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MCPTT & Broadband PTT Market: 2025 – 2030 – Opportunities, Challenges, Strategies & Forecasts

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Abstracts

MCPTT (Mission-Critical PTT) is an evolution of PoC or PTToC (PTT-Over-Cellular) technology aimed at meeting or exceeding the performance of mission-critical group communications in digital LMR (Land Mobile Radio) systems, such as APCO P25 and TETRA. Besides enabling voice services with fast call setup times, clear audio quality in high-noise environments, priority/preemption, and other differentiating features, MCPTT solutions may also incorporate MCVideo (Mission-Critical Video) and MCData (Mission-Critical Data) capabilities. The three services are collectively referred to as MCX or MCS (Mission-Critical PTT, Video & Data) in 3GPP terminology. MCPTX and PTX (Push-to-Anything) are additional marketing terms that some suppliers use.

It is worth noting that both carrier-integrated and OTT (Over-the-Top) solutions for non-mission critical PoC or broadband PTT services have been in existence since the 2000s, aimed at improving collaboration and productivity for commercial business users across a diverse range of sectors. If iDEN – a 2G cellular technology – is taken into account, the very first PoC deployments date back even further to the 1990s. MCPTT and broader MCX services are a more recent addition to the market and are largely driven by public safety broadband, FRMCS (Future Railway Mobile Communication System) readiness, utility grid transformation, and Industry 4.0 digitization initiatives.

AT&T, Verizon, T-Mobile, Southern Linc, Telus, Bell Canada, SFR, KPN, Swisscom, Telia, F?roya Tele, Plus (Polkomtel), STC (Saudi Telecom Company), Omantel, Telstra, Telecom Argentina, and many other public mobile operators have either deployed or are in the process of launching MCPTT service offerings to expand their B2B (Business-to-Business) customer base among first responders and other critical communications user groups. MCPTT functionality has also been implemented in purpose-built critical communications broadband networks such as South Korea’s Safe-Net and LTE-R

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networks; United States' FirstNet – via AT&T but with direct integration into a dedicated core network; United Kingdom's ESN (Emergency Services Network); France's RRF (Radio Network of the Future); Hub One's private cellular network in Paris airports; Spain's SIRDEE (State Emergency Digital Radiocommunications System); Italian Ministry of Interior's public safety LTE platform; Tampnet's offshore private 4G/5G networks; Finland's VIRVE 2.0 mission-critical broadband service; T?rkiye's KETUM hybrid narrowband-broadband system; Oman's public safety broadband network; Qatar MOI's (Ministry of Interior) private LTE network; and Nedaa's 4G network for critical communications in Dubai.

Many, but not all, of these aforementioned MCX deployments are supported by eMBMS (Evolved Multimedia Broadcast-Multicast Service) technology to facilitate large-scale group communications in a resource-efficient manner, particularly in the PPDR (Public Protection & Disaster Relief) sector. Additionally, multiple options are available for LMR-broadband interoperability, including 3GPP-compliant IWF (Interworking Function) solutions for network-to-network integration between LMR and MCX systems, which have recently been deployed in national markets as diverse as the United States, Sweden, Australia, and Argentina.

While some end user organizations are already migrating from legacy LMR systems to broadband networks, the general consensus in the public safety community is that a complete LMR-to-broadband transition is not possible without the commercial availability of 5G NR sidelink-enabled chipsets. 5G sidelink technology enables 3GPP devices to communicate directly without relying on network infrastructure, much like direct mode operation in LMR systems, which is especially useful for firefighters and other first responders operating in coverage-limited spaces inside buildings, stairwells, multi-level basements, and tunnels or disaster scenarios in remote locations not served by the network. To address the gap in D2D (Device-to-Device) communications functionality, frontrunners have initially adopted interim solutions, including LMR-based RSMs (Remote Speaker Microphones) and hybrid LMR-broadband devices. Following recent lab and field demonstrations, there are also realistic hopes of seeing production-grade implementations of MCX over the 5G sidelink interface in the coming years.

