## COMPILATION OF RECENT OPEN RAN ANNOUNCEMENTS AND DEMONSTRATIONS

### AIRSPAN

US Companies Airspan And Altiostar Announce Partnership To Commercialize 4G & 5G Open Virtualized RAN Network Solutions

Airspan To Partner With Rakuten Mobile To Deliver Air5G Openrange28 Mmwave Platform

### ALTIOSTAR

IBM leading system integration for Telefónica Open RAN proof of concept

Rakuten Mobile's 5G network achieves 1.77Gbps throughput using Altiostar Open RAN network

O2 and NEC jointly conduct Open RAN trial with Altiostar

The Telecom Infra Project inaugurates New Community Lab in Indonesia

STC Tests First Live Open RAN Network in MENA

Telefonica Deutschland to accelerate O-RAN deployment: Report

NEC accelerates commercial-ready 5G ecosystem development at its CoE Open RAN laboratory

Keysight's 5G Test Solutions Selected by Altiostar to Accelerate Deployment of Virtualized Radio Access Network Infrastructure

Altiostar and NEC Demonstrated O-RAN Open Fronthaul at Global O-RAN ALLIANCE Plugfest Hosted by Bharti Airtel in India

Altiostar Executive Joins FCC Chairman at Forum on 5G Open Radio Access Networks DISH Selects Altiostar O-RAN Solution as Company Leads U.S. in Nationwide, Standalone 5G Network Buildout

Altiostar and Mavenir to Deliver OpenRAN Radios for US Market

Altiostar Conducting O-RAN Compliant 5G Massive MIMO Technology Interoperability Testing in Cooperation with NEC and Rakuten Mobile

Altiostar is Founding Member of Open RAN Policy Coalition

Bharti Airtel To Deploy Altiostar vRAN

Cisco, Altiostar, WWT Team For Open vRAN Blueprint

WWT Develops Blueprint To Accelerate Deployment Of 4G/5G Open vRAN Solutions With Cisco And Altiostar Technology

Altiostar, Intel, Xilinx Among Telefonica Open RAN Providers

US Companies Airspan And Altiostar Announce Partnership To Commercialize 4G & 5G Open Virtualized RAN Network Solutions

Rakuten Mobile and Altiostar To Launch World's First Cloud-Native, Container-Based 5G Radio Access Network Solution

NEC and Altiostar Collaborate to Advance Open vRAN Deployments for 4G and 5G Etisalat Launches Open vRAN with Altiostar, NEC and Cisco

Rakuten Mobile and Altiostar To Launch World's First Cloud-Native, Container-Based 5G Radio Access Network Solution

NEC and Altiostar Collaborate to Advance Open vRAN Deployments for 4G and 5G

Etisalat Launches Open vRAN with Altiostar, NEC and Cisco

Etisalat Launches MENA's First Open vRAN Network In The UAE

GSMA Welcomes New Telco Cloud Companies to the 'GSMA 100'

Altiostar: 'The status quo cannot deliver on the premise of 5G'

Telefónica Invests In Altiostar's Open RAN Technology To Accelerate Network Transformation

Ubicquia and Altiostar Expand Partnership to Accelerate Rural Broadband

Telecom Italia Halves Software Costs in vRAN Trials

U.S. Still Leads World in 5G Innovation

Sercomm and Altiostar Drive Small Cell and Open vRAN Innovation

Altiostar Talks About the Virtualization of the RAN & Its Role in the Rakuten Network at MWC 2019

Altiostar to Develop Innovative 4G/5G Solutions Based on Qualcomm Small Cell 4G and 5G Platforms

Deutsche Telekom Partners With Crown Castle, Altiostar On 3.5 GHz Test Bed

Altiostar AND SK Telecom Implement Virtualized Radio Access Network (RAN) and Collaborate on Software Defined RAN Solution

Altiostar, Amdocs & Wind River Collaborate on End-to-End vRAN Solution: New Services, New Customers, New Revenue

Altiostar And Sercomm Announce Collaboration For LTE And 5G Solution On CBRS Band For Rural Broadband And Fixed Wireless

Announcing North America's Most Advanced Radio Access Network Solution by GCI in Collaboration with Altiostar

