

Communication Test and Measurement Market by Offering (Hardware, Software, Services), Test Solution, Type of Test (Enterprise Test, Field Network Test, Lab & Manufacturing Test, Network Assurance Test), End User and Region - Global Forecast to 2029

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Abstracts

MarketsandMarkets forecasts that the communication test and measurement market size is projected to grow from USD 9.6 billion in 2024 to USD 14.9 billion by 2029, at a CAGR of 9.1% during the forecast period. Regulatory standards and industry specifications require communication equipment to meet certain performance criteria and regulatory compliance. This drives the need for specialized test and measurement solutions that can ensure adherence to these standards.

"By services, the managed services segment is expected to grow with the highest CAGR during the forecast period."

managed services offer organizations comprehensive solutions to assess, monitor, and enhance their communication strategies efficiently. These services provide access to specialized expertise and advanced technologies, enabling organizations to scale resources according to their needs while remaining cost-effective. By outsourcing these functions to managed service providers, organizations can focus on their core competencies while ensuring that communication initiatives are executed seamlessly. Managed services also mitigate risks associated with data security and compliance, thanks to stringent protocols and adherence to regulatory standards. This service relieves customers from wasting efforts, time, and money on the update, repair, and maintenance of test equipment and leverages the advanced communication test and measurement equipment available in the market at cheaper rates. The service providers and network equipment manufacturers are increasingly opting for managed services to



reduce their capital expenditure (CAPEX) and operational expenditure (OPEX).

"By services, the professional services segment is expected to hold the largest market size during the forecast period."

Professional services act as indispensable partners, offering tailored solutions to enhance organizational communication effectiveness. These services encompass a spectrum of offerings, including consultation, strategy development, tool implementation, data analysis, training, quality assurance, and continuous improvement. Professional service providers collaborate closely with organizations to assess communication needs, devise strategic plans, implement measurement tools, analyze data, and ensure adherence to best practices. These services assist network equipment manufacturers and service providers in testing new services, qualifying, and characterizing the network design, thereby significantly reducing the costs, complexity, and time-to-market. Professional services reduce the amount of time and effort taken by end users in developing optimal network infrastructure and enable them to focus on their core business objectives. This is the major reason for the adoption of professional services by industries.

"Asia Pacific is expected to grow with the highest CAGR during the forecast period."

The communication test and measurement market in the Asia Pacific region is undergoing significant advancements and has witnessed the advanced and dynamic adoption of new technologies and is expected to record the highest CAGR in the communication test and measurement market during the forecast period. Asia Pacific countries are considerably contributing to the growth of the communication test and measurement market. The growing demand for automated electronic products has made the Asia Pacific market very attractive, but the growth is fragmented, and many local players have specialized contributions making the communication test and measurement ecosystem in Asia Pacific competitive.

Breakdown of primaries

The study contains insights from various industry experts, from solution vendors to Tier 1 companies. The break-up of the primaries is as follows:

By Company: Tier 1–35%, Tier 2–40%, and Tier 3–25%

By Designation: C-Level Executives-35, Director Level-25%, and Others-40%



By Region: North America-30%, Europe-35%, APAC-25%, RoW-10%

The major players in the communication test and measurement market are Anritsu (Japan), Fortive (US), EXFO (Canada), Rohde & Schwarz (Germany), Emerson (US), VIAVI Solutions (US), Yokogawa (Japan), Spirent Communications (UK), Keysight Technologies (US), Huawei (China), Hammer (US), Calnex Solutions (UK), Luna Innovations (US), NetScout (US), Cisco (US), LitePoint (US), SysMech (England), VeEX (US), TEOCO Corporation (US), NetAlly (US), thinkRF (Canada), Kyrio (US), Fastech Telecommunications (India), Eagle Photonics (India), Verkotan (Finland). These players have adopted various growth strategies, such as partnerships, agreements and collaborations, new product launches, product enhancements, and acquisitions to expand their footprint in the communication test and measurement market.

Research Coverage

The report segments the global communication test and measurement market based on offering has been classified into hardware, software, and services (professional services (support services, consulting services, training services), managed services)). Based on test solution, the market is classified into two segments, wireline test solution and wireless test solution. Based on type of test, the market is classified by enterprise test, field network test, lab & manufacturing test, and network assurance test. Based on end user, the market is segmented into telecommunication service provider, network equipment manufacturer, mobile device manufacturer, and other end users. By region, the market has been segmented into North America, Europe, Asia Pacific, Middle East & Africa, and Latin America.

Key benefits of the report

The report would help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall communication test and measurement market and the subsegments. This report would help stakeholders understand the competitive landscape and gain insights to better position their businesses and plan suitable go-to-market strategies. The report would help stakeholders understand the pulse of the market and provide them with information on the key market drivers, restraints, challenges, and opportunities.



The report provides insights on the following pointers:

Analysis of key drivers (growing demand for network testing, rising demand for automated products and a growing need for communication test and measurement equipment, rapid technological advancements), restraints (price sensitivity, lack of standardization), opportunities (deployment of 5G networks, rising demand for bandwidth and traffic inspection, quantum communication testing), and challenges (matching up with continually changing technologies, security and privacy concerns).

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the communication test and measurement market.

Market Development: Comprehensive information about lucrative markets – the report analyses the communication test and measurement market across varied regions.

Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the communication test and measurement market.

Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players such as Anritsu (Japan), Fortive (US), EXFO (Canada), Rohde & Schwarz (Germany), Emerson (US), VIAVI Solutions (US), Yokogawa (Japan), Spirent Communications (UK), Keysight Technologies (US), Huawei (China), Hammer (US), Calnex Solutions (UK), Luna Innovations (US), NetScout (US), Cisco (US), LitePoint (US), SysMech (England), VeEX (US), TEOCO Corporation (US), NetAlly (US), thinkRF (Canada), Kyrio (US), Fastech Telecommunications (India), Eagle Photonics (India), Verkotan (Finland).