SNS Telecom & IT estimates that MCPTT and broadband PTT service revenue will grow at a CAGR of approximately 11% between 2025 and 2028, eventually accounting for more than $12 billion by the end of 2028. Although non-critical broadband PTT services will continue to constitute the bulk of subscriptions, much of this growth will be driven by 3GPP standards-compliant MCX service offerings, which are increasingly being adopted by business and mission-critical end user organizations of all sizes

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across a host of industries. Examples range from the KNPA (Korean National Police Agency) and NFA (Korean National Fire Agency) with their 140,000 and 20,000 MCX-equipped user terminals respectively to mid-sized and smaller organizations including but not limited to the City of Buenos Aires, Icon Water, Turkish National Police in Adana, NS (Dutch Railways), Amsterdam Schiphol Airport, Rijkswaterstaat, WLE (Westphalian State Railway), SGP (Soci?t? du Grand Paris), Groupe ADP, DHL, Faroese first responders, AdventHealth, Georgia State Patrol, Dallas (Georgia) Police Department, and many state/local first responder agencies in the United States.

The “MCPTT & Broadband PTT Market: 2025 – 2030 – Opportunities, Challenges, Strategies & Forecasts” report presents an in-depth assessment of the MCPTT and broadband PTT market, including the value chain, market drivers, barriers to uptake, enabling technologies, operational models, application scenarios, key trends, future roadmap, standardization, case studies, ecosystem player profiles, and strategies. The report also presents global and regional market size forecasts from 2025 to 2030, covering MCX/PTT software and infrastructure, end user devices, subscriptions, and service revenue. These forecasts cover three submarkets, two standards compliance categories, five software and infrastructure segments, four device form factors, 10 vertical industries, and five regional markets.

The report comes with an associated Excel datasheet suite covering quantitative data from all numeric forecasts presented in the report.

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Contents

1 CHAPTER 1: INTRODUCTION

1.1 Executive Summary
1.2 Topics Covered
1.3 Forecast Segmentation
1.4 Key Questions Answered
1.5 Key Findings
1.6 Methodology
1.7 Target Audience

2 CHAPTER 2: AN OVERVIEW OF MCPTT & BROADBAND PTT SERVICES

2.1 What is PTT (Push-to-Talk)?
  2.1.1 Differences From Traditional Telephony
  2.1.2 LMR (Land Mobile Radio) Systems
  2.1.3 Broadband PTT/PoC (PTT-Over-Cellular)
  2.1.4 MCPTT (Mission-Critical PTT) for Critical Communications
  2.1.5 MCX/MCS (Mission-Critical Services), MCVideo (Mission-Critical Video) & MCData (Mission-Critical Data)
2.2 Types of MCPTT & Broadband PTT Solutions
  2.2.1 Carrier-Integrated PTT
  2.2.2 Independent OTT (Over-the-Top)
  2.2.3 PTT Services Over Private Networks
  2.2.4 Direct Mode Operation Without Infrastructure
2.3 MCPTT & Broadband PTT Value Chain
  2.3.1 Chipset & Enabling Technology Suppliers
  2.3.2 Terminal Equipment Manufacturers
  2.3.3 MCX/PTT Client & Application Server Providers
  2.3.4 Traditional LMR System Vendors
  2.3.5 Mobile Network Infrastructure Providers
  2.3.6 Cloud Platform Providers
  2.3.7 MCPTT & Broadband PTT Service Providers
    2.3.7.1 Wireless Carriers
    2.3.7.2 OTT Players
    2.3.7.3 Private Network Operators
    2.3.7.4 Critical Communications Service Providers
  2.3.8 End User Organizations

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2.3.9 Other Ecosystem Players
2.4 Market Drivers
2.4.1 Limitations of Legacy LMR Systems
2.4.2 Cost Savings on Devices & Network Buildout
2.4.3 Wireless Carriers' Desire for New Revenue Sources
2.4.4 Provision of QPP (QoS, Priority & Preemption) Capabilities
2.4.5 Critical Broadband, Industry 4.0 Digitization & Enterprise Transformation
2.4.6 Effective 3GPP Working Community & Innovation Path
2.4.7 Growth of Private 4G/5G Cellular Networks
2.4.8 Integration of Satellite-Based NTNs (Non-Terrestrial Networks)
2.5 Market Barriers
2.5.1 Commercial Cellular Network Coverage Gaps & Vulnerabilities
2.5.2 Sidelink Chipset Ecosystem for D2D (Device-to-Device) Communications
2.5.3 Concerns Regarding Genuine Interoperability
2.5.4 Market Fragmentation Risk
2.5.5 Conservatism of End User Communities
2.5.6 Extension Contracts for Digital LMR Networks