Altiostar vRAN Receives Multiple Glomo Awards Including CTO's Choice Award And Best Mobile Technology Breakthrough Award

TIM Brings Altiostar vRAN into Live Mobile Network

Altiostar And Dali Wireless Collaborate To Support Emerging 5G Technologies

Altiostar Teams with Wind River Titanium Cloud Ecosystem to Accelerate Deployment of NFV Solutions

Altiostar Unveils Open vRAN Development Platform

Bharti Airtel To Deploy Altiostar vRAN

Altiostar, Intel, Xilinx Among Telefonica Open RAN Providers

Cisco, Altiostar, WWT Team For Open vRAN Blueprint

WWT Develops Blueprint To Accelerate Deployment Of 4G/5G Open vRAN Solutions With Cisco And Altiostar Technology

US Companies Airspan And Altiostar Announce Partnership To Commercialize 4G & 5G Open Virtualized RAN Network Solutions

## ANALOG DEVICES, INC.

Analog Devices Announces Complete Radio Platform for 5G O-RAN Ecosystem

## AT&T

AT&T and CommScope are Showcasing O-RAN's Vendor Agnostic Operations, Administration and Maintenance (OAM) Architecture and O1 Interface Specification

AT&T and Nokia are Co-Sponsoring a Demo of the O-RAN OSC Open Source Near-Real-Time RAN Intelligent Controller (near-RT RIC) Running at the Network Edge on an Akraino-Based Open Cloud Platform

Ciena, Radisys, Wind River, AT&T And DISH Network Are Co-Sponsoring A Demonstration Of 5G Edge Orchestration And Optimization

AT&T, Commscope, And Intel Are Demonstrating mmWave 5G gNB And 7.2x Open Fronthaul Demo

Samsung and AT&T Achieve Open RAN Milestone

## AWS

Announcing AWS Wavelength For Delivering Ultra-Low Latency Applications For 5G

## CISCO

Cisco And Telstra Complete World's First 5G Call Over Packetized Fronthaul Network

Realizing A Multi-Vendor Virtualized RAN

WWT Develops Blueprint To Accelerate Deployment Of 4G/5G Open vRAN Solutions With Cisco And Altiostar Technology

Cisco's Early Bet On RAN Virtualization Propels Altiostar

Etisalat Launches Open vRAN with Altiostar, NEC and Cisco

## COHERE TECHNOLOGIES

Cohere Announces Software Platform that Increases Spectral Efficiency by As Much As 2x

## COMMSCOPE

CommScope, AT&T To Demo O-RAN, ONAP At Digital Forum

## DELL

## DISH

## FUJITSU

## GOOGLE

## INTEL

AT&T, Commscope, And Intel Are Demonstrating mmWave 5G gNB And 7.2x Open Fronthaul Demo

Altiostar, Intel, Xilinx Among Telefonica Open RAN Providers

## MAVENIR

Mavenir and Xilinx Collaborate to Bring to Market Open RAN Massive MIMO Portfolio

Vodafone Idea Deploys Mavenir Open RAN Solution

DISH Selects Mavenir To Deliver Cloud-Native Open RAN Software For Nation's First Virtual 5G Wireless Broadband Network

Mavenir Awarded 'Best OpenRAN Solution' At 2020 Network Automation Awards

Mavenir and Turkcell Partner on OpenRAN

VMware and Deutsche Telekom Unveil Collaboration on Cloud-based Open and Intelligent Virtual RAN Platform with an open partner ecosystem including Mavenir

Mavenir and MTI Announce First OpenRAN O-RAN Interface on RRU Portfolio

Mavenir Simplifies Deployment of 5G Cloud Solutions with Business Partners

Mavenir Collaborates with Partners to Launch Evenstar Remote Radio Head Family NEC and Mavenir Deliver 5G Open vRAN Solutions

Mavenir Will Be Sponsoring A Demo On Open Fronthaul

Mavenir and Mugler Collaborate to Deliver End-to-End 5G Private Networks in Germany