Contents

1 INTRODUCTION

1.1 STUDY OBJECTIVES 1.2 MARKET DEFINITION 1.2.1 INCLUSIONS & EXCLUSIONS 1.3 STUDY SCOPE 1.3.1 MARKETS COVERED FIGURE 1 COMMUNICATION TEST & MEASUREMENT MARKET SEGMENTATION **1.3.2 GEOGRAPHIC SCOPE** FIGURE 2 COMMUNICATION TEST & MEASUREMENT MARKET: GEOGRAPHIC SCOPE **1.3.3 YEARS CONSIDERED** FIGURE 3 YEARS OF STUDY CONSIDERED **1.4 CURRENCY CONSIDERED** TABLE 1 USD EXCHANGE RATES, 2021–2023 **1.5 STAKEHOLDERS 1.6 SUMMARY OF CHANGES 1.6.1 IMPACT OF RECESSION**

2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA

FIGURE 4 COMMUNICATION TEST & MEASUREMENT MARKET: RESEARCH DESIGN

2.1.1 SECONDARY DATA

2.1.1.1 Secondary sources

FIGURE 5 SECONDARY SOURCES

2.1.2 PRIMARY DATA

2.1.2.1 Primary interviews with experts

TABLE 2 PRIMARY SOURCES

2.1.2.2 Breakdown of primaries

FIGURE 6 BREAKDOWN OF PRIMARIES, BY COMPANY, DESIGNATION, AND REGION

2.1.2.3 Key data from primary sources

FIGURE 7 KEY DATA FROM PRIMARY SOURCES

2.1.2.4 Key industry insights

FIGURE 8 INSIGHTS FROM KEY INDUSTRY EXPERTS



2.2 MARKET SIZE ESTIMATION
FIGURE 9 APPROACH 1 (SUPPLY-SIDE): REVENUE OF OFFERINGS IN
COMMUNICATION TEST & MEASUREMENT MARKET
FIGURE 10 APPROACH 2 (DEMAND-SIDE): SPENDING AT EACH LEVEL IN
COMMUNICATION TEST & MEASUREMENT MARKET
FIGURE 11 COMMUNICATION TEST AND MEASUREMENT MARKET: TOP-DOWN
AND BOTTOM-UP APPROACHES
2.2.1 TOP-DOWN APPROACH
2.2.2 BOTTOM-UP APPROACH
2.3 DATA TRIANGULATION
FIGURE 12 DATA TRIANGULATION
TABLE 3 FACTOR ANALYSIS
2.4 RESEARCH ASSUMPTIONS
2.5 LIMITATIONS
2.6 RECESSION IMPACT ON MARKET

3 EXECUTIVE SUMMARY

FIGURE 13 COMMUNICATION TEST & MEASUREMENT MARKET, 2022–2029 (USD MILLION) FIGURE 14 COMMUNICATION TEST & MEASUREMENT MARKET: REGIONAL SHARE, 2024

4 PREMIUM INSIGHTS

4.1 BRIEF OVERVIEW OF COMMUNICATION TEST & MEASUREMENT MARKET
FIGURE 15 GROWING DEPLOYMENT OF 5G NETWORKS TO OPEN
OPPORTUNITIES IN COMMUNICATION TEST & MEASUREMENT MARKET
4.2 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY
OFFERING AND COUNTRY
FIGURE 16 HARDWARE AND US TO ACCOUNT FOR LARGER RESPECTIVE
SEGMENTAL SHARES OF MARKET IN NORTH AMERICA
4.3 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY
OFFERING & TOP THREE COUNTRIES
FIGURE 17 HARDWARE AND CHINA TO ACCOUNT FOR LARGER RESPECTIVE
SEGMENTAL SHARES OF MARKET IN ASIA PACIFIC
4.4 COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER
FIGURE 18 TELECOMMUNICATION SERVICE PROVIDERS TO ACCOUNT FOR
LARGEST MARKET SHARE



4.5 COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST FIGURE 19 FIELD NETWORK TEST ACCOUNT FOR RESPECTIVE LARGER MARKET SHARES

5 MARKET OVERVIEW AND INDUSTRY TRENDS

5.1 MARKET OVERVIEW

5.2 MARKET DYNAMICS

FIGURE 20 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES: COMMUNICATION TEST & MEASUREMENT MARKET

5.2.1 DRIVERS

5.2.1.1 Growth in demand for network testing

5.2.1.2 Rise in demand for automated products and need for communication test & measurement equipment

5.2.1.3 Rise in demand for bandwidth and traffic inspection

5.2.1.4 Rapid technological advancements

5.2.2 RESTRAINTS

5.2.2.1 Price sensitivity

5.2.2.2 Lack of standardization

5.2.3 OPPORTUNITIES

5.2.3.1 Deployment of 5G networks

5.2.3.2 Advent of quantum communication testing

5.2.4 CHALLENGES

5.2.4.1 Keeping pace with continually changing technologies

5.2.4.2 Security and privacy concerns

5.3 INDUSTRY TRENDS

5.3.1 BRIEF HISTORY OF COMMUNICATION TEST & MEASUREMENT MARKET FIGURE 21 BRIEF HISTORY OF COMMUNICATION TEST & MEASUREMENT

5.3.1.1 2000-2010

5.3.1.2 2010-2020

5.3.1.3 2020-Present

5.3.2 DISRUPTIONS IMPACTING BUYERS/CUSTOMERS IN MARKET FIGURE 22 DISRUPTION TRENDS IMPACTING BUYERS/CUSTOMERS IN COMMUNICATION TEST & MEASUREMENT MARKET

5.3.3 PRICING ANALYSIS

5.3.3.1 Average selling price trend of key players, by offering

FIGURE 23 AVERAGE SELLING PRICE TREND OF KEY PLAYERS, BY OFFERING (USD)

TABLE 4 AVERAGE SELLING PRICE OF KEY PLAYERS, BY OFFERING (USD)



5.3.3.2 Indicative pricing analysis of communication test & measurement, by offering TABLE 5 INDICATIVE PRICING ANALYSIS OF COMMUNICATION TEST & MEASUREMENT, BY OFFERING (USD)

5.4 VALUE CHAIN ANALYSIS

FIGURE 24 COMMUNICATION TEST & MEASUREMENT MARKET: VALUE CHAIN ANALYSIS

5.5 ECOSYSTEM

FIGURE 25 COMMUNICATION TEST & MEASUREMENT ECOSYSTEM

TABLE 6 COMMUNICATION TEST & MEASUREMENT MARKET: ECOSYSTEM 5.6 TECHNOLOGY ANALYSIS

5.6.1 KEY TECHNOLOGIES

5.6.1.1 Internet of Things (IoT)

- 5.6.1.2 5G
- 5.6.1.3 NLP

5.6.2 ADJACENT TECHNOLOGIES

5.6.2.1 Signal Processing

5.6.2.2 Embedded systems

5.6.3 COMPLEMENTARY TECHNOLOGIES

5.6.3.1 Edge Computing

5.6.3.2 Data Analytics

5.7 PATENT ANALYSIS

5.7.1 METHODOLOGY

FIGURE 26 LIST OF MAJOR PATENTS FOR COMMUNICATION TEST &

MEASUREMENT

TABLE 7 LIST OF MAJOR PATENTS

5.8 HS CODE: OSCILLOSCOPES AND OSCILLOGRAPHS (903020)

5.8.1 EXPORT SCENARIO

TABLE 8 EXPORT SCENARIO FOR HS CODE: 903020, BY COUNTRY, 2020–2022 (USD THOUSAND)