3 CHAPTER 3: MCPTT & BROADBAND PTT TECHNOLOGY

3.1 System Architecture & Functional Elements
3.1.1 PTT/MCX Clients & End User Terminal Equipment
3.1.2 Broadband RAN (Radio Access Network)
3.1.3 EPC/5GC (Evolved Packet Core & 5G Core)
3.1.4 SIP (Session Initiation Protocol) Core/IMS (IP Multimedia Subsystem)
3.1.5 eMBMS/5G MBS (Multicast-Broadcast Services) Core
3.1.6 PTT/MCX Application & Ancillary Servers
3.1.6.1 Non-MCX Broadband PTT Server
3.1.6.2 MC (Mission-Critical) Service Server(s)
3.1.6.3 MCPTT Server
3.1.6.4 MCVideo Server
3.1.6.5 MCData Server
3.1.6.6 FRMCS (Future Railway Mobile Communication System) Server
3.1.6.7 CSC (Common Services Core)
3.1.6.8 GMS (Group Management Server)
3.1.6.9 CMS (Configuration Management Server)
3.1.6.10 IdMS (Identity Management Server)
3.1.6.11 KMS (Key Management Server)
3.1.6.12 LMS (Location Management Server)

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3.1.6.13 MC Recording Server
3.1.7 Interworking Gateways
3.1.8 Dispatch & Control Rooms
3.1.9 LMR Infrastructure & Radios
3.2 MCPTT & Broadband PTT Application Features
3.2.1 MCPTT
3.2.1.1 Group Calls
3.2.1.2 Private Calls
3.2.1.3 First-to-Answer Calls
3.2.1.4 Broadcast Group Calls
3.2.1.5 Imminent Peril Group Call
3.2.1.6 Emergency Calls
3.2.1.7 Emergency Alerts
3.2.1.8 Ambient Listening
3.2.1.9 Discrete Listening
3.2.1.10 Remotely Initiated Calls
3.2.2 MCVideo
3.2.2.1 Group Video Calls
3.2.2.2 Video Conferencing
3.2.2.3 Private Video Calls
3.2.2.4 Broadcast Group Video Calls
3.2.2.5 Imminent Peril Video Group Calls
3.2.2.6 Emergency Video Calls
3.2.2.7 Video Pull & Push
3.2.2.8 Ambient Viewing Calls
3.2.3 MCData
3.2.3.1 SDS (Short Data Service)
3.2.3.2 File Distribution
3.2.3.3 Data Streaming
3.2.3.4 IPCon (IP Connectivity)
3.2.3.5 Presence & Status
3.2.3.6 Location Services
3.2.4 Application Enablement Aspects
3.2.4.1 Audio & Video Codecs
3.2.4.2 Unicast & Multicast Bearers
3.2.4.3 Control & Media Plane Protocols
3.2.4.4 Floor Control Mechanisms
3.2.4.5 Group & Private Call Establishment
3.2.4.6 Pre-Arranged, Ad hoc & Chat Group Calls

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3.2.4.7 Private Call Commencement Modes
3.2.4.8 Management by Mission-Critical Organizations
3.2.4.9 MCX Security & Encryption
3.3 Solutions & Interfaces for LMR Interoperability
3.3.1 RoIP (Radio-Over-Internet Protocol) & Proprietary Gateways
3.3.2 BSI (Bridging Systems Interface) Technology
3.3.3 P25 Interfaces for System-Level Integration
3.3.3.1 ISSI (Inter-RF Subsystem Interface)
3.3.3.2 CSSI (Console Subsystem Interface)
3.3.3.3 DFSI (Digital Fixed Station Interface)
3.3.4 TETRA ISI (Inter-System Interface)
3.3.5 DMR AIS (Application Interface Specification)
3.3.6 GSM-R IWF-g1, g2 & g5 Interfaces
3.3.7 3GPP MCX IWF (Interworking Function)
3.3.7.1 IWF-1 Interface to MCPTT Server
3.3.7.2 IWF-2 Interface to MCData Server
3.3.7.3 IWF-3 Interface to Group Management Server
3.3.7.4 IWF-4 Interface to Location Management Server
3.3.8 MCX Client Interface-Based Interoperability Solutions
3.3.9 Console Patches, SDR (Software-Defined Radio) & Other Approaches
3.4 Interworking Between MCX Service Systems
3.4.1 Inter-MCX Signaling
3.4.2 User Authentication
3.4.3 Group Affiliation & Communication
3.4.4 Priority Between Interconnected MCX Systems
3.5 QoS Differentiation & Service Resilience
3.5.1 QPP Mechanisms for Network Resource Control
3.5.1.1 Access Priority: ACB (Access Class Barring) & UAC (Unified Access Control)
3.5.1.2 Admission Control Priority: ARP (Allocation & Retention Priority)
3.5.1.3 Preemption: PCI/PVI (Preemption Capability & Vulnerability Information)
3.5.1.4 Traffic Scheduling Priority: QCI (QoS Class Indicator) & 5QI (5G QoS Identifier)
3.5.1.5 APN (Access Point Name)/DNN (Data Network Name)-Based Isolation
3.5.1.6 Emergency Scenarios: MPS (Multimedia Priority Service)
3.5.1.7 Application Priority & Additional Capabilities
3.5.2 5G Network Slicing-Enabled Customized Virtual Networks
3.5.3 National Roaming & Multi-Operator Redundancy
3.5.4 IOPS (Isolated Operation for Public Safety)
3.5.5 Rapidly Deployable Network Assets

