

# Open Radio Access Network (Open RAN) Market by Component (Hardware, Software, Services), Type (Open RAN RU, Open vRAN), Frequency (Sub-6GHz, mmWave), Radio Interface, Access (Public, Private), Network and Region - Global Forecast to 2027

https://marketpublishers.com/r/O8A5CF4924B4EN.html

Date: December 2022 Pages: 255 Price: US\$ 4,950.00 (Single User License) ID: O8A5CF4924B4EN

# Abstracts

The global Open RAN market is projected to grow from USD 1.1 billion in 2022 to USD 15.6 billion by 2027, at a Compound Annual Growth Rate (CAGR) of 70.5% during the forecast period. Advantages such as solution flexibility, reduced costs and supply chain diversity is driving the Open RAN market growth.

Services segment is estimated to account for a higher CAGR during the forecast period

The adoption of Open RAN services is expected to increase among service providers and enterprises with the increasing adoption of Open RAN solutions. The Open RAN market has been segmented based on services into consulting, deployment and implementation, and support and maintenance. These services assist end users in reducing costs, lowering operational costs, increasing overall revenues, and improving business performance.

Sub-6GHz segment is expected to account for a larger market share during the forecast period

Businesses are already on the way to Sub-6GHz 5G. Huawei proposed bands below 6 GHz as the primary working frequency of 5G. Qualcomm announced a 5G New Radio model system and trial platform. The 5G NR prototype system operates in the Sub-6GHz spectrum bands and is utilized to showcase the company's 5G designs to efficiently achieve multigigabit per second data rates and low latency. Mobile operators



will continue to rely heavily on the Sub-6GHz spectrum. This is because it will take time for mmWave technology to be fully developed and harmonize the availability of the new spectrum bands.

Public segment to account for the largest market share during the forecast period

Public 5G wireless networks provide the same level of service and security to all clients. But the security risk is higher in case of public access and comes from the public sharing the network. Also, when the network is busy, it can impact all users at the same time. The spectrum is usually owned by a mobile network operator (MNO), and in the public 5G network, the service and management are the responsibility of the MNO. The public 5G network is intended for use by the public, with tens of millions of subscribers on a given nationwide network.

Among regions, Asia Pacific recorded the highest CAGR during the forecast period

Asia Pacific constitutes thriving economies, such as Singapore, Japan, China, India, and Australia, which are expected to register high growth rates in the Open RAN market. Asia Pacific houses many large countries with a wide population spread over remote locations and wide geographical areas. Major leading companies such as Rakuten Mobile, NTT Docomo, KDDI, Reliance Jio, Bharti Airtel, Vodafone and more are involving and contributing to Open RAN technology in Asia Pacific region which is driving the growth of the market.

Breakdown of primaries

In-depth interviews were conducted with Chief Executive Officers (CEOs), innovation and technology directors, system integrators, and executives from various key organizations operating in the Open RAN market.

By Company: Tier I: 35%, Tier II: 40%, and Tier III: 25%

By Designation: C-Level Executives: 60% and Managers: 40%

By Region: North America: 30%, Europe: 35%, Asia Pacific: 25%, Middle East and Africa: 5%, and Latin America: 5%

The report includes the study of key players offering Open RAN solutions and services.



It profiles major vendors in the global Open RAN market. The major vendors in the global Open RAN market include Ericsson (Sweden), Nokia (Finland), Samsung (South Korea), NEC Corporation (Japan), Hewlett Packard Enterprise (US), VMware (US), Huawei (China), AT&T (US), Fujitsu (Japan), IBM (US), Orange (France), Airspan Networks (US), Mavenir (US), CommScope (US), Viavi Solutions (US), Amdocs (US), Renesas (Japan), MTN Group (South Africa), Entel (Chile), Comba Telecom (China), KDDI (Japan), SingTel (Singapore), TIM (Italy), Telefonica (Spain), Sivers Semiconductors (Sweden), NXP Semiconductors (Netherlands), Picocom (UK), Etisalat (UAE), Mobily (Saudi Arabia), XCOM Labs (US), DeepSig (US), ZTE (China), Celona (US), LIME Microsystems (UK), Verana Networks (US), Microamp Solutions (Poland).

#### **Research Coverage**

The market study covers the Open RAN market across segments. It aims at estimating the market size and the growth potential of this market across segments, such as component, type, frequency, radio interface, access, network and region. It includes an in-depth competitive analysis of the market's key players, their company profiles, key observations related to product and business offerings, recent developments, and key market strategies.

Key Benefits of Buying the Report

The report would provide the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall Open RAN market and its subsegments. It would help stakeholders understand the competitive landscape and gain better insights to position their business and plan suitable go-to-market strategies. It also helps stakeholders understand the market's pulse and provides information on key market drivers, restraints, challenges, and opportunities.



# **Contents**

## **1 INTRODUCTION**

1.1 STUDY OBJECTIVES
1.2 MARKET DEFINITION
1.3 STUDY SCOPE

1.3.1 MARKETS COVERED

FIGURE 1 OPEN RAN MARKET SEGMENTATION

1.3.2 GEOGRAPHIC SCOPE

FIGURE 2 OPEN RAN MARKET: GEOGRAPHIC SCOPE
1.3.3 INCLUSIONS & EXCLUSIONS

1.3.4 YEARS CONSIDERED

1.4 CURRENCY CONSIDERED
TABLE 1 USD EXCHANGE RATES, 2019–2021
1.5 STAKEHOLDERS

## 2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA

FIGURE 3 OPEN RAN MARKET: RESEARCH DESIGN

- 2.1.1 SECONDARY DATA
  - 2.1.1.1 Secondary sources
- 2.1.2 PRIMARY DATA
  - 2.1.2.1 Primary interviews with experts
  - 2.1.2.2 List of key primary interview participants
  - 2.1.2.3 Breakdown of primaries
  - 2.1.2.4 Primary sources
- 2.1.2.5 Key industry insights
- 2.2 MARKET SIZE ESTIMATION

FIGURE 4 MARKET SIZE ESTIMATION METHODOLOGY: APPROACH 1 (SUPPLY SIDE) - REVENUE OF HARDWARE/SOFTWARE/SERVICES

2.2.1 BOTTOM-UP APPROACH

FIGURE 5 BOTTOM-UP APPROACH

FIGURE 6 MARKET SIZE ESTIMATION USING BOTTOM-UP APPROACH (SUPPLY

SIDE): COLLECTIVE REVENUE FROM SOLUTIONS/SERVICES

2.2.2 TOP-DOWN APPROACH

FIGURE 7 TOP-DOWN APPROACH

2.2.3 OPEN RAN MARKET ESTIMATION: DEMAND-SIDE ANALYSIS



FIGURE 8 MARKET SIZE ESTIMATION METHODOLOGY: DEMAND-SIDE ANALYSIS 2.3 MARKET BREAKDOWN AND DATA TRIANGULATION FIGURE 9 DATA TRIANGULATION 2.4 OPEN RAN MARKET: RECESSION IMPACT FIGURE 10 OPEN RAN MARKET TO WITNESS DECLINE IN Y-O-Y GROWTH 2.5 FACTOR ANALYSIS 2.6 ASSUMPTIONS 2.7 LIMITATIONS

