaul. It is based on Qualcomm FSM99xx platform, suitable for indoor hotspot scenarios, solving cellular network issues including weak coverage, low data rate and site acquisition. It increases capacity for data service and offloads macro network by absorbing traffic from indoor hotspots or buildings. It has two versions: LTE + LTE dual carrier, 3G + LTE dual mode.
Small cells (Airspan)	Airspan has a wide portfolio of Network Solutions ranging from EPC, EMS Advanced SON and 5G V-RAN which allow carriers and other verticals to disrupt the traditional implementation of end-to-end LTE and LTE-A network.
WiFi Mesh	Wi-Fi Mesh router will demonstrate the capabilities of SON based on Dakota platform. This is a primary use case for carriers and retail market segment to provide best coverage inside residential areas. Indoor coverage benefits extend to providing best bandwidth at all locations and to achieve best user experience at all points in the indoor location
Telematics	As part of the demo we will be showcasing the below use cases. 1. Modem voice call over ethernet with AVB protocol 2. eCall (emergency call) 3. CAN messages - reception/decoing/display on on console 4.QDR (Qualcomm dead reconning)

Qualcomm

IoT (Borqs)	<p>Trackers:</p> <ul style="list-style-type: none">- Based on Qualcomm Snapdragon 1100 and 1200 series processors- Support LTE Cat-1, NB-IoT and Cat-M cellular technologies; can also support 3G and GSM- Support Global Navigation Satellite Systems (GNSS)- Location Tracking, Emergency Alerts, Voice Calling- Different designs for multiple use cases: people/pet/asset tracking, personal emergency response services <p>Module:</p> <ul style="list-style-type: none">- 84 pin LGA package; 33mm x 33mm- Based on Qualcomm Snapdragon 1200- Support LTE Cat-M, NB-IoT and GPRS; multiple RF bands for global coverage- Support GNSS; optionally support WiFi, Bluetooth- Interfaces include UART/I2C/SPI/SIM/USB/HSIC/RTC/I2S/GPIOs <p>Network Interface Cards:</p> <ul style="list-style-type: none">- Based on Borqs IoT module- Current design of size 65mm x 45mm; interfaces include UART, PWM, Analog- New designs possible based on customer requirements- Can satisfy multiple IoT use cases needing LTE connectivity; e.g. electricity meters, asset tracking
IoT (iWave)	OBD II Module for advanced automotive applications to support Connected Car Devices. The OBDII Module using MDM9207 is enabled with 4G, Wi-Fi, BLE, GPS, Sensors, OBDII CAN support, USB...
IoT (Melange)	Smart Energy Metering Demo using Tarang. Tarang is a highly integrated Cat M1 and NB1 module perfectly tailored for the next generation IoT products requiring low bandwidth and years of battery-life to provide most reliable and optimized cellular connectivity using Qualcomm's MDM9206 solution.

	IoT (VEPL)	<p>PRYSM a integrated Smart Grid Solutions provider with Full Smart Meter Functionality which includes the following features:</p> <ul style="list-style-type: none"> - Remote Meter Reading - Remote Disconnect/Connect - ToD/ToU Metering - Prepaid Functionality - Net-Metering - Records & reports Tamper Events [Occurrence & Restoration] - Firmware Over The Air (FOTA) – Remote upgrade <ul style="list-style-type: none"> <input type="checkbox"/> True four quadrant measurement with import/export registration <input type="checkbox"/> Billing history up to last 12 months. <input type="checkbox"/> Integrated with individual Relay on Phase & Neutral <input type="checkbox"/> Optical Communication for manual Meter reading
	QCV (ideaForge)	Indigenous drones from India using Qualcomm communication technology
	QCV (Stellapps)	"Milk revolution 2.0: Changing the end to end dairy landscape with Qualcomm powered solutions"
	QCV (Ridlr)	IOT Based transport solution for mobile ticketing for bus commuters in India
Sterlite	Public Data Office (PDO)	Sterlite Tech showcased Public Data Office (PDO) at BSNL booth to promote rural broadband network in India. Sterlite Tech has positioned itself as the technology partner to design, build and manage smarter network.
	Network Function Virtualisation Infrastructure (NFVI) Solutions	Sterlite Tech announced a partnership of developing solutions using Redhat's products portfolio that will enable communication service providers, enterprises and citizen networks to realise the full potential of web-scale Network Function Virtualisation Infrastructure (NFVI) platform, for their network automation and software defined networks initiatives.
	Virtual Reality Plant Tour	A Truly Immersive VR Experience Sterlite Tech's VR demo zone was abuzz with visitors and enthusiasts! Our virtual tour of the Optical Fibre manufacturing plant was a big hit! The virtual tour of our manufacturing facility showed the engineering marvel of optical fibre manufacturing in the most immersive fashion.