5.8.2 IMPORT SCENARIO

TABLE 9 IMPORT SCENARIO FOR HS CODE: 903020, BY COUNTRY, 2020–2022 (USD THOUSAND)

5.9 CASE STUDIES

5.9.1 TIER-1 US SERVICE PROVIDER DELIVERED HIGH-PERFORMANCE, RELIABLE IOT SERVICES OVER MOBILE NETWORK USING SPIRENT'S SOLUTION

5.9.2 VIAVI OTDR TESTING HELPED INTERLINK TELECOM IMPROVE EFFICIENCY OF FIBER MTTR

5.9.3 TIER 1 COMMUNICATIONS SERVICE PROVIDER MONITORED ITS HYBRID

ACCESS NETWORK WITH R&S INTRA

5.10 KEY CONFERENCES & EVENTS

TABLE 10 COMMUNICATION TEST & MEASUREMENT MARKET: DETAILED LIST

OF CONFERENCES & EVENTS, 2024

5.11 CURRENT AND EMERGING BUSINESS MODELS

5.11.1 TRADITIONAL MODEL

5.11.2 SUBSCRIPTION MODEL

5.11.3 TRADITIONAL SALES MODEL

5.11.4 MANAGED SERVICES MODEL

5.11.5 HYBRID MODEL

5.11.6 PAY-PER-USE MODEL

5.12 BEST PRACTICES IN COMMUNICATION TEST & MEASUREMENT MARKET 5.13 TOOLS, FRAMEWORKS, AND TECHNIQUES

FIGURE 27 COMMUNICATION TEST & MEASUREMENT TOOLS, FRAMEWORKS, AND TECHNIQUES

5.14 FUTURE LANDSCAPE OF COMMUNICATION TEST & MEASUREMENT MARKET

5.14.1 COMMUNICATION TEST & MEASUREMENT TECHNOLOGY ROADMAP TILL 2030

5.14.1.1 Short-term roadmap (2025-2026)

5.14.1.2 Mid-term roadmap (2026-2028)

5.14.1.3 Long-term roadmap (2028-2030)

5.15 REGULATORY LANDSCAPE

5.15.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 11 NORTH AMERICA: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 12 EUROPE: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 13 ASIA PACIFIC: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 14 MIDDLE EAST & AFRICA: LIST OF REGULATORY BODIES,

GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 15 LATIN AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

5.15.2 PERTINENT REGULATIONS

5.15.2.1 North America

5.15.2.1.1 US

5.15.2.1.2 Canada



5.15.2.2 Europe

5.15.2.3 Asia Pacific

5.15.2.3.1 South Korea

5.15.2.3.2 China

5.15.2.3.3 India

5.15.2.4 Middle East & Africa

5.15.2.4.1 UAE

5.15.2.4.2 KSA

5.15.2.5 Latin America

5.15.2.5.1 Brazil

5.15.2.5.2 Mexico

5.16 PORTER'S FIVE FORCES ANALYSIS

TABLE 16 COMMUNICATION TEST & MEASUREMENT MARKET: IMPACT OF PORTER'S FIVE FORCES

FIGURE 28 COMMUNICATION TEST & MEASUREMENT MARKET: PORTER'S FIVE FORCES MODEL

5.16.1 THREAT OF NEW ENTRANTS

5.16.2 THREAT OF SUBSTITUTES

5.16.3 BARGAINING POWER OF BUYERS

5.16.4 BARGAINING POWER OF SUPPLIERS

5.16.5 INTENSITY OF COMPETITIVE RIVALRY

5.17 KEY STAKEHOLDERS & BUYING CRITERIA

5.17.1 KEY STAKEHOLDERS IN BUYING PROCESS

FIGURE 29 INFLUENCE OF STAKEHOLDERS IN BUYING PROCESS FOR TOP THREE END-USE INDUSTRIES

TABLE 17 INFLUENCE OF STAKEHOLDERS IN BUYING PROCESS FOR TOP THREE END-USE INDUSTRIES

5.17.2 BUYING CRITERIA

FIGURE 30 KEY BUYING CRITERIA FOR TOP THREE END-USE INDUSTRIES TABLE 18 KEY BUYING CRITERIA FOR TOP THREE END-USE INDUSTRIES 5.18 INVESTMENT AND FUNDING SCENARIO

FIGURE 31 INVESTMENT AND FUNDING SCENARIO, 2019–2023 (USD MILLION)

6 COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING

6.1 INTRODUCTION

FIGURE 32 HARDWARE SEGMENT TO LEAD COMMUNICATION TEST & MEASUREMENT MARKET DURING FORECAST PERIOD TABLE 19 COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING,



2019–2023 (USD MILLION)

TABLE 20 COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2024–2029 (USD MILLION)

6.1.1 OFFERING: COMMUNICATION TEST & MEASUREMENT MARKET DRIVERS 6.2 HARDWARE

6.2.1 HARDWARE: FOUNDATION OF COMMUNICATION TEST & MEASUREMENT TECHNOLOGY LANDSCAPE

TABLE 21 COMMUNICATION TEST & MEASUREMENT HARDWARE MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 22 COMMUNICATION TEST & MEASUREMENT HARDWARE MARKET, BY REGION, 2024–2029 (USD MILLION)

6.3 SOFTWARE

6.3.1 SOFTWARE: INTEGRAL TO FRAMEWORK OF COMMUNICATION INFRASTRUCTURE

TABLE 23 COMMUNICATION TEST & MEASUREMENT SOFTWARE MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 24 COMMUNICATION TEST & MEASUREMENT SOFTWARE MARKET, BY REGION, 2024–2029 (USD MILLION)

6.4 SERVICES

6.4.1 RIGOROUS ASSESSMENT OF TECHNOLOGY KEY TO COMBATING EVOLVING THREATS

FIGURE 33 PROFESSIONAL SERVICES SEGMENT TO LEAD OVER MANAGED SERVICES DURING FORECAST PERIOD

TABLE 25 COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2019–2023 (USD MILLION)

TABLE 26 COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2024–2029 (USD MILLION)

TABLE 27 COMMUNICATION TEST & MEASUREMENT SERVICES MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 28 COMMUNICATION TEST & MEASUREMENT SERVICES MARKET, BY REGION, 2024–2029 (USD MILLION)

6.4.2 PROFESSIONAL SERVICES

FIGURE 34 SUPPORT SERVICES TO LEAD AMONG PROFESSIONAL SERVICES DURING FORECAST PERIOD

TABLE 29 COMMUNICATION TEST & MEASUREMENT MARKET, BY

PROFESSIONAL SERVICE, 2019–2023 (USD MILLION)