## **3 EXECUTIVE SUMMARY**

3.1 OPEN RAN MARKET: REGIONAL AND COUNTRY-WISE SHARE FIGURE 11 OPEN RAN MARKET: REGIONAL AND COUNTRY-WISE SHARE, 2022

## **4 PREMIUM INSIGHTS**

**4.1 OPEN RAN MARKET OVERVIEW** FIGURE 12 MAJOR DEVELOPMENTS BY LEADING VENDORS TO DRIVE OPEN RAN MARKET DURING FORECAST PERIOD 4.2 OPEN RAN MARKET, BY FREQUENCY, 2022 FIGURE 13 SUB-6GHZ SEGMENT TO HOLD LARGER SHARE IN 2022 4.3 OPEN RAN MARKET, BY COMPONENT FIGURE 14 HARDWARE SEGMENT EXPECTED TO DOMINATE MARKET BY 2027 4.4 OPEN RAN MARKET, BY TYPE FIGURE 15 OPEN VRAN TO WITNESS HIGHER GROWTH RATE DURING FORECAST PERIOD 4.5 OPEN RAN MARKET, BY FREQUENCY FIGURE 16 SUB-6GHZ SEGMENT TO DOMINATE MARKET BY 2027 4.6 OPEN RAN MARKET. BY RADIO INTERFACE FIGURE 17 5G SEGMENT TO WITNESS FASTEST GROWTH 4.7 OPEN RAN MARKET, BY ACCESS FIGURE 18 PUBLIC SEGMENT TO DOMINATE MARKET BY 2027 4.8 OPEN RAN MARKET, BY NETWORK FIGURE 19 BROWNFIELD SEGMENT TO WITNESS DOMINANCE 4.9 NORTH AMERICA: OPEN RAN MARKET, BY TYPE AND NETWORK FIGURE 20 OPEN RAN RU AND BROWNFIELD SEGMENTS TO ACCOUNT FOR SIGNIFICANT SHARES IN 2022

#### **5 MARKET OVERVIEW**



5.1 INTRODUCTION

5.2 MARKET DYNAMICS

FIGURE 21 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES: OPEN RAN MARKET

5.2.1 DRIVERS

5.2.1.1 Open RAN to improve total cost of ownership (TCO) and return on investment (ROI)

5.2.1.2 To reduce time and risk of deploying new services and revenue streams 5.2.2 RESTRAINTS

5.2.2.1 High integration cost and complexity

**5.2.3 OPPORTUNITIES** 

5.2.3.1 Commercialization of 5G services

5.2.3.2 Rising Open RAN demand from mobile operators

5.2.4 CHALLENGES

5.2.4.1 Carrier-grade scalability

5.2.4.2 Complicated systems due to multi-vendor environment

5.3 OPEN RAN MARKET, BY COMPLIANCE

5.3.1 PARTIAL

5.3.2 FULL

5.4 INDUSTRY TRENDS

5.4.1 VALUE CHAIN ANALYSIS

FIGURE 22 OPEN RAN MARKET: VALUE CHAIN ANALYSIS

5.4.2 ECOSYSTEM

TABLE 2 OPEN RAN MARKET: ECOSYSTEM

5.4.3 CASE STUDY ANALYSIS

5.4.3.1 Case Study 1: Deutsche Telekom powering mobile broadband site with renewable energy for sustainable connectivity

5.4.3.2 Case Study 2: Real-time music collaboration where performers connect live across London by 5G

5.4.3.3 Case Study 3: US cellular to offer FWA services using 5G-extended range mmWave to target rural America

5.4.3.4 Case Study 4: XL Axiata to accelerate its radio access network rollout by transforming Virtual Drive Test

5.4.3.5 Case Study 5: Nokia to power world's first cloud-based 5G RAN in North America

5.4.3.6 Case Study 6: Amdocs helped Indonesian University implement Open RAN 5.4.4 PORTER'S FIVE FORCES ANALYSIS

TABLE 3 OPEN RAN MARKET: PORTER'S FIVE FORCES MODEL





5.4.4.1 Threat of new entrants

- 5.4.4.2 Threat of substitutes
- 5.4.4.3 Bargaining power of buyers

5.4.4.4 Bargaining power of suppliers

5.4.4.5 Intensity of competitive rivalry

5.4.5 TECHNOLOGY ANALYSIS

5.4.5.1 Artificial Intelligence/Machine Learning

5.4.5.2 5G Network

5.4.5.3 Cloud Computing

5.4.6 PRICING ANALYSIS

5.4.6.1 Average selling price, by key player

TABLE 4 AVERAGE SELLING PRICE, BY SUBSCRIPTION TYPE

5.4.6.2 Average selling price trend

**5.4.7 PATENT ANALYSIS** 

5.4.7.1 Methodology

5.4.7.2 Document Types

TABLE 5 PATENTS FILED, 2020–2022

5.4.7.3 Innovation and Patent Applications

FIGURE 23 NUMBER OF PATENTS GRANTED ANNUALLY, 2020–2022

5.4.7.3.1 Top applicants

FIGURE 24 TOP 10 PATENT APPLICANTS WITH HIGHEST NUMBER OF PATENT APPLICATIONS, 2020–2022

TABLE 6 LIST OF PATENTS IN OPEN RAN MARKET, 2020–2022

5.4.8 DISRUPTIONS IMPACTING BUYERS/CLIENTS IN OPEN RAN MARKET FIGURE 25 OPEN RAN MARKET: DISRUPTIONS IMPACTING BUYERS/CLIENTS 5.4.9 KEY STAKEHOLDERS AND BUYING CRITERIA

5.4.9.1 Key stakeholders in buying process

FIGURE 26 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE VERTICALS

TABLE 7 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE VERTICALS

5.4.9.2 Buying Criteria

FIGURE 27 KEY BUYING CRITERIA FOR TOP THREE VERTICALS

TABLE 8 KEY BUYING CRITERIA FOR TOP THREE VERTICALS

5.4.10 KEY CONFERENCES & EVENTS IN 2022–2023

TABLE 9 OPEN RAN MARKET: DETAILED LIST OF CONFERENCES & EVENTS 5.5 REGULATORY LANDSCAPE

5.5.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS



TABLE 10 NORTH AMERICA: REGULATORY BODIES. GOVERNMENT AGENCIES. AND OTHER ORGANIZATIONS TABLE 11 EUROPE: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS TABLE 12 ASIA PACIFIC: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES. AND OTHER ORGANIZATIONS TABLE 13 ROW: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 5.5.1.1 North America 5.5.1.1.1 US 5.5.1.1.2 Canada 5.5.1.2 Europe 5.5.1.3 Asia Pacific 5.5.1.3.1 South Korea 5.5.1.3.2 China 5.5.1.3.3 India