Sterlite GARV	Sterlite Garv showcase stole the show with its powerful use cases and exciting demos. It aims at connecting rural India to the digital world and we exhibited compelling use cases like Smart agriculture, Smart electricity, Haptik training for skill building etc.
Others	<ol style="list-style-type: none"> 1) G.657.A2 bend insensitive fibre 2) The worlds' slimmest 432F fibre cable 3) ADSS aerial cable with micro module 4) Sterlite Tech's brainchild for Networks of tomorrow – Flattened Network Architecture 5) FTTH compact kits 6) Sterlite Tech's innovative LEAD360 approach for hyperscale network modernisation 7) Software Defined Network (SDN) 8) Sterlite Garv – A transformative solution for rural India
5G connected drones	<p>Drones have been used in a variety of new and exciting ways around the world. It can be deployed for mission critical applications such as Disaster management, Surveillance and other consumer applications. The demo showcases continuous streaming and precise controlling of the drones over 5G networks that guarantee high throughput and low latency.</p> <p>By running scenarios on a city model, we showcase Centralized and Decentralized Radio Architecture, Core and RAN Virtualization, Network Slicing, 5G deployment scenarios, Transport Evolution, among other technological deployments on the road to 5G.</p>
Robotic Arm	5G has paved the way for mass-market automation. The impact of robots and robotics has been greatest in the manufacturing industry, particularly on assembly lines and in hazardous environments. Robots are beginning to appear in all industries and are being used to carry out a wide variety of tasks.
3D augmented reality (AR) collaboration	3D AR provides an interactive experience of a real-world environment which can be an enabler to applications such as remote assistance/collaboration and immersive retail experience. This demo is done in collaboration with Meta (a US company specializing in immersive AR experience).

Ericsson

Move ahead with Ericsson Radio System (ERS)	ERS is an innovative, modular system that enables operators to address growth opportunities and transform their radio networks by leveraging a multi-standard, multi-band and multi-layer architecture (3xMulti), industry-leading performance on the smallest site footprint with the lowest energy consumption. ERS supports all technologies – 2G, 3G, 4G & 5G on the existing deployed Base Stations.
End-to-end 5G Transport	It showcases Ericsson end to end 5G Transport portfolio, from Ericsson MINI-LINK microwave, Ericsson Fronthaul, and Ericsson Router 6000. The demo also captures our partnership with Juniper, and ECI.
Connected transport	<p>Connected Urban Transport – Addresses transport challenges in the city. Enables city agencies to interwork within the municipality and between municipalities—securely.</p> <p>Fleet Management – Ericsson Connected Fleet (ECF) manages fleets that are large and global; connected and automated; integrated and intelligent. ECF is focused on OEMs, rentals companies, large enterprises, and governments, who sell or own a fleet of commercial motor vehicles such as cars, vans and trucks.</p>
Connectivity management	It puts service providers in the driver’s seat by helping them manage connectivity over the device life cycle and provides access to actionable information in real time regarding status, events and health of the SIM cards.
Connected Technician	An app-based solution, it empowers field technicians to configure and integrate sites easily from their mobile phones. It helps in identifying technical issues at the time of new installation as well as during maintenance. The solution helps identify the issue, provides the root cause and suggests actions to resolve it.
Connected project management	An end-to-end project tracking and monitoring service for complex and big projects, it provides status of all the ongoing field activities on a single dashboard view. Developed by Ericsson, this solution captures field information in real time with the help of mobile apps and updates on the cloud-based dashboard. The key benefits delivered by this solution include smaller time to market, first time ‘right’ services and better inventory management.
Automation & AI – intelligent operations	Telecom operators are facing multi-dimensional challenges in their operations with a surge in data traffic levels. Witness the next generation of Managed Services capabilities exemplified in the areas of Customer Experience; Analytics, AI & Automation and future operations.

Managed security	Ericsson managed security is designed to provide our customers with continuous monitoring and response to threats and vulnerabilities that can occur in their network. It helps enhance compliance and resilience.
Ericsson Expert Analytics	Data driven analysis in real-time enables networks to automate its operations, drive superior customer experience and explore new business opportunities. Ericsson Expert Analytics is telecom-ready data analytics solution and creates insights based on unique network correlations across different domains. Leveraging Ericsson's domain expertise coupled with machine learning, it provides the capabilities to unlock 5G.
Network exposure for Massive IoT	With new IoT devices entering the market, telecom operators need an ecosystem that can provide efficient device and application communication with a reduced network investment. In the demo we will talk about how Ericsson can help operators in achieving this by demonstrating use cases around how one can leverage and monetize this ecosystem.
Automation & Orchestration	Ericsson Dynamic Orchestration enables network slicing design process, orchestration of designed slices into the network and eventually assists in monitoring of the network slices. Enterprise Service Orchestration showcases onboarding, validation and verification for multivendor Virtual Network Function (VNF) environment. It also demonstrates how to build service design based on validated VNF artifacts, onboard and instantiate network service for enterprise customers.
Cloud native	Demo will showcase new telco applications paradigm and the associated ecosystem to bring in Network efficiencies and Easy of deployment. Ericsson's Cloud Native application on Container NFVi (network functions virtualization infrastructure): * VNF (Virtual Network Function) VNF deployed as microservices in containers, VNF Scaling in & out etc. * Container-as-a-Service (CaaS) based on Kubernetes (K8s)
NFV here and now	Network Function Virtualization (NFV) is the building block of futuristic networks and 5G. It is crucial to enable efficiencies and agility to support new business. The demo showcases Ericsson's complete stack including Virtual Infrastructure Manager, Virtual Network Function, and Management & Orchestration, ready for delivery for 4G and 5G platform. It enables shorter time-to-market for new services and higher efficiency with short upgrade cycles. Using e2e Ericsson NW Management & Orchestration, Network deployment flexibility, agility and automation of NFV is making it real for operator now.

MediaKind Orion – consumer experience

Orion provides a modern, multi-device, multi-screen platform for immersive TV service delivery. Backed by powerful analytics, user interface customization and dynamic ad-insertion features, Orion is the most comprehensive consumer experience solution for Live and OTT service. – CT Bureau