TABLE 30 COMMUNICATION TEST & MEASUREMENT MARKET, BY

PROFESSIONAL SERVICE, 2024–2029 (USD MILLION)

TABLE 31 COMMUNICATION TEST & MEASUREMENT PROFESSIONAL SERVICES



MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 32 COMMUNICATION TEST & MEASUREMENT PROFESSIONAL SERVICES MARKET, BY REGION, 2024–2029 (USD MILLION)

6.4.2.1 Support services

TABLE 33 COMMUNICATION TEST & MEASUREMENT SUPPORT SERVICES MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 34 COMMUNICATION TEST & MEASUREMENT SUPPORT SERVICES MARKET, BY REGION, 2024–2029 (USD MILLION)

6.4.2.2 Consulting services

TABLE 35 COMMUNICATION TEST & MEASUREMENT CONSULTING SERVICES MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 36 COMMUNICATION TEST & MEASUREMENT CONSULTING SERVICES MARKET, BY REGION, 2024–2029 (USD MILLION)

6.4.2.3 Training services

TABLE 37 COMMUNICATION TEST & MEASUREMENT TRAINING SERVICES MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 38 COMMUNICATION TEST & MEASUREMENT TRAINING SERVICES MARKET, BY REGION, 2024–2029 (USD MILLION)

6.4.3 MANAGED SERVICES

TABLE 39 COMMUNICATION TEST & MEASUREMENT MANAGED SERVICES MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 40 COMMUNICATION TEST & MEASUREMENT MANAGED SERVICES MARKET, BY REGION, 2024–2029 (USD MILLION)

7 COMMUNICATION TEST & MEASUREMENT, BY TEST SOLUTION

7.1 INTRODUCTION

FIGURE 35 WIRELINE TEST SOLUTIONS SEGMENT TO DOMINATE DURING FORECAST PERIOD

TABLE 41 COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2019–2023 (USD MILLION)

TABLE 42 COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2024–2029 (USD MILLION)

7.1.1 TEST SOLUTION: COMMUNICATION TEST & MEASUREMENT MARKET DRIVERS

7.2 WIRELESS TEST SOLUTIONS

7.2.1 NEED FOR QUALITY ASSURANCE OF WIRELESS TECHNOLOGIES, ESPECIALLY WITH COMPLIANCE TESTING AND NETWORK OPTIMIZATION TABLE 43 WIRELESS COMMUNICATION TEST SOLUTIONS MARKET, BY REGION,



2019–2023 (USD MILLION)

TABLE 44 WIRELESS COMMUNICATION TEST SOLUTIONS MARKET, BY REGION, 2024–2029 (USD MILLION)

7.3 WIRELINE TEST SOLUTIONS

7.3.1 NEED TO MAINTAIN, CERTIFY, AND SECURE ROBUST FUNCTIONALITY OF WIRED COMMUNICATION NETWORKS

TABLE 45 WIRELINE COMMUNICATION TEST SOLUTIONS MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 46 WIRELINE COMMUNICATION TEST SOLUTIONS MARKET, BY REGION, 2024–2029 (USD MILLION)

8 COMMUNICATION TEST & MEASUREMENT, BY TYPE OF TEST

8.1 INTRODUCTION

FIGURE 36 FIELD NETWORK TESTS TO LEAD DURING FORECAST PERIOD TABLE 47 COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2019–2023 (USD MILLION)

TABLE 48 COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2024–2029 (USD MILLION)

8.1.1 TYPE OF TEST: COMMUNICATION TEST & MEASUREMENT MARKET DRIVERS

8.2 ENTERPRISE TEST

8.2.1 ENSURING NETWORKS CAN HANDLE HEAVY TRAFFIC LOADS, SCALE TO MEET GROWING DEMANDS, AND COMPLY WITH INDUSTRY REGULATIONS TABLE 49 COMMUNICATION ENTERPRISE TEST MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 50 COMMUNICATION ENTERPRISE TEST MARKET, BY REGION,2024–2029 (USD MILLION)

8.3 FIELD NETWORK TEST

8.3.1 DEMAND FOR NETWORK RELIABILITY AND PERFORMANCE IN REAL-WORLD ENVIRONMENTS

TABLE 51 COMMUNICATION FIELD NETWORK TEST MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 52 COMMUNICATION FIELD NETWORK TEST MARKET, BY REGION,2024–2029 (USD MILLION)

8.4 LAB & MANUFACTURING TEST

8.4.1 GROWTH IN NEED FOR CONSISTENT ENHANCED QUALITY STANDARDS AND TECHNOLOGICAL INNOVATIONS

TABLE 53 COMMUNICATION LAB & MANUFACTURING TEST MARKET, BY



REGION, 2019–2023 (USD MILLION) TABLE 54 COMMUNICATION LAB & MANUFACTURING TEST MARKET, BY REGION, 2024–2029 (USD MILLION) 8.5 NETWORK ASSURANCE TEST 8.5.1 INCREASE IN NEED TO PROVIDE BETTER USER EXPERIENCE AND IMPROVE NETWORK PERFORMANCE TABLE 55 COMMUNICATION NETWORK ASSURANCE TEST MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 56 COMMUNICATION NETWORK ASSURANCE TEST MARKET, BY REGION, 2024–2029 (USD MILLION)

9 COMMUNICATION TEST & MEASUREMENT, BY END USER

9.1 INTRODUCTION

FIGURE 37 TELECOMMUNICATION SERVICE PROVIDER SEGMENT TO LARGELY LEAD DURING FORECAST PERIOD

TABLE 57 COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2019–2023 (USD MILLION)

TABLE 58 COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2024–2029 (USD MILLION)

9.1.1 END USER: COMMUNICATION TEST & MEASUREMENT MARKET DRIVERS 9.2 TELECOMMUNICATION SERVICE PROVIDERS

9.2.1 RELIANCE OF SERVICE PROVIDERS ON TEST & MEASUREMENT SOLUTIONS FOR OPTIMALLY PERFORMING NETWORKS THROUGHOUT THEIR LIFECYCLE

TABLE 59 COMMUNICATION TEST & MEASUREMENT MARKET FOR TELECOMMUNICATION SERVICE PROVIDERS, BY REGION, 2019–2023 (USD MILLION)

TABLE 60 COMMUNICATION TEST & MEASUREMENT MARKET FOR TELECOMMUNICATION SERVICE PROVIDERS, BY REGION, 2024–2029 (USD MILLION)