5.5.1.4 Middle East & Africa

- 5.5.1.4.1 UAE
- 5.5.1.4.2 KSA
- 5.5.1.5 Latin America
- 5.5.1.5.1 Brazil
- 5.5.1.5.2 Mexico

# **6 OPEN RAN MARKET, BY COMPONENT**

6.1 INTRODUCTION

6.1.1 COMPONENT: OPEN RAN MARKET DRIVERS

FIGURE 28 SERVICES SEGMENT TO GROW AT HIGHEST CAGR DURING FORECAST PERIOD

TABLE 14 OPEN RAN MARKET, BY COMPONENT, 2016–2021 (USD MILLION) TABLE 15 OPEN RAN MARKET, BY COMPONENT, 2022–2027 (USD MILLION) 6.2 HARDWARE

6.2.1 HARDWARE TO WITNESS INCREASING DEMAND IN COMING YEARS TABLE 16 HARDWARE: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION)

TABLE 17 HARDWARE: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

6.3 SOFTWARE

6.3.1 OPEN RAN SOFTWARE TO INCREASE AGILITY AND DEPLOYMENT OF



NETWORK

TABLE 18 SOFTWARE: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION)

TABLE 19 SOFTWARE: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

6.4 SERVICES

FIGURE 29 DEPLOYMENT AND IMPLEMENTATION TO GROW AT HIGHEST CAGR DURING FORECAST PERIOD

TABLE 20 SERVICES: OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION) TABLE 21 SERVICES: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION) TABLE 22 SERVICES: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION)

TABLE 23 SERVICES: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

6.4.1 CONSULTING

6.4.1.1 Consulting services to drive network transformation

TABLE 24 CONSULTING: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION)

TABLE 25 CONSULTING: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

6.4.2 DEPLOYMENT AND IMPLEMENTATION

6.4.2.1 To increase revenue for Open RAN deployments

TABLE 26 DEPLOYMENT AND IMPLEMENTATION: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION)

TABLE 27 DEPLOYMENT AND IMPLEMENTATION: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

6.4.3 SUPPORT AND MAINTENANCE

6.4.3.1 To increase operational efficiency and ensure low costs

TABLE 28 SUPPORT AND MAINTENANCE: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION)

TABLE 29 SUPPORT AND MAINTENANCE: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

# 7 OPEN RAN MARKET, BY TYPE

7.1 INTRODUCTION

7.1.1 TYPE: OPEN RAN MARKET DRIVERS FIGURE 30 OPEN VRAN TO GROW AT HIGHER CAGR DURING FORECAST PERIOD



TABLE 30 OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION) TABLE 31 OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION) 7.2 OPEN RAN RU

7.2.1 OPEN RAN RU TO FACILITATE MORE COMPETITIVE MARKET TABLE 32 OPEN RAN RU: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION)

TABLE 33 OPEN RAN RU: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

7.2.2 MACRO CELL

7.2.3 SMALL CELL

7.3 OPEN VRAN

7.3.1 TO PRESENT MORE OPPORTUNITIES FOR CSPS

TABLE 34 OPEN VRAN: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION)

TABLE 35 OPEN VRAN: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

7.3.2 CENTRALIZED UNIT

7.3.3 DISTRIBUTED UNIT

# **8 OPEN RAN MARKET, BY FREQUENCY**

8.1 INTRODUCTION

8.1.1 FREQUENCY: OPEN RAN MARKET DRIVERS

FIGURE 31 MMWAVE SEGMENT TO GROW AT HIGHER CAGR DURING FORECAST PERIOD

TABLE 36 OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD MILLION) TABLE 37 OPEN RAN MARKET, BY FREQUENCY, 2022–2027 (USD MILLION) 8.2 SUB-6GHZ

8.2.1 MAJOR PLAYERS TO RELY ON SUB-6GHZ FREQUENCY TABLE 38 SUB-6GHZ: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION)

TABLE 39 SUB-6GHZ: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

8.3 MMWAVE

8.3.1 MMWAVE TO GAIN TRACTION IN COMING YEARS

TABLE 40 MMWAVE: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION) TABLE 41 MMWAVE: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

# 9 OPEN RAN MARKET, BY RADIO INTERFACE



#### 9.1 INTRODUCTION

9.1.1 RADIO INTERFACE: OPEN RAN MARKET DRIVERS

FIGURE 32 5G SEGMENT TO GROW AT HIGHEST CAGR DURING FORECAST PERIOD

TABLE 42 OPEN RAN MARKET, BY RADIO INTERFACE, 2016–2021 (USD MILLION) TABLE 43 OPEN RAN MARKET, BY RADIO INTERFACE, 2022–2027 (USD MILLION) 9.2 2G, 3G

9.2.1 INVESTMENTS BY EMERGING ECONOMIES IN LEGACY NETWORKS TO CONTINUE IN COMING YEARS

TABLE 44 2G, 3G: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION) TABLE 45 2G, 3G: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION) 9.3 4G LTE

9.3.1 MAJOR PLAYERS TO EXPAND 4G LTE WITH OPEN RAN TABLE 46 4G LTE: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION) TABLE 47 4G LTE: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION) 9.4 5G

9.4.1 5G TO ENHANCE PERFORMANCE OF NETWORKS

TABLE 48 5G: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION)TABLE 49 5G: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

#### **10 OPEN RAN MARKET, BY ACCESS**

10.1 INTRODUCTION

10.1.1 ACCESS: OPEN RAN MARKET DRIVERS

FIGURE 33 PRIVATE SEGMENT TO GROW AT HIGHER CAGR DURING FORECAST PERIOD

TABLE 50 OPEN RAN MARKET, BY ACCESS, 2016–2021 (USD MILLION) TABLE 51 OPEN RAN MARKET, BY ACCESS, 2022–2027 (USD MILLION) 10.2 PUBLIC

10.2.1 TO ENABLE NETWORK ACCESS TO SEVERAL CUSTOMERS TABLE 52 PUBLIC: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION) TABLE 53 PUBLIC: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION) 10.3 PRIVATE

10.3.1 PRIVATE ACCESS TO ENHANCE SECURITY

TABLE 54 PRIVATE: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION) TABLE 55 PRIVATE: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

# 11 OPEN RAN MARKET, BY NETWORK



11.1 INTRODUCTION

11.1.1 NETWORK: OPEN RAN MARKET DRIVERS

FIGURE 34 GREENFIELD SEGMENT TO GROW AT HIGHER CAGR DURING FORECAST PERIOD

TABLE 56 OPEN RAN MARKET, BY NETWORK, 2016–2021 (USD MILLION) TABLE 57 OPEN RAN MARKET, BY NETWORK, 2022–2027 (USD MILLION) 11.2 GREENFIELD

11.2.1 LOW-CAPACITY NETWORK TO DRIVE MARKET

TABLE 58 GREENFIELD: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION)