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3.6 Coverage Extension & Off-Network Communications
3.6.1 HPUE (High-Power User Equipment) for Uplink Range Extension
3.6.2 Off-Network Communications With Sidelink (PC5) Interface
3.6.3 UE-to-Network & UE-to-UE Relays
3.6.4 Mobile IAB (Integrated Access & Backhaul)
3.6.5 Satellite PTT & NTN (Non-Terrestrial Network) Access
3.6.6 ATG/A2G (Air-to-Ground) Connectivity

4 CHAPTER 4: STANDARDIZATION & COLLABORATIVE INITIATIVES

4.1 3GPP (Third Generation Partnership Project)
4.1.1 Release 12: MCX Enablers – GCSE & LTE ProSe
4.1.2 Release 13: MCPTT, LTE IOPS & ProSe Extensions
4.1.3 Release 14: MCVideo, MCData & MCX Common Functional Architecture
4.1.4 Release 15: MCX Refinements & Phase 1 Work on Railway-Related Features
4.1.5 Release 16: Further Evolution of MCX, 3GPP-LMR Interworking & FRMCS (Phase 2)
4.1.6 Release 17: MCX Over 5G (Unicast), LTE MCIOPS, FRMCS (Phase 3) & 5G NR Sidelink Enhancements
4.1.7 Release 18: MCX Using 5G MBS (Multicast)/5G ProSe, Gateway UEs, Ad Hoc Groups & UE-to-UE Relays
4.1.8 Release 19 & Beyond: Enhanced MCX Architecture, Multi-Hop Sidelink Relaying & IOPS Over 5G
4.2 ATIS (Alliance for Telecommunications Industry Solutions)
4.2.1 ATIS/TIA JLMRLTE (Joint LMR-LTE) Working Group
4.2.1.1 Study of Interworking Between P25 LMR & 3GPP Mission-Critical Services
4.3 EENA (European Emergency Number Association)
4.3.1 MCX Integration With NG112/911/999
4.4 ETSI (European Telecommunications Standards Institute)
4.4.1 TC TCCE (Technical Committee for TETRA and Critical Communications Evolution)
4.4.1.1 Interworking Between TETRA & Broadband Systems
4.4.2 TC RT (Technical Committee for Rail Telecommunications)
4.4.2.1 FRMCS & Interworking With Legacy GSM-R
4.4.3 CTI (Center for Testing and Interoperability)
4.4.3.1 MCX & FRMCS Plugtests
4.5 GCF (Global Certification Forum)
4.5.1 MCS Certification Program & Work Stream
4.6 IETF (Internet Engineering Task Force)

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4.6.1 Protocols for MCX Services Over 3GPP Networks
4.7 OMA SpecWorks (Open Mobile Alliance)
4.7.1 PoC V1.04, V2.0 & V2.1
4.7.2 PCPS (Push-to-Communicate for Public Safety)
4.8 PSCE (Public Safety Communication Europe) & European Projects
4.8.1 Mission-Critical Communications Standardization
4.8.2 BroadX Projects: Pan-European Public Safety Mobile Broadband System
4.8.2.1 BroadMap: Specifications & Roadmap for Procurement
4.8.2.2 BroadWay: R&D/PCP (Pre-Commercial Procurement)
4.8.2.3 BroadNet.EU: EUCCS (EU Critical Communication System) Preparation
4.8.3 Other European Union-Funded Projects
4.8.3.1 5GENESIS
4.8.3.2 5G-EPICENTRE
4.8.3.3 5GinFIRE
4.8.3.4 Affordable5G
4.8.3.5 FIDAL (Field Trials Beyond 5G)
4.8.3.6 MoySEST (Mission-Critical Services & Transport Systems)
4.8.3.7 REMIRO5G MULTISLICE & MULTINET
4.8.3.8 RESPOND-A
4.8.4 Additional Projects
4.9 TCCA (The Critical Communications Association)
4.9.1 BIG (Broadband Industry Group)
4.9.2 CCBG (Critical Communications Broadband Group)
4.9.2.1 IWF Working Group
4.9.3 Future Technologies Group
4.9.4 Other TCCA Groups & Activities
4.10 TIA (Telecommunications Industry Association)
4.10.1 TR-8: Engineering Committee on Mobile & Personal Private Radio Standards
4.10.1.1 3GPP MCPTT Interworking With P25 & Analog FM
4.10.1.2 Addendums to ISSI/CSSI & DFSI Standards
4.11 U.S. DHS (Department of Homeland Security)
4.11.1 S&T (Science and Technology) Directorate
4.11.2 Standards-Based Interworking Solution for MCPTT-LMR Communications
4.11.3 Interoperability Between FirstNet, Southern Linc & Other Broadband PTT Systems
4.12 U.S. NIST (National Institute of Standards and Technology)
4.12.1 PSCR (Public Safety Communications Research)
4.12.2 MCV (Mission-Critical Voice) Research Portfolio
4.12.3 Internal Research Projects