9.3 NETWORK EQUIPMENT MANUFACTURERS (NEM)

9.3.1 VERSATILITY IN COMPATIBILITY OF TEST & MEASUREMENT EQUIPMENT WITH MULTIPLE COMMUNICATION TECHNOLOGIES

TABLE 61 COMMUNICATION TEST & MEASUREMENT MARKET FOR NETWORK EQUIPMENT MANUFACTURERS, BY REGION, 2019–2023 (USD MILLION) TABLE 62 COMMUNICATION TEST & MEASUREMENT MARKET FOR NETWORK EQUIPMENT MANUFACTURERS, BY REGION, 2024–2029 (USD MILLION) 9.4 MOBILE DEVICE MANUFACTURERS



9.4.1 RISE IN NEED TO ENSURE GLOBAL STANDARDS FOR NEW PRODUCTS TABLE 63 COMMUNICATION TEST & MEASUREMENT MARKET FOR MOBILE DEVICE MANUFACTURERS, BY REGION, 2019–2023 (USD MILLION) TABLE 64 COMMUNICATION TEST & MEASUREMENT MARKET FOR MOBILE DEVICE MANUFACTURERS, BY REGION, 2024–2029 (USD MILLION) 9.5 OTHER END USERS

TABLE 65 COMMUNICATION TEST & MEASUREMENT MARKET FOR OTHER END USERS, BY REGION, 2019–2023 (USD MILLION)

TABLE 66 COMMUNICATION TEST & MEASUREMENT MARKET FOR OTHER END USERS, BY REGION, 2024–2029 (USD MILLION)

10 COMMUNICATION TEST & MEASUREMENT MARKET, BY REGION

10.1 INTRODUCTION

FIGURE 38 COMMUNICATION TEST & MEASUREMENT MARKET: REGIONAL SNAPSHOT, 2024

FIGURE 39 ASIA PACIFIC TO ACCOUNT FOR HIGHEST CAGR DURING FORECAST PERIOD

TABLE 67 COMMUNICATION TEST & MEASUREMENT MARKET, BY REGION, 2019–2023 (USD MILLION)

TABLE 68 COMMUNICATION TEST & MEASUREMENT MARKET, BY REGION, 2024–2029 (USD MILLION)

10.2 NORTH AMERICA

FIGURE 40 NORTH AMERICA: MARKET SNAPSHOT

10.2.1 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET DRIVERS

10.2.2 NORTH AMERICA: RECESSION IMPACT

TABLE 69 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2019–2023 (USD MILLION)

TABLE 70 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2024–2029 (USD MILLION)

TABLE 71 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2019–2023 (USD MILLION)

TABLE 72 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2024–2029 (USD MILLION)

TABLE 73 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2019–2023 (USD MILLION) TABLE 74 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2024–2029 (USD MILLION)



TABLE 75 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2019-2023 (USD MILLION) TABLE 76 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2024-2029 (USD MILLION) TABLE 77 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2019–2023 (USD MILLION) TABLE 78 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2024–2029 (USD MILLION) TABLE 79 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2019–2023 (USD MILLION) TABLE 80 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2024-2029 (USD MILLION) TABLE 81 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY COUNTRY, 2019–2023 (USD MILLION) TABLE 82 NORTH AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY COUNTRY, 2024–2029 (USD MILLION)

10.2.3 US

10.2.3.1 Prominent communication test & measurement players offering costeffective solutions

TABLE 83 US: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2019–2023 (USD MILLION)

TABLE 84 US: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2024–2029 (USD MILLION)

TABLE 85 US: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2019–2023 (USD MILLION)

TABLE 86 US: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2024–2029 (USD MILLION)

TABLE 87 US: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2019–2023 (USD MILLION)

TABLE 88 US: COMMUNICATION TEST & MEASUREMENT MARKET, BY

PROFESSIONAL SERVICE, 2024–2029 (USD MILLION)

TABLE 89 US: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2019–2023 (USD MILLION)

TABLE 90 US: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2024–2029 (USD MILLION)

TABLE 91 US: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2019–2023 (USD MILLION)

TABLE 92 US: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2024–2029 (USD MILLION)



TABLE 93 US: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2019–2023 (USD MILLION)

TABLE 94 US: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2024–2029 (USD MILLION)

10.2.4 CANADA

10.2.4.1 Increase in investments for better communication test & measurement solutions

10.3 EUROPE

10.3.1 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET DRIVERS 10.3.2 EUROPE: RECESSION IMPACT

TABLE 95 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2019–2023 (USD MILLION)

TABLE 96 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2024–2029 (USD MILLION)

TABLE 97 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2019–2023 (USD MILLION)

TABLE 98 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2024–2029 (USD MILLION)

TABLE 99 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2019–2023 (USD MILLION)

TABLE 100 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2024–2029 (USD MILLION)

TABLE 101 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2019–2023 (USD MILLION)

TABLE 102 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2024–2029 (USD MILLION)

TABLE 103 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2019–2023 (USD MILLION)

TABLE 104 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2024–2029 (USD MILLION)

TABLE 105 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2019–2023 (USD MILLION)

TABLE 106 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2024–2029 (USD MILLION)

TABLE 107 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY COUNTRY, 2019–2023 (USD MILLION)

TABLE 108 EUROPE: COMMUNICATION TEST & MEASUREMENT MARKET, BY COUNTRY, 2024–2029 (USD MILLION)

10.3.3 UK



10.3.3.1 Readiness in adopting new trends and global nature of telecommunications sector

TABLE 109 UK: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2019–2023 (USD MILLION)

TABLE 110 UK: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2024–2029 (USD MILLION)

TABLE 111 UK: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2019–2023 (USD MILLION)

TABLE 112 UK: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2024–2029 (USD MILLION)

TABLE 113 UK: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2019–2023 (USD MILLION)

TABLE 114 UK: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2024–2029 (USD MILLION)

TABLE 115 UK: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2019–2023 (USD MILLION)

TABLE 116 UK: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2024–2029 (USD MILLION)

TABLE 117 UK: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2019–2023 (USD MILLION)

TABLE 118 UK: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2024–2029 (USD MILLION)

TABLE 119 UK: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2019–2023 (USD MILLION)

TABLE 120 UK: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2024–2029 (USD MILLION)

10.3.4 GERMANY

10.3.4.1 Surge in initiatives for enhanced communication testing services TABLE 121 GERMANY: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2019–2023 (USD MILLION)

TABLE 122 GERMANY: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2024–2029 (USD MILLION)

TABLE 123 GERMANY: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2019–2023 (USD MILLION)

TABLE 124 GERMANY: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2024–2029 (USD MILLION)

TABLE 125 GERMANY: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2019–2023 (USD MILLION)

TABLE 126 GERMANY: COMMUNICATION TEST & MEASUREMENT MARKET, BY



PROFESSIONAL SERVICE, 2024–2029 (USD MILLION)

TABLE 127 GERMANY: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2019–2023 (USD MILLION)