TABLE 59 GREENFIELD: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

11.3 BROWNFIELD

11.3.1 TO IMPROVE OR ADD NEW FEATURES TO EXISTING CLOUD NETWORK TABLE 60 BROWNFIELD: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION)

TABLE 61 BROWNFIELD: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION)

# 12 OPEN RAN MARKET, BY REGION

12.1 INTRODUCTION

TABLE 62 OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION) TABLE 63 OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION) 12.2 NORTH AMERICA

12.2.1 NORTH AMERICA: PESTLE ANALYSIS

12.2.2 NORTH AMERICA: RECESSION IMPACT

FIGURE 35 NORTH AMERICA: MARKET SNAPSHOT

TABLE 64 NORTH AMERICA: OPEN RAN MARKET, BY COMPONENT, 2016–2021 (USD MILLION)

TABLE 65 NORTH AMERICA: OPEN RAN MARKET, BY COMPONENT, 2022–2027 (USD MILLION)

TABLE 66 NORTH AMERICA: OPEN RAN MARKET, BY SERVICE, 2016–2021 (USD MILLION)

TABLE 67 NORTH AMERICA: OPEN RAN MARKET, BY SERVICE, 2022–2027 (USD MILLION)

TABLE 68 NORTH AMERICA: OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION)



TABLE 69 NORTH AMERICA: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION)

TABLE 70 NORTH AMERICA: OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD MILLION)

TABLE 71 NORTH AMERICA: OPEN RAN MARKET, BY FREQUENCY, 2022–2027 (USD MILLION)

TABLE 72 NORTH AMERICA: OPEN RAN MARKET, BY RADIO INTERFACE, 2016–2021 (USD MILLION)

TABLE 73 NORTH AMERICA: OPEN RAN MARKET, BY RADIO INTERFACE, 2022–2027 (USD MILLION)

TABLE 74 NORTH AMERICA: OPEN RAN MARKET, BY ACCESS, 2016–2021 (USD MILLION)

TABLE 75 NORTH AMERICA: OPEN RAN MARKET, BY ACCESS, 2022–2027 (USD MILLION)

TABLE 76 NORTH AMERICA: OPEN RAN MARKET, BY NETWORK, 2016–2021 (USD MILLION)

TABLE 77 NORTH AMERICA: OPEN RAN MARKET, BY NETWORK, 2022–2027 (USD MILLION)

TABLE 78 NORTH AMERICA: OPEN RAN MARKET, BY COUNTRY, 2016–2021 (USD MILLION)

TABLE 79 NORTH AMERICA: OPEN RAN MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

12.2.3 US

12.2.3.1 Major US operators part of Open RAN Policy Coalition Group TABLE 80 US: OPEN RAN MARKET, BY COMPONENT, 2016–2021 (USD MILLION) TABLE 81 US: OPEN RAN MARKET, BY COMPONENT, 2022–2027 (USD MILLION) TABLE 82 US: OPEN RAN MARKET, BY SERVICE, 2016–2021 (USD MILLION) TABLE 83 US: OPEN RAN MARKET, BY SERVICE, 2022–2027 (USD MILLION) TABLE 84 US: OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION) TABLE 85 US: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION) TABLE 85 US: OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD MILLION) TABLE 86 US: OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD MILLION) TABLE 87 US: OPEN RAN MARKET, BY FREQUENCY, 2022–2027 (USD MILLION) TABLE 88 US: OPEN RAN MARKET, BY FREQUENCY, 2022–2027 (USD MILLION) MILLION)

TABLE 89 US: OPEN RAN MARKET, BY RADIO INTERFACE, 2022–2027 (USD MILLION)

TABLE 90 US: OPEN RAN MARKET, BY ACCESS, 2016–2021 (USD MILLION) TABLE 91 US: OPEN RAN MARKET, BY ACCESS, 2022–2027 (USD MILLION) TABLE 92 US: OPEN RAN MARKET, BY NETWORK, 2016–2021 (USD MILLION)



TABLE 93 US: OPEN RAN MARKET, BY NETWORK, 2022–2027 (USD MILLION) 12.2.4 CANADA

12.2.4.1 Developments in 5G Open RAN to drive market

TABLE 94 CANADA: OPEN RAN MARKET, BY COMPONENT, 2016–2021 (USD MILLION)

TABLE 95 CANADA: OPEN RAN MARKET, BY COMPONENT, 2022–2027 (USD MILLION)

TABLE 96 CANADA: OPEN RAN MARKET, BY SERVICE, 2016–2021 (USD MILLION) TABLE 97 CANADA: OPEN RAN MARKET, BY SERVICE, 2022–2027 (USD MILLION) TABLE 98 CANADA: OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION) TABLE 99 CANADA: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION) TABLE 100 CANADA: OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD MILLION)

TABLE 101 CANADA: OPEN RAN MARKET, BY FREQUENCY, 2022–2027 (USD MILLION)

TABLE 102 CANADA: OPEN RAN MARKET, BY RADIO INTERFACE, 2016–2021 (USD MILLION)

TABLE 103 CANADA: OPEN RAN MARKET, BY RADIO INTERFACE, 2022–2027 (USD MILLION)

TABLE 104 CANADA: OPEN RAN MARKET, BY ACCESS, 2016–2021 (USD MILLION) TABLE 105 CANADA: OPEN RAN MARKET, BY ACCESS, 2022–2027 (USD MILLION) TABLE 106 CANADA: OPEN RAN MARKET, BY NETWORK, 2016–2021 (USD MILLION)

TABLE 107 CANADA: OPEN RAN MARKET, BY NETWORK, 2022–2027 (USD MILLION)

12.3 EUROPE

12.3.1 EUROPE: PESTLE ANALYSIS

12.3.2 EUROPE: RECESSION IMPACT

TABLE 108 EUROPE: OPEN RAN MARKET, BY COMPONENT, 2016–2021 (USD MILLION)

TABLE 109 EUROPE: OPEN RAN MARKET, BY COMPONENT, 2022–2027 (USD MILLION)

TABLE 110 EUROPE: OPEN RAN MARKET, BY SERVICE, 2016–2021 (USD MILLION)

TABLE 111 EUROPE: OPEN RAN MARKET, BY SERVICE, 2022–2027 (USD MILLION)

TABLE 112 EUROPE: OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION) TABLE 113 EUROPE: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION) TABLE 114 EUROPE: OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD



MILLION)

TABLE 115 EUROPE: OPEN RAN MARKET, BY FREQUENCY, 2022–2027 (USD MILLION)

TABLE 116 EUROPE: OPEN RAN MARKET, BY RADIO INTERFACE, 2016–2021 (USD MILLION)

TABLE 117 EUROPE: OPEN RAN MARKET, BY RADIO INTERFACE, 2022–2027 (USD MILLION)

TABLE 118 EUROPE: OPEN RAN MARKET, BY ACCESS, 2016–2021 (USD MILLION) TABLE 119 EUROPE: OPEN RAN MARKET, BY ACCESS, 2022–2027 (USD MILLION) TABLE 120 EUROPE: OPEN RAN MARKET, BY NETWORK, 2016–2021 (USD MILLION)