Sunwave and Mavenir Announce Partnership

Mavenir Launches Fully Virtualized 4G-5G OpenRAN Solutions

Mavenir Survey Reveals 100% of Mobile Operators Plan to Implement Open RAN

Mavenir Opens New Center of Innovation in Stockholm

Mavenir Demonstrates 5G O-RAN Interface at Center of Innovation in Stockholm

Mavenir's Virtualized Radio Access Network (vRAN) Awarded Best RAN Technology at 5G Asia for Second Year in a Row

Realizing OpenRAN Efficiency and Performance

Mavenir Wins Best RAN Product

Mavenir and Baicells Announce xRAN Interface Interoperability Testing

Mavenir Wins Best RAN Award

Mavenir Brings Cloud RAN and vEPC to India and South Asia

Adva, BT and Mavenir Collaborate on Cloud RAN

Mavenir Teams with Dell on NFV

Mavenir Announces vMBC

Mavenir Announces 5G Core Network and vRAN Solutions

Mavenir Unlocks the Value and Benefits of NFV

Mavenir Acquires vEPC Business

Mavenir Extends Partnership with 6Wind to Accelerate the Next Generation of Telecom

Mavenir Joins xRAN Foundation

NEC

NEC Releases "Open And Virtualized RAN" White Paper

NEC Will Show Their O-RAN Open Fronthaul Compliant Small-Cell Rus That Support the 3.7GHz, 4.5GHz and 28 GHz Bands

Rakuten Mobile and NEC Begin Production of Open RAN 5G Radio Equipment

NEC Begins Shipping 5G Radio Equipment to DOCOMO

Etisalat Launches Open vRAN with Altiostar, NEC and Cisco

NTT DOCOMO

DOCOMO to Commence Deployment of World's First 4G/5G Multivendor Radio Access Network Conforming to O-RAN Specifications

## NVIDIA

GPU Accelerated 5G Virtual RAN with NVIDIA Aerial SDK and OAI

OpenAirInterface Demonstrates 5G Virtual RAN with NVIDIA Aerial SDK

## QUALCOMM

Global Cellular Infrastructure Firms Select Qualcomm 5G RAN Technologies

Corning Announces 5G mmWave In-Building Network Systems Utilizing Qualcomm Technologies 5G Expertise

Small Cell Forum Publishes Specification To Drive Unified 5G Open Ran

QCT Develops 5G Foundation In Preparation For Steep Demand

Fujitsu and Qualcomm Complete 5G Data Calls in Sub-6 GHz and mmWave Spectrum Bands

Altiostar to Develop Innovative 4G/5G Solutions Based on Qualcomm Small Cell 4G and 5G Platforms

Airspan To Partner With Rakuten Mobile To Deliver Air5G Openrange28 Mmwave Platform

## RAKUTEN

Rakuten Mobile CTO: We're Stronger, Faster & Cheaper Than You

Rakuten Mobile and Altiostar To Launch World's First Cloud-Native, Container-Based 5G Radio Access Network Solution

Rakuten Mobile Eyes Global Ambitions, Readies For April Launch In Japan

Rakuten Selects Red Hat's Tech For New Mobile Network

Intel And Rakuten Partner To Address 5G Network Gap

TPG Telecom Partners Rakuten On Trial For 5G OpenRAN

[MWC19: Rakuten Provides A Template For How The Future 5G Network Could Look](#)

[Rakuten Mobile and NEC Begin Production of Open RAN 5G Radio Equipment](#)

[Airspan To Partner With Rakuten Mobile To Deliver Air5G Openrange28 Mmwave Platform](#)

[Rakuten Mobile and NEC to Build Open vRAN Architecture in Japan](#)

[Rakuten Mobile and TPG Telecom Sign Partnership Agreement to Trial 5G OpenRAN in Singapore](#)

[Rakuten Mobile Announces Full-Scale Commercial Launch; Unveils Enhanced "Rakuten UN-LIMIT 2.0" Service Plan](#)

## SAMSUNG

[Samsung and KDDI to Bring 5G vRAN to Japan](#)

[Samsung Expands 5G Technology Leadership with Fully Virtualized Commercial 5G RAN](#)

[Samsung Introduces Fully Virtualized 5G RAN for Commercial Availability](#)

[VMware and Samsung Form Alliance to Accelerate CSPs Transformation to 5G](#)