TABLE 128 GERMANY: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2024–2029 (USD MILLION)

TABLE 129 GERMANY: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2019–2023 (USD MILLION)

TABLE 130 GERMANY: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2024–2029 (USD MILLION)

TABLE 131 GERMANY: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2019–2023 (USD MILLION)

TABLE 132 GERMANY: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2024–2029 (USD MILLION)

10.3.5 ITALY

10.3.5.1 Rise in demand for 5G, preference for renting test equipment, and adoption of cloud-based solutions

TABLE 133 ITALY: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2019–2023 (USD MILLION)

TABLE 134 ITALY: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2024–2029 (USD MILLION)

TABLE 135 ITALY: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2019–2023 (USD MILLION)

TABLE 136 ITALY: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2024–2029 (USD MILLION)

TABLE 137 ITALY: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2019–2023 (USD MILLION)

TABLE 138 ITALY: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2024–2029 (USD MILLION)

TABLE 139 ITALY: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2019–2023 (USD MILLION)

TABLE 140 ITALY: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2024–2029 (USD MILLION)

TABLE 141 ITALY: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2019–2023 (USD MILLION)

TABLE 142 ITALY: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2024–2029 (USD MILLION)

TABLE 143 ITALY: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2019–2023 (USD MILLION)

TABLE 144 ITALY: COMMUNICATION TEST & MEASUREMENT MARKET, BY END



USER, 2024–2029 (USD MILLION)

10.3.6 FRANCE

10.3.6.1 Projected increase in adoption of telecom service assurance testing solutions for smart city projects

10.3.7 REST OF EUROPE

10.4 ASIA PACIFIC

FIGURE 41 ASIA PACIFIC: MARKET SNAPSHOT

10.4.1 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET DRIVERS

10.4.2 ASIA PACIFIC: RECESSION IMPACT

TABLE 145 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2019–2023 (USD MILLION)

TABLE 146 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2024–2029 (USD MILLION)

TABLE 147 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2019–2023 (USD MILLION)

TABLE 148 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2024–2029 (USD MILLION)

TABLE 149 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2019–2023 (USD MILLION)

TABLE 150 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2024–2029 (USD MILLION)

TABLE 151 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2019–2023 (USD MILLION)

TABLE 152 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2024–2029 (USD MILLION)

TABLE 153 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2019–2023 (USD MILLION)

TABLE 154 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2024–2029 (USD MILLION)

TABLE 155 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2019–2023 (USD MILLION)

TABLE 156 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2024–2029 (USD MILLION)

TABLE 157 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY COUNTRY, 2019–2023 (USD MILLION)

TABLE 158 ASIA PACIFIC: COMMUNICATION TEST & MEASUREMENT MARKET, BY COUNTRY, 2024–2029 (USD MILLION)

10.4.3 CHINA



10.4.3.1 Increase in focus on advanced communication testing solutions TABLE 159 CHINA: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2019–2023 (USD MILLION)

TABLE 160 CHINA: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2024–2029 (USD MILLION)

TABLE 161 CHINA: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2019–2023 (USD MILLION)

TABLE 162 CHINA: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2024–2029 (USD MILLION)

TABLE 163 CHINA: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2019–2023 (USD MILLION)

TABLE 164 CHINA: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2024–2029 (USD MILLION)

TABLE 165 CHINA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2019–2023 (USD MILLION)

TABLE 166 CHINA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2024–2029 (USD MILLION)

TABLE 167 CHINA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2019–2023 (USD MILLION)

TABLE 168 CHINA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2024–2029 (USD MILLION)

TABLE 169 CHINA: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2019–2023 (USD MILLION)

TABLE 170 CHINA: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2024–2029 (USD MILLION)

10.4.4 JAPAN

10.4.4.1 Deployment of advanced technologies and

10.4.5 INDIA

10.4.5.1 Increase in government initiatives to improve network infrastructure 10.4.6 REST OF ASIA PACIFIC

10.5 MIDDLE EAST & AFRICA

10.5.1 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET DRIVERS

10.5.2 MIDDLE EAST & AFRICA: RECESSION IMPACT

TABLE 171 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2019–2023 (USD MILLION)

TABLE 172 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2024–2029 (USD MILLION)

TABLE 173 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT



MARKET, BY SERVICE, 2019–2023 (USD MILLION)

TABLE 174 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2024–2029 (USD MILLION)

TABLE 175 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2019–2023 (USD MILLION)

TABLE 176 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2024–2029 (USD MILLION)

TABLE 177 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2019–2023 (USD MILLION)

TABLE 178 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2024–2029 (USD MILLION)

TABLE 179 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2019–2023 (USD MILLION)

TABLE 180 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2024–2029 (USD MILLION)

TABLE 181 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2019–2023 (USD MILLION)

TABLE 182 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2024–2029 (USD MILLION)

TABLE 183 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY COUNTRY/REGION, 2019–2023 (USD MILLION)

TABLE 184 MIDDLE EAST & AFRICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY COUNTRY/REGION, 2024–2029 (USD MILLION)

10.5.3 GCC COUNTRIES

10.5.3.1 UAE

10.5.3.1.1 Strong communication infrastructure warranted by high internet penetration rate

10.5.3.2 KSA

10.5.3.2.1 Rapid expansion in ICT development and network infrastructure 10.5.3.3 Rest of GCC

10.5.4 SOUTH AFRICA

10.5.4.1 Presence of significant players and rise in 5G adoption

10.5.5 REST OF MIDDLE EAST & AFRICA

10.6 LATIN AMERICA

10.6.1 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET DRIVERS

10.6.2 LATIN AMERICA: RECESSION IMPACT

TABLE 185 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2019–2023 (USD MILLION)



TABLE 186 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY OFFERING, 2024–2029 (USD MILLION)

TABLE 187 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2019–2023 (USD MILLION)

TABLE 188 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY SERVICE, 2024–2029 (USD MILLION)

TABLE 189 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2019–2023 (USD MILLION)

TABLE 190 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY PROFESSIONAL SERVICE, 2024–2029 (USD MILLION)

TABLE 191 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2019–2023 (USD MILLION)

TABLE 192 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TEST SOLUTION, 2024–2029 (USD MILLION)

TABLE 193 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2019–2023 (USD MILLION)

TABLE 194 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY TYPE OF TEST, 2024–2029 (USD MILLION)

TABLE 195 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2019–2023 (USD MILLION)

TABLE 196 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY END USER, 2024–2029 (USD MILLION)

TABLE 197 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY COUNTRY, 2019–2023 (USD MILLION)

TABLE 198 LATIN AMERICA: COMMUNICATION TEST & MEASUREMENT MARKET, BY COUNTRY, 2024–2029 (USD MILLION)

10.6.3 BRAZIL

10.6.3.1 Government investment in growing telecom sector

10.6.4 MEXICO

10.6.4.1 Government Initiatives and testing tools for integrating new communication technologies

10.6.5 REST OF LATIN AMERICA

11 COMPETITIVE LANDSCAPE

11.1 OVERVIEW

11.2 KEY PLAYER STRATEGIES/RIGHT TO WIN TABLE 199 OVERVIEW OF STRATEGIES DEPLOYED BY KEY COMMUNICATION TEST & MEASUREMENT VENDORS

Communication Test and Measurement Market by Offering (Hardware, Software, Services), Test Solution, Type of T...