TABLE 121 EUROPE: OPEN RAN MARKET, BY NETWORK, 2022–2027 (USD MILLION)

TABLE 122 EUROPE: OPEN RAN MARKET, BY COUNTRY, 2016–2021 (USD MILLION)

TABLE 123 EUROPE: OPEN RAN MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

12.3.3 UK

12.3.3.1 UK Open RAN principles to be foundation of future government investments TABLE 124 UK: OPEN RAN MARKET, BY COMPONENT, 2016–2021 (USD MILLION) TABLE 125 UK: OPEN RAN MARKET, BY COMPONENT, 2022–2027 (USD MILLION) TABLE 126 UK: OPEN RAN MARKET, BY SERVICE, 2016–2021 (USD MILLION) TABLE 127 UK: OPEN RAN MARKET, BY SERVICE, 2022–2027 (USD MILLION) TABLE 128 UK: OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION) TABLE 129 UK: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION) TABLE 129 UK: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION) TABLE 130 UK: OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD MILLION) TABLE 131 UK: OPEN RAN MARKET, BY FREQUENCY, 2022–2027 (USD MILLION) TABLE 132 UK: OPEN RAN MARKET, BY RADIO INTERFACE, 2016–2021 (USD MILLION)

TABLE 133 UK: OPEN RAN MARKET, BY RADIO INTERFACE, 2022–2027 (USD MILLION)

TABLE 134 UK: OPEN RAN MARKET, BY ACCESS, 2016–2021 (USD MILLION) TABLE 135 UK: OPEN RAN MARKET, BY ACCESS, 2022–2027 (USD MILLION) TABLE 136 UK: OPEN RAN MARKET, BY NETWORK, 2016–2021 (USD MILLION) TABLE 137 UK: OPEN RAN MARKET, BY NETWORK, 2022–2027 (USD MILLION) 12.3.4 GERMANY

12.3.4.1 Government funding to progress deployment of Open RAN network 12.3.5 FRANCE

12.3.5.1 First Open RAN Integration Center in France



12.3.6 ITALY

12.3.6.1 Open RAN deployment program to innovate 4G and 5G radio access networks

12.3.7 SPAIN

12.3.7.1 Major operators coming together to conduct Open RAN trials in Spain 12.3.8 NORDIC REGION

12.3.8.1 Increasing involvement of major players to drive Open RAN market 12.3.9 REST OF EUROPE

12.4 ASIA PACIFIC

12.4.1 ASIA PACIFIC: PESTLE ANALYSIS

12.4.2 ASIA PACIFIC: RECESSION IMPACT

FIGURE 36 ASIA PACIFIC: MARKET SNAPSHOT

TABLE 138 ASIA PACIFIC: OPEN RAN MARKET, BY COMPONENT, 2016–2021 (USD MILLION)

TABLE 139 ASIA PACIFIC: OPEN RAN MARKET, BY COMPONENT, 2022–2027 (USD MILLION)

TABLE 140 ASIA PACIFIC: OPEN RAN MARKET, BY SERVICE, 2016–2021 (USD MILLION)

TABLE 141 ASIA PACIFIC: OPEN RAN MARKET, BY SERVICE, 2022–2027 (USD MILLION)

TABLE 142 ASIA PACIFIC: OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION)

TABLE 143 ASIA PACIFIC: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION)

TABLE 144 ASIA PACIFIC: OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD MILLION)

TABLE 145 ASIA PACIFIC: OPEN RAN MARKET, BY FREQUENCY, 2022–2027 (USD MILLION)

TABLE 146 ASIA PACIFIC: OPEN RAN MARKET, BY RADIO INTERFACE, 2016–2021 (USD MILLION)

TABLE 147 ASIA PACIFIC: OPEN RAN MARKET, BY RADIO INTERFACE, 2022–2027 (USD MILLION)

TABLE 148 ASIA PACIFIC: OPEN RAN MARKET, BY ACCESS, 2016–2021 (USD MILLION)

TABLE 149 ASIA PACIFIC: OPEN RAN MARKET, BY ACCESS, 2022–2027 (USD MILLION)

TABLE 150 ASIA PACIFIC: OPEN RAN MARKET, BY NETWORK, 2016–2021 (USD MILLION)

TABLE 151 ASIA PACIFIC: OPEN RAN MARKET, BY NETWORK, 2022–2027 (USD



MILLION)

TABLE 152 ASIA PACIFIC: OPEN RAN MARKET, BY COUNTRY, 2016–2021 (USD MILLION)

TABLE 153 ASIA PACIFIC: OPEN RAN MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

12.4.3 CHINA

12.4.3.1 Economic and political tensions between US and China to spill over into technology sector

TABLE 154 CHINA: OPEN RAN MARKET, BY COMPONENT, 2016–2021 (USD MILLION)

TABLE 155 CHINA: OPEN RAN MARKET, BY COMPONENT, 2022–2027 (USD MILLION)

TABLE 156 CHINA: OPEN RAN MARKET, BY SERVICE, 2016–2021 (USD MILLION) TABLE 157 CHINA: OPEN RAN MARKET, BY SERVICE, 2022–2027 (USD MILLION) TABLE 158 CHINA: OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION) TABLE 159 CHINA: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION) TABLE 160 CHINA: OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD MILLION)

TABLE 161 CHINA: OPEN RAN MARKET, BY FREQUENCY, 2022–2027 (USD MILLION)

TABLE 162 CHINA: OPEN RAN MARKET, BY RADIO INTERFACE, 2016–2021 (USD MILLION)

TABLE 163 CHINA: OPEN RAN MARKET, BY RADIO INTERFACE, 2022–2027 (USD MILLION)

TABLE 164 CHINA: OPEN RAN MARKET, BY ACCESS, 2016–2021 (USD MILLION) TABLE 165 CHINA: OPEN RAN MARKET, BY ACCESS, 2022–2027 (USD MILLION) TABLE 166 CHINA: OPEN RAN MARKET, BY NETWORK, 2016–2021 (USD MILLION) TABLE 167 CHINA: OPEN RAN MARKET, BY NETWORK, 2022–2027 (USD MILLION)