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4.12.4 NIST-Funded Extramural Research
4.12.4.1 Interoperable Public Safety Communications System
4.12.4.2 MCOP (Mission-Critical Open Platform)
4.12.4.3 MCTP (Mission-Critical Test Platform)
4.12.4.4 MCX Client Conformance Tester
4.12.4.5 MCS-TaaSting (Mission-Critical Services Testing-as-a-Service)
4.12.4.6 BroadImPort (Importing European BroadPort MCX Concepts to the U.S.)
4.12.4.7 Other Projects
4.13 U.S. NPSTC (National Public Safety Telecommunications Council)
4.13.1 LMR-LTE Integration & Interoperability Working Group
4.14 UIC (International Union of Railways)
4.14.1 FRMCS Program for the Replacement of GSM-R Networks
4.15 Others
4.15.1 Critical Communications Industry Associations
4.15.2 Vendor-Led Alliances & Partner Programs
4.15.3 Academic Institutes, Research Centers & Labs

5 CHAPTER 5: CASE STUDIES OF MCPTT & BROADBAND PTT SERVICE DEPLOYMENTS

5.1 Service Provider Case Studies
5.1.1 AT&T/FirstNet (First Responder Network)
5.1.1.1 PTT Service Type
5.1.1.2 Integrators & Suppliers
5.1.1.3 Service Deployment Summary
5.1.1.4 FNPTT (FirstNet PTT)
5.1.1.5 FNRR (FirstNet Rapid Response)
5.1.1.6 EPTT (Enhanced PTT)
5.1.1.7 Customer Spotlight: Dallas Police, AdventHealth & East Moline Fire
5.1.2 Bell Canada
5.1.2.1 PTT Service Type
5.1.2.2 Integrators & Suppliers
5.1.2.3 Service Deployment Summary
5.1.2.4 Customer Spotlight: Graham Construction & Dollarama
5.1.3 F?roya Tele (Faroese Telecom)
5.1.3.1 PTT Service Type
5.1.3.2 Integrators & Suppliers
5.1.3.3 Service Deployment Summary
5.1.3.4 Customer Spotlight: Faroe Islands Police & T?rshavn Fire Brigade

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5.1.4 France’s RRF (Radio Network of the Future)
5.1.4.1 PTT Service Type
5.1.4.2 Integrators & Suppliers
5.1.4.3 Service Deployment Summary
5.1.4.4 Customer Spotlight: SDIS 42 (Loire Departmental Fire & Rescue Service)
5.1.5 Korea’s Safe-Net (National Disaster Safety Communications Network)
5.1.5.1 PTT Service Type
5.1.5.2 Integrators & Suppliers
5.1.5.3 Service Deployment Summary
5.1.5.4 Customer Spotlight: KNPA (Korean National Police Agency)
5.1.6 KPN
5.1.6.1 PTT Service Type
5.1.6.2 Integrators & Suppliers
5.1.6.3 Service Deployment Summary
5.1.6.4 Customer Spotlight: NS (Dutch Railways/Nederlandse Spoorwegen)
5.1.7 Southern Linc
5.1.7.1 PTT Service Type
5.1.7.2 Integrators & Suppliers
5.1.7.3 Service Deployment Summary
5.1.7.4 Customer Spotlight: Georgia State Patrol
5.1.8 Specialized by STC
5.1.8.1 PTT Service Type
5.1.8.2 Integrators & Suppliers
5.1.8.3 Service Deployment Summary
5.1.8.4 Customer Spotlight: NEOM (Sindalah Island)
5.1.9 Tampnet
5.1.9.1 PTT Service Type
5.1.9.2 Integrators & Suppliers
5.1.9.3 Service Deployment Summary
5.1.9.4 Customer Spotlight: Offshore Energy Operators
5.1.10 Telecom Argentina
5.1.10.1 PTT Service Type
5.1.10.2 Integrators & Suppliers
5.1.10.3 Service Deployment Summary
5.1.10.4 Customer Spotlight: City of Buenos Aires
5.2 End User Organization Case Studies
5.2.1 Bundeswehr (German Armed Forces)
5.2.1.1 PTT Service Type
5.2.1.2 Integrators & Suppliers