11.3 REVENUE ANALYSIS

FIGURE 42 FIVE-YEAR REVENUE ANALYSIS OF KEY PLAYERS (USD MILLION) 11.4 MARKET SHARE ANALYSIS

TABLE 200 COMMUNICATION TEST & MEASUREMENT MARKET: DEGREE OF COMPETITION

FIGURE 43 COMMUNICATION TEST & MEASUREMENT MARKET: MARKET SHARE ANALYSIS, 2023

11.5 MARKET RANKING ANALYSIS

FIGURE 44 MARKET RANKING ANALYSIS OF TOP FIVE PLAYERS

11.6 COMPANY EVALUATION MATRIX: KEY PLAYERS

11.6.1 STARS

11.6.2 EMERGING LEADERS

11.6.3 PERVASIVE PLAYERS

11.6.4 PARTICIPANTS

FIGURE 45 COMMUNICATION TEST & MEASUREMENT MARKET: COMPANY EVALUATION MATRIX (KEY PLAYERS), 2023

11.6.5 OVERALL COMPANY FOOTPRINT: KEY PLAYERS TABLE 201 OVERALL COMPANY FOOTPRINT: KEY PLAYERS, 2023 TABLE 202 REGIONAL FOOTPRINT: KEY PLAYERS, 2023 TABLE 203 OFFERING FOOTPRINT: KEY PLAYERS, 2023 TABLE 204 TEST SOLUTION FOOTPRINT: KEY PLAYERS, 2023 TABLE 205 END USER FOOTPRINT: KEY PLAYERS, 2023 11.7 COMPANY EVALUATION MATRIX: STARTUPS/SMES

11.7.1 PROGRESSIVE COMPANIES

11.7.2 RESPONSIVE COMPANIES

11.7.3 DYNAMIC COMPANIES

11.7.4 STARTING BLOCKS

FIGURE 46 COMMUNICATION TEST & MEASUREMENT MARKET: COMPANY EVALUATION MATRIX (STARTUPS/SMES), 2023

11.7.5 COMPETITIVE BENCHMARKING: STARTUPS/SMES

TABLE 206 DETAILED LIST OF KEY STARTUPS/SMES, 2023

TABLE 207 COMPETITIVE BENCHMARKING OF KEY STARTUPS/SMES

11.8 COMPETITIVE SCENARIO

11.8.1 PRODUCT LAUNCHES

TABLE 208 COMMUNICATION TEST & MEASUREMENT MARKET: PRODUCT LAUNCHES, JANUARY 2020–MARCH 2024

11.8.2 DEALS

TABLE 209 COMMUNICATION TEST & MEASUREMENT MARKET: DEALS, JANUARY 2020–MARCH 2024



11.9 BRAND/PRODUCT COMPARISON

FIGURE 47 PROMINENT COMMUNICATION TEST & MEASUREMENT SOLUTIONS 11.10 COMPANY VALUATION AND FINANCIAL METRICS FIGURE 48 VALUATION AND FINANCIAL METRICS OF KEY COMMUNICATION TEST & MEASUREMENT VENDORS

12 COMPANY PROFILES

12.1 KEY PLAYERS

(Business Overview, Products/Services/Solutions Offered, MnM View, Key Strengths and Right to Win, Strategic Choices Made, Weaknesses and Competitive Threats, Recent Developments)*

12.1.1 KEYSIGHT TECHNOLOGIES TABLE 210 KEYSIGHT TECHNOLOGIES: COMPANY OVERVIEW FIGURE 49 KEYSIGHT TECHNOLOGIES: COMPANY SNAPSHOT TABLE 211 KEYSIGHT TECHNOLOGIES: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 212 KEYSIGHT TECHNOLOGIES: PRODUCT LAUNCHES TABLE 213 KEYSIGHT TECHNOLOGIES: DEALS 12.1.2 ROHDE & SCHWARZ TABLE 214 ROHDE & SCHWARZ: COMPANY OVERVIEW TABLE 215 ROHDE & SCHWARZ: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 216 ROHDE & SCHWARZ: DEALS **12.1.3 ANRITSU** TABLE 217 ANRITSU: COMPANY OVERVIEW FIGURE 50 ANRITSU: COMPANY SNAPSHOT TABLE 218 ANRITSU: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 219 ANRITSU: PRODUCT LAUNCHES **TABLE 220 ANRITSU: DEALS 12.1.4 VIAVI SOLUTIONS** TABLE 221 VIAVI SOLUTIONS: COMPANY OVERVIEW FIGURE 51 VIAVI SOLUTIONS: COMPANY SNAPSHOT TABLE 222 VIAVI SOLUTIONS: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 223 VIAVI SOLUTIONS: PRODUCT LAUNCHES 12.1.5 YOKOGAWA TABLE 224 YOKOGAWA: COMPANY OVERVIEW FIGURE 52 YOKOGAWA: COMPANY SNAPSHOT TABLE 225 YOKOGAWA: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 226 YOKOGAWA: PRODUCT LAUNCHES