12.4.4 INDIA

12.4.4.1 India to witness opportunities for Open RAN in coming years 12.4.5 JAPAN

12.4.5.1 Country to witness Open RAN developments by telecom giants 12.4.6 AUSTRALIA AND NEW ZEALAND

12.4.6.1 NEC Australia to deploy Open RAN technologies

12.4.7 SOUTHEAST ASIA

12.4.7.1 USAID launched Asia Open RAN Academy in Southeast Asia

12.4.8 REST OF ASIA PACIFIC

12.5 MIDDLE EAST & AFRICA

12.5.1 MIDDLE EAST & AFRICA: PESTLE ANALYSIS



12.5.2 MIDDLE EAST & AFRICA: RECESSION IMPACT TABLE 168 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY COMPONENT, 2016-2021 (USD MILLION) TABLE 169 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY COMPONENT, 2022–2027 (USD MILLION) TABLE 170 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY SERVICE, 2016-2021 (USD MILLION) TABLE 171 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY SERVICE, 2022–2027 (USD MILLION) TABLE 172 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION) TABLE 173 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION) TABLE 174 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD MILLION) TABLE 175 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY FREQUENCY, 2022-2027 (USD MILLION) TABLE 176 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY RADIO INTERFACE, 2016–2021 (USD MILLION) TABLE 177 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY RADIO INTERFACE, 2022-2027 (USD MILLION) TABLE 178 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY ACCESS, 2016-2021 (USD MILLION) TABLE 179 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY ACCESS, 2022–2027 (USD MILLION) TABLE 180 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY NETWORK, 2016-2021 (USD MILLION) TABLE 181 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY NETWORK, 2022–2027 (USD MILLION) TABLE 182 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY REGION, 2016–2021 (USD MILLION) TABLE 183 MIDDLE EAST & AFRICA: OPEN RAN MARKET, BY REGION, 2022–2027 (USD MILLION) 12.5.3 MIDDLE EAST 12.5.3.1 Establishment of first Open RAN centralized test lab in region TABLE 184 MIDDLE EAST: OPEN RAN MARKET, BY COUNTRY, 2016–2021 (USD MILLION) TABLE 185 MIDDLE EAST: OPEN RAN MARKET, BY COUNTRY, 2022–2027 (USD

MILLION)



12.5.3.1.1 KSA

TABLE 186 KSA: OPEN RAN MARKET, BY COMPONENT, 2016–2021 (USD MILLION)

TABLE 187 KSA: OPEN RAN MARKET, BY COMPONENT, 2022–2027 (USD MILLION)

TABLE 188 KSA: OPEN RAN MARKET, BY SERVICE, 2016–2021 (USD MILLION) TABLE 189 KSA: OPEN RAN MARKET, BY SERVICE, 2022–2027 (USD MILLION) TABLE 190 KSA: OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION) TABLE 191 KSA: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION) TABLE 192 KSA: OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD MILLION) TABLE 193 KSA: OPEN RAN MARKET, BY FREQUENCY, 2022–2027 (USD MILLION) TABLE 194 KSA: OPEN RAN MARKET, BY RADIO INTERFACE, 2016–2021 (USD MILLION) MILLION)

TABLE 195 KSA: OPEN RAN MARKET, BY RADIO INTERFACE, 2022–2027 (USD MILLION)

TABLE 196 KSA: OPEN RAN MARKET, BY ACCESS, 2016–2021 (USD MILLION) TABLE 197 KSA: OPEN RAN MARKET, BY ACCESS, 2022–2027 (USD MILLION) TABLE 198 KSA: OPEN RAN MARKET, BY NETWORK, 2016–2021 (USD MILLION) TABLE 199 KSA: OPEN RAN MARKET, BY NETWORK, 2022–2027 (USD MILLION)

12.5.3.1.2 UAE

12.5.3.1.3 Rest of Middle East

12.5.4 AFRICA

12.5.4.1 Increase in Open RAN adoption to enhance connectivity

TABLE 200 AFRICA: OPEN RAN MARKET, BY COUNTRY, 2016–2021 (USD MILLION)

TABLE 201 AFRICA: OPEN RAN MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

12.5.4.1.1 South Africa

12.5.4.1.2 Egypt

12.5.4.1.3 Nigeria

12.5.4.1.4 Rest of Africa

12.6 LATIN AMERICA

12.6.1 LATIN AMERICA: PESTLE ANALYSIS

12.6.2 LATIN AMERICA: RECESSION IMPACT

TABLE 202 LATIN AMERICA: OPEN RAN MARKET, BY COMPONENT, 2016–2021 (USD MILLION)

TABLE 203 LATIN AMERICA: OPEN RAN MARKET, BY COMPONENT, 2022–2027 (USD MILLION)

TABLE 204 LATIN AMERICA: OPEN RAN MARKET, BY SERVICE, 2016–2021 (USD



MILLION)

TABLE 205 LATIN AMERICA: OPEN RAN MARKET, BY SERVICE, 2022–2027 (USD MILLION)

TABLE 206 LATIN AMERICA: OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION)

TABLE 207 LATIN AMERICA: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION)

TABLE 208 LATIN AMERICA: OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD MILLION)

TABLE 209 LATIN AMERICA: OPEN RAN MARKET, BY FREQUENCY, 2022–2027 (USD MILLION)

TABLE 210 LATIN AMERICA: OPEN RAN MARKET, BY RADIO INTERFACE, 2016–2021 (USD MILLION)

TABLE 211 LATIN AMERICA: OPEN RAN MARKET, BY RADIO INTERFACE, 2022–2027 (USD MILLION)

TABLE 212 LATIN AMERICA: OPEN RAN MARKET, BY ACCESS, 2016–2021 (USD MILLION)

TABLE 213 LATIN AMERICA: OPEN RAN MARKET, BY ACCESS, 2022–2027 (USD MILLION)

TABLE 214 LATIN AMERICA: OPEN RAN MARKET, BY NETWORK, 2016–2021 (USD MILLION)

TABLE 215 LATIN AMERICA: OPEN RAN MARKET, BY NETWORK, 2022–2027 (USD MILLION)

TABLE 216 LATIN AMERICA: OPEN RAN MARKET, BY COUNTRY, 2016–2021 (USD MILLION)

TABLE 217 LATIN AMERICA: OPEN RAN MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

12.6.3 BRAZIL

12.6.3.1 Brazil opens program to support Open RAN development

TABLE 218 BRAZIL: OPEN RAN MARKET, BY COMPONENT, 2016–2021 (USD MILLION)

TABLE 219 BRAZIL: OPEN RAN MARKET, BY COMPONENT, 2022–2027 (USD MILLION)

TABLE 220 BRAZIL: OPEN RAN MARKET, BY SERVICE, 2016–2021 (USD MILLION) TABLE 221 BRAZIL: OPEN RAN MARKET, BY SERVICE, 2022–2027 (USD MILLION) TABLE 222 BRAZIL: OPEN RAN MARKET, BY TYPE, 2016–2021 (USD MILLION) TABLE 223 BRAZIL: OPEN RAN MARKET, BY TYPE, 2022–2027 (USD MILLION) TABLE 224 BRAZIL: OPEN RAN MARKET, BY FREQUENCY, 2016–2021 (USD MILLION)



TABLE 225 BRAZIL: OPEN RAN MARKET, BY FREQUENCY, 2022–2027 (USD MILLION)

TABLE 226 BRAZIL: OPEN RAN MARKET, BY RADIO INTERFACE, 2016–2021 (USD MILLION)

TABLE 227 BRAZIL: OPEN RAN MARKET, BY RADIO INTERFACE, 2022–2027 (USD MILLION)