[Samsung and Amdocs Partner to Accelerate Communications Service Providers' Deployment of 5G Open Cloud Networks](#)

[The Open Road to 5G](#)

[Overcoming Challenges of Multi-Vendor Open RAN](#)

[Samsung and AT&T Achieve Open RAN Milestone](#)

[OTIC: An Industry Innovation for O-RAN Verification](#)

[Samsung Demonstrates Dynamic Scalability of 5G RAN Using ORAN Framework](#)

[Building Success in the 5G Ecosystem](#)

[Persistence Pays Off For Samsung Networks In Becoming A Major 5G Radio Access Network Vendor](#)

Open RAN 1 - Driving New Network Economies, Efficiencies and Experiences

Open RAN 2 - A Paradigm Shift Mandating a New Wireless Ecosystem

Open RAN 3 - Critical Success Factors to Build a Strong Open RAN Ecosystem

LFN Member Spotlight: Samsung Electronics

U.S. Cellular Selects Samsung 5G and 4G LTE Network Solutions

Samsung Expands to New Zealand in 5G Networks Deal With Spark

Samsung Selected As 4G LTE-A & 5G Network Solution Provider by Videotron In Canada

System-On-A-Chip Tech: The Key To Unlocking 5G's Full Potential

Samsung And KDDI Are Co-Sponsoring An Intelligent RAN Control Demo

Samsung Joins O-RAN Alliance to Advance Open Innovation in Networking Technologies

Samsung Joins xRAN Forum to Advance Next-Gen 5G Technologies

Samsung Joins Linux Foundation Networking Fund as Platinum Member

Samsung Completes Multivendor Interoperability of Cloud-Native 5G Standalone Core with HPE & Openet

Taking a Multi-Vendor Approach to Best-in-Class 5G Networks

Samsung Selected as a 4G LTE Open RAN Provider on Verizon's LTE Network

Global Operators Collaborate with Industry Partners to Facilitate O-RAN Testing and Integration

Samsung and Open Networking Foundation (ONF) Host ONOS BUILD 2017 to Unleash Software-Defined Next-Generation Network

Samsung Acquires Network Services Provider Teleworld Solutions to Accelerate U.S. 5G Network Expansion

Samsung Brings 5G to World by Shipping More than 6.7 Million Galaxy 5G Devices in 2019

## VMWARE

[Vmware And Netsia Are Co-Sponsoring A Live End-To-End Network Slicing And Service Orchestration Demo, Using A Multi-Domain And Multi-Cloud Environment](#)

[VMware Automates Maestro, Grabs DT for vRAN](#)

[VMware Takes on Radio Networks](#)

[VMware And Deutsche Telekom Unveil Collaboration On Cloud-Based Open And Intelligent Virtual RAN Platform With An Open Partner Ecosystem Including Mavenir](#)

## VODAFONE

[Vodafone and Qualcomm blueprint for Open RAN vendor diversification](#)

[Vodafone Pioneers Innovative Network Tech To Increase Suppliers And Extend Rural Internet Access](#)

[Disaggregated Cell Site Gateway RFI Evaluation Results Announced](#)

[Results Announced For Telecoms Industry's First OpenRAN RFI](#)

[Open Source CrowdCell Ready For Deployment](#)

[Storm iGen](#)

[Vodafone Announces Successful Trials Of New Technologies That Will Bring Cost-Effective Connectivity To Millions Of People In Africa And India](#)

[Vodafone To Join Telecom Infra Project (TIP) Board Of Directors And Co-Chair New Open RAN Project Group](#)

## WWT

[World Wide Technology Announces Availability of End-to-End Virtual Central Office Solution](#)

[World Wide Technology and VMware Collaborate on New Mobile Edge Computing Solutions For Consumption By Service Providers' End Customers](#)

[Cisco, Altiostar, WWT Team For Open vRAN Blueprint](#)

## XILINX

[Telefónica joins forces with Altiostar, Gigatera Communications, Intel, Supermicro and Xilinx for the development and deployment of Open Ran in 4g and 5g](#)

[Mavenir and Xilinx Collaborate to Bring to Market Open RAN Massive MIMO Portfolio](#)