12.1.6 FORTIVE TABLE 227 FORTIVE: BUSINESS OVERVIEW FIGURE 53 FORTIVE: COMPANY SNAPSHOT TABLE 228 FORTIVE: PRODUCTS/SOLUTIONS/SERVICES OFFERED **TABLE 229 FORTIVE: DEALS** 12.1.7 EXFO TABLE 230 EXFO: BUSINESS OVERVIEW TABLE 231 EXFO: PRODUCTS/SOLUTIONS/SERVICES OFFERED **12.1.8 EMERSON** TABLE 232 EMERSON: COMPANY OVERVIEW FIGURE 54 EMERSON: COMPANY SNAPSHOT TABLE 233 EMERSON: PRODUCTS/SOLUTIONS/SERVICES OFFERED **TABLE 234 EMERSON: DEALS 12.1.9 SPIRENT COMMUNICATIONS** TABLE 235 SPIRENT COMMUNICATIONS: COMPANY OVERVIEW FIGURE 55 SPIRENT COMMUNICATION: COMPANY SNAPSHOT TABLE 236 SPIRENT COMMUNICATIONS: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 237 SPIRENT COMMUNICATIONS: DEALS 12.1.10 HUAWEI TABLE 238 HUAWEI: COMPANY OVERVIEW FIGURE 56 HUAWEI: COMPANY SNAPSHOT TABLE 239 HUAWEI: PRODUCTS/SOLUTIONS/SERVICES OFFERED *Business Overview, Products/Services/Solutions Offered, MnM View, Key Strengths and Right to Win, Strategic Choices Made, Weaknesses and Competitive Threats, Recent Developments might not be captured in case of unlisted companies. **12.2 OTHER COMPANY PROFILES 12.2.1 HAMMER 12.2.2 CALNEX SOLUTIONS 12.2.3 LUNA INNOVATIONS** 12.2.4 NETSCOUT 12.2.5 CISCO **12.3 SMES/STARTUPS** 12.3.1 LITEPOINT 12.3.2 SYSMECH 12.3.3 VEEX **12.3.4 TEOCO CORPORATION 12.3.5 NETALLY 12.3.6 THINKRF**



12.3.7 KYRIO

12.3.8 FASTECH TELECOMMUNICATIONS 12.3.9 EAGLE PHOTONICS 12.3.10 VERKOTAN

13 ADJACENT/RELATED MARKETS

13.1 INTRODUCTION TO ADJACENT MARKETS TABLE 240 ADJACENT MARKETS AND FORECASTS **13.2 LIMITATIONS 13.3 TEST AND MEASUREMENT EQUIPMENT MARKET 13.3.1 MARKET DEFINITION** TABLE 241 TEST AND MEASUREMENT EQUIPMENT MARKET, BY PRODUCT TYPE, 2019–2022 (USD MILLION) TABLE 242 TEST AND MEASUREMENT EQUIPMENT MARKET, BY PRODUCT TYPE, 2023–2028 (USD MILLION) TABLE 243 TEST AND MEASUREMENT EQUIPMENT MARKET, BY SERVICE TYPE, 2019-2022 (USD MILLION) TABLE 244 TEST AND MEASUREMENT EQUIPMENT MARKET, BY SERVICE TYPE, 2023-2028 (USD MILLION) TABLE 245 TEST AND MEASUREMENT EQUIPMENT MARKET, BY VERTICAL, 2019-2022 (USD MILLION) TABLE 246 TEST AND MEASUREMENT EQUIPMENT MARKET, BY VERTICAL, 2023-2028 (USD MILLION) TABLE 247 TEST AND MEASUREMENT EQUIPMENT MARKET, BY REGION, 2019-2022 (USD MILLION) TABLE 248 TEST AND MEASUREMENT EQUIPMENT MARKET, BY REGION, 2023-2028 (USD MILLION) **13.4 WIRELESS TESTING MARKET 13.4.1 MARKET DEFINITION** TABLE 249 WIRELESS TESTING MARKET, BY OFFERING, 2018–2021 (USD MILLION) TABLE 250 WIRELESS TESTING MARKET, BY OFFERING, 2022–2027 (USD MILLION) TABLE 251 WIRELESS TESTING MARKET, BY TYPE, 2018–2021 (USD MILLION) TABLE 252 WIRELESS TESTING MARKET, BY TYPE, 2022–2027 (USD MILLION) TABLE 253 WIRELESS TESTING SERVICE MARKET, BY TYPE, 2018-2021 (USD MILLION)

TABLE 254 WIRELESS TESTING SERVICE MARKET, BY TYPE, 2022–2027 (USD



MILLION)

TABLE 255 WIRELESS TESTING EQUIPMENT MARKET, BY TYPE, 2018–2021 (USD MILLION)

TABLE 256 WIRELESS TESTING EQUIPMENT MARKET, BY TYPE, 2022–2027 (USD MILLION)

TABLE 257 WIRELESS DEVICE TESTING MARKET, BY TECHNOLOGY TYPE, 2018–2021 (USD MILLION)

TABLE 258 WIRELESS DEVICE TESTING MARKET, BY TECHNOLOGY TYPE, 2022–2027 (USD MILLION)

TABLE 259 WIRELESS TESTING MARKET, BY APPLICATION, 2018–2021 (USD MILLION)

TABLE 260 WIRELESS TESTING MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

TABLE 261 WIRELESS TESTING MARKET, BY REGION, 2018–2021 (USD MILLION)TABLE 262 WIRELESS TESTING MARKET, BY REGION, 2022–2027 (USD MILLION)

14 APPENDIX

14.1 DISCUSSION GUIDE

14.2 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL

14.3 CUSTOMIZATION OPTIONS

14.4 RELATED REPORTS

14.5 AUTHOR DETAILS



About

The CT&M market is highly dependent on the growth oftelecommunications industry. An increase in subscriber base, operators move towards 3G, World Wide Interoperability for Microwave Access (WiMax) Technologies, and Research and Development (R&D) investments in the emerging Long Term Evolution (LTE) and LTE-Advanced technologies have fuelled the growth of the telecommunications industries. These initiatives demand for increased LTE/4G trial runs which in turn trigger the demand for CT&M products to optimize the networks.

The CT&M products help network operators, equipment manufacturers and broadband service providers to deliver high quality triple-play services: voice, video and data over mobile and fixed networks. The CT&M solutions help network operators in deployment of new services, help in reducing CAPEX and assist in delivering Quality of Service (QoS) across each phase of network life cycle, which include R&D, manufacturing, deployment and service assurance.

The CT&M solution also helps broadband service providers and operators to deliver high Quality Experience (QoE) to their users and ensure effective management of services such as Voice over Internet protocol (VoIP) and Internet Protocol TV (IPTV) services by providing visibility into end-user experience and facilitates repair, calibration, instrument management, deployment and maintenance of networks and services.

The wireless industry is offering tremendous growth opportunities for the test equipment vendors. The wireless standards are evolving rapidly with increasing bandwidth demand and higher data transmission rates. The growing number of mobile and internet subscribers and increasing adoption of broadband services and evolving communication standards such as LTE, LTE-Advanced are fuelling the demand for CT&M products.

The major players in CT&M market such as, JDSU, Agilent Technologies, Anritsu, EXFO, IXIA, Rohde & Schwarz, National Instruments, etc. are finding huge potential in the market with wireless test and measurement products.

The report broadly comprises type of communication test equipment: wireless and wireline: type of communication test: enterprise test, field network test, lab and manufacturing test, network assurance test; type of services: product support services, professional services, managed services; end-users: Network Equipment Manufacturers



(NEMs), mobile device manufacturers, telecommunication service providers, enterprises; regions: North America, Europe, APAC, MEA and LA.



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