TABLE 228 BRAZIL: OPEN RAN MARKET, BY ACCESS, 2016–2021 (USD MILLION) TABLE 229 BRAZIL: OPEN RAN MARKET, BY ACCESS, 2022–2027 (USD MILLION) TABLE 230 BRAZIL: OPEN RAN MARKET, BY NETWORK, 2016–2021 (USD MILLION)

TABLE 231 BRAZIL: OPEN RAN MARKET, BY NETWORK, 2022–2027 (USD MILLION)

12.6.4 MEXICO

12.6.4.1 Open RAN services to be commercially available in Mexico 12.6.5 REST OF LATIN AMERICA

# **13 COMPETITIVE LANDSCAPE**

**13.1 INTRODUCTION** 

13.2 STRATEGIES ADOPTED BY KEY PLAYERS

TABLE 232 OVERVIEW OF STRATEGIES ADOPTED BY KEY PLAYERS IN OPEN RAN MARKET

13.3 MARKET SHARE ANALYSIS OF TOP PLAYERS

TABLE 233 OPEN RAN MARKET: DEGREE OF COMPETITION

13.4 HISTORICAL REVENUE ANALYSIS

FIGURE 37 HISTORICAL REVENUE ANALYSIS OF LEADING PLAYERS, 2019–2021 (USD MILLION)

13.5 COMPETITIVE BENCHMARKING

TABLE 234 OPEN RAN MARKET: DETAILED LIST OF KEY STARTUPS/SMES TABLE 235 OPEN RAN MARKET: COMPETITIVE BENCHMARKING OF KEY STARTUPS/SMES

TABLE 236 OPEN RAN MARKET: COMPETITIVE BENCHMARKING OF MAJOR PLAYERS

13.6 COMPANY EVALUATION QUADRANT

13.6.1 STARS

13.6.2 EMERGING LEADERS

13.6.3 PERVASIVE PLAYERS

13.6.4 PARTICIPANTS

FIGURE 38 KEY OPEN RAN MARKET PLAYERS: COMPANY EVALUATION MATRIX,

Open Radio Access Network (Open RAN) Market by Component (Hardware, Software, Services), Type (Open RAN RU, Op...



2022

13.7 STARTUP/SME EVALUATION QUADRANT
13.7.1 PROGRESSIVE COMPANIES
13.7.2 RESPONSIVE COMPANIES
13.7.3 DYNAMIC COMPANIES
13.7.4 STARTING BLOCKS
FIGURE 39 STARTUP/SMES: MARKET EVALUATION MATRIX, 2022
13.8 COMPETITIVE SCENARIO
13.8.1 PRODUCT LAUNCHES
TABLE 237 PRODUCT LAUNCHES, 2020–2022
13.8.2 DEALS
TABLE 238 DEALS, 2020–2022

# **14 COMPANY PROFILES**

(Business overview, Products/Solutions/Services offered, Recent developments & MnM View)\* **14.1 MAJOR PLAYERS** 14.1.1 HUAWEI TABLE 239 HUAWEI: BUSINESS OVERVIEW FIGURE 40 HUAWEI: COMPANY SNAPSHOT TABLE 240 HUAWEI: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 241 HUAWEI: PRODUCT LAUNCHES **TABLE 242 HUAWEI: DEALS** 14.1.2 ERICSSON TABLE 243 ERICSSON: BUSINESS OVERVIEW FIGURE 41 ERICSSON: COMPANY SNAPSHOT TABLE 244 ERICSSON: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 245 ERICSSON: PRODUCT LAUNCHES AND ENHANCEMENTS **TABLE 246 ERICSSON: DEALS** 14.1.3 NOKIA TABLE 247 NOKIA: BUSINESS OVERVIEW FIGURE 42 NOKIA: COMPANY SNAPSHOT TABLE 248 NOKIA: PRODUCTS/SOLUTIONS/SERVICES OFFERED **TABLE 249 NOKIA: PRODUCT LAUNCHES TABLE 250 NOKIA: DEALS** 14.1.4 SAMSUNG TABLE 251 SAMSUNG: BUSINESS OVERVIEW FIGURE 43 SAMSUNG: COMPANY SNAPSHOT



TABLE 252 SAMSUNG: PRODUCTS/ SOLUTIONS/SERVICES OFFERED TABLE 253 SAMSUNG: PRODUCT LAUNCHES AND ENHANCEMENTS TABLE 254 SAMSUNG: DEALS

14.1.5 ZTE

TABLE 255 ZTE: BUSINESS OVERVIEW

FIGURE 44 ZTE: COMPANY SNAPSHOT

TABLE 256 ZTE: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 257 ZTE: PRODUCT LAUNCHES

TABLE 258 ZTE: DEALS

14.1.6 VMWARE

TABLE 259 VMWARE: BUSINESS OVERVIEW

FIGURE 45 VMWARE: COMPANY SNAPSHOT

TABLE 260 VMWARE: PRODUCT/SOLUTIONS/SERVICES OFFERED

TABLE 261 VMWARE: PRODUCT LAUNCHES

TABLE 262 VMWARE: DEALS

14.1.7 NEC CORPORATION

TABLE 263 NEC CORPORATION: BUSINESS OVERVIEW

FIGURE 46 NEC CORPORATION: COMPANY SNAPSHOT

TABLE 264 NEC CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 265 NEC CORPORATION: PRODUCT LAUNCHES AND ENHANCEMENTS TABLE 266 NEC CORPORATION: DEALS

14.1.8 HEWLETT PACKARD ENTERPRISE

TABLE 267 HEWLETT PACKARD ENTERPRISE: BUSINESS OVERVIEW

FIGURE 47 HEWLETT PACKARD ENTERPRISE: COMPANY SNAPSHOT

TABLE 268 HEWLETT PACKARD ENTERPRISE: PRODUCT/SOLUTIONS/SERVICES OFFERED

TABLE 269 HEWLETT PACKARD ENTERPRISE: PRODUCT LAUNCHES

TABLE 270 HEWLETT PACKARD ENTERPRISE: DEALS

14.1.9 AT&T

TABLE 271 AT&T: BUSINESS OVERVIEW

FIGURE 48 AT&T: COMPANY SNAPSHOT

TABLE 272 AT&T: SOLUTIONS OFFERED

TABLE 273 AT&T: PRODUCT LAUNCHES AND ENHANCEMENTS

TABLE 274 AT&T: DEALS

14.1.10 FUJITSU

TABLE 275 FUJITSU: BUSINESS OVERVIEW

FIGURE 49 FUJITSU: COMPANY SNAPSHOT

TABLE 276 FUJITSU: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 277 FUJITSU: DEALS