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5.2.1.3 Service Deployment Summary
5.2.2 Delhi-Ghaziabad-Meerut RRTS (Regional Rapid Transit System)
5.2.2.1 PTT Service Type
5.2.2.2 Integrators & Suppliers
5.2.2.3 Service Deployment Summary
5.2.3 Icon Water
5.2.3.1 PTT Service Type
5.2.3.2 Integrators & Suppliers
5.2.3.3 Service Deployment Summary
5.2.4 Marriott International
5.2.4.1 PTT Service Type
5.2.4.2 Integrators & Suppliers
5.2.4.3 Service Deployment Summary
5.2.5 NSW (New South Wales) Telco Authority
5.2.5.1 PTT Service Type
5.2.5.2 Integrators & Suppliers
5.2.5.3 Service Deployment Summary
5.2.6 Paris Airports
5.2.6.1 PTT Service Type
5.2.6.2 Integrators & Suppliers
5.2.6.3 Service Deployment Summary
5.2.7 PETRONAS (Petroliam Nasional)
5.2.7.1 PTT Service Type
5.2.7.2 Integrators & Suppliers
5.2.7.3 Service Deployment Summary
5.2.8 Rijkswaterstaat
5.2.8.1 PTT Service Type
5.2.8.2 Integrators & Suppliers
5.2.8.3 Service Deployment Summary
5.2.9 TfL (Transport for London)
5.2.9.1 PTT Service Type
5.2.9.2 Integrators & Suppliers
5.2.9.3 Service Deployment Summary
5.2.10 U.S. DOJ (Department of Justice)
5.2.10.1 PTT Service Type
5.2.10.2 Integrators & Suppliers
5.2.10.3 Service Deployment Summary

6 CHAPTER 6: MARKET SIZING & FORECASTS

+357 96 030922
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6.1 Future Outlook for MCPTT & Broadband PTT Services
6.1.1 MCX/PTT Software & Core Infrastructure Investments
6.1.2 MCPTT & Broadband PTT Terminal Equipment Sales
6.1.3 Subscriptions & Service Revenue
6.2 MCX/PTT Software & Infrastructure
6.2.1 Software & Core Infrastructure Segments
6.2.1.1 MCX/PTT Client & Application Server Platforms
6.2.1.2 eMBMS/5G MBS Middleware & Network Components
6.2.1.3 LMR-Broadband Interworking Solutions
6.2.1.4 Dispatch & Control Room Systems
6.2.1.5 Recording & Lawful Interception
6.2.2 Standards Compliance
6.2.2.1 3GPP-Compliant MCX Solutions
6.2.2.2 Non-MCX Broadband PTT Solutions
6.3 MCPTT & Broadband PTT Terminal Equipment
6.3.1 Device Form Factors
6.3.1.1 Smartphones
6.3.1.2 Rugged Handsets
6.3.1.3 In-Vehicle Devices
6.3.1.4 Accessories & Others
6.3.2 Device Access Technologies
6.3.2.1 Broadband-Only MCX/PTT Devices
6.3.2.2 Hybrid LMR-Broadband Devices
6.4 Subscriptions & Service Revenue
6.4.1 Standards Compliance
6.4.1.1 3GPP-Compliant MCX Subscriptions
6.4.1.2 Non-MCX Broadband PTT Subscriptions
6.4.2 Vertical Industries
6.4.2.1 Public Safety
6.4.2.2 Defense
6.4.2.3 Transportation
6.4.2.4 Utilities
6.4.2.5 Oil & Gas
6.4.2.6 Mining
6.4.2.7 Construction
6.4.2.8 Manufacturing
6.4.2.9 Healthcare
6.4.2.10 Retail & Hospitality

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