14.1.11 IBM TABLE 278 IBM: BUSINESS OVERVIEW FIGURE 50 IBM: COMPANY SNAPSHOT TABLE 279 IBM: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 280 IBM: PRODUCT LAUNCHES AND ENHANCEMENTS TABLE 281 IBM: DEALS 14.1.12 ORANGE TABLE 282 ORANGE: BUSINESS OVERVIEW FIGURE 51 ORANGE: COMPANY SNAPSHOT TABLE 283 ORANGE: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 284 ORANGE: PRODUCT LAUNCHES AND ENHANCEMENTS TABLE 285 ORANGE: DEALS 14.1.13 TIM 14.1.14 TELEFONICA 14.1.15 NXP SEMICONDUCTORS 14.1.16 ETISALAT 14.1.17 MOBILY 14.1.18 MAVENIR 14.1.19 COMMSCOPE 14.1.20 VIAVI SOLUTIONS 14.1.21 AMDOCS 14.1.22 RENESAS 14.1.23 MTN GROUP 14.1.24 ENTEL 14.1.25 COMBA TELECOM 14.1.26 KDDI 14.1.27 SINGTEL \*Details on Business overview, Products/Solutions/Services offered, Recent developments & MnM View might not be captured in case of unlisted companies. **14.2 STARTUPS/SMES** 14.2.1 XCOM LABS 14.2.2 DEEPSIG **14.2.3 AIRSPAN NETWORKS** 14.2.4 SIVERS SEMICONDUCTOR 14.2.5 PICOCOM 14.2.6 CELONA **14.2.7 LIME MICROSYSTEMS** 

- 14.2.8 VERANA NETWORKS
- 14.2.9 MICROAMP SOLUTIONS



#### **15 ADJACENT/RELATED MARKETS**

**15.1 INTRODUCTION** 

15.2 CLOUD-RADIO ACCESS NETWORK MARKET

15.2.1 MARKET OVERVIEW

15.2.2 CLOUD-RADIO ACCESS NETWORK MARKET, BY COMPONENT TABLE 286 CLOUD-RADIO ACCESS NETWORK MARKET, BY COMPONENT, 2016–2019 (USD MILLION)

TABLE 287 CLOUD-RADIO ACCESS NETWORK MARKET, BY COMPONENT, 2019–2025 (USD MILLION)

15.2.2.1 Solutions

TABLE 288 SOLUTIONS: CLOUD-RADIO ACCESS NETWORK MARKET, BY REGION, 2016–2019 (USD MILLION)

TABLE 289 SOLUTIONS: CLOUD-RADIO ACCESS NETWORK MARKET, BY REGION, 2019–2025 (USD MILLION)

15.2.2.2 Services

TABLE 290 SERVICES: CLOUD-RADIO ACCESS NETWORK MARKET, BY REGION, 2016–2019 (USD MILLION)

TABLE 291 SERVICES: CLOUD-RADIO ACCESS NETWORK MARKET, BY REGION, 2019–2025 (USD MILLION)

TABLE 292 SERVICES: CLOUD-RADIO ACCESS NETWORK MARKET, BY TYPE, 2016–2019 (USD MILLION)

TABLE 293 SERVICES: CLOUD-RADIO ACCESS NETWORK MARKET, BY TYPE, 2019–2025 (USD MILLION)

15.2.3 CLOUD-RADIO ACCESS NETWORK MARKET, BY NETWORK TYPE TABLE 294 CLOUD-RADIO ACCESS NETWORK MARKET, BY NETWORK TYPE, 2016–2019 (USD MILLION)

TABLE 295 CLOUD-RADIO ACCESS NETWORK MARKET, BY NETWORK TYPE, 2019–2025 (USD MILLION)

15.2.4 CLOUD- RADIO ACCESS NETWORK MARKET, BY DEPLOYMENT TABLE 296 CLOUD-RADIO ACCESS NETWORK MARKET, BY DEPLOYMENT, 2016–2019 (USD MILLION)

TABLE 297 CLOUD-RADIO ACCESS NETWORK MARKET, BY DEPLOYMENT, 2019–2025 (USD MILLION)

15.2.5 CLOUD-RADIO ACCESS NETWORK MARKET, BY END USER TABLE 298 CLOUD-RADIO ACCESS NETWORK MARKET, BY END USER, 2016–2019 (USD MILLION)

TABLE 299 CLOUD-RADIO ACCESS NETWORK MARKET, BY END USER,



2019–2025 (USD MILLION)

15.3 MMWAVE 5G MARKET

15.3.1 MARKET DEFINITION

15.3.2 MARKET OVERVIEW

15.3.3 MMWAVE 5G MARKET, BY COMPONENT

TABLE 300 MMWAVE 5G MARKET, BY COMPONENT, 2018–2021 (USD MILLION) TABLE 301 MMWAVE 5G MARKET, BY COMPONENT, 2022–2027 (USD MILLION) TABLE 302 SERVICES: MMWAVE 5G MARKET, BY TYPE, 2018–2021 (USD MILLION)

TABLE 303 SERVICES: MMWAVE 5G MARKET, BY TYPE, 2022–2027 (USD MILLION)

15.3.4 MMWAVE 5G MARKET, BY USE CASE

TABLE 304 MMWAVE 5G MARKET, BY USE CASE, 2018–2021 (USD MILLION)TABLE 305 MMWAVE 5G MARKET, BY USE CASE, 2022–2027 (USD MILLION)15.3.5 MMWAVE 5G MARKET, BY BANDWIDTH

TABLE 306 MMWAVE 5G MARKET, BY BANDWIDTH, 2018–2021 (USD MILLION)TABLE 307 MMWAVE 5G MARKET, BY BANDWIDTH, 2022–2027 (USD MILLION)

15.3.6 MMWAVE 5G MARKET, BY APPLICATION TABLE 308 MMWAVE 5G MARKET, BY APPLICATION, 2018–2021 (USD MILLION) TABLE 309 MMWAVE 5G MARKET, BY APPLICATION, 2022–2027 (USD MILLION) 15.3.7 MMWAVE 5G MARKET, BY END USER

TABLE 310 MMWAVE 5G MARKET, BY END USER, 2018–2021 (USD MILLION) TABLE 311 MMWAVE 5G MARKET, BY END USER, 2022–2027 (USD MILLION) 15.3.8 MMWAVE 5G MARKET, BY REGION

TABLE 312 MMWAVE 5G MARKET, BY REGION, 2018–2021 (USD MILLION) TABLE 313 MMWAVE 5G MARKET, BY REGION, 2022–2027 (USD MILLION)

# **16 APPENDIX**

16.1 DISCUSSION GUIDE
16.2 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL
16.3 CUSTOMIZATION OPTIONS
16.4 RELATED REPORTS
16.5 AUTHOR DETAILS



#### I would like to order

Product name: Open Radio Access Network (Open RAN) Market by Component (Hardware, Software, Services), Type (Open RAN RU, Open vRAN), Frequency (Sub-6GHz, mmWave), Radio Interface, Access (Public, Private), Network and Region - Global Forecast to 2027

Product link: https://marketpublishers.com/r/O8A5CF4924B4EN.html

Price: US\$ 4,950.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: info@marketpublishers.com

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/O8A5CF4924B4EN.html</u>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

\*\*All fields are required

Custumer signature \_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>

To place an order via fax simply print this form, fill in the information below



and fax the completed form to +44 20 7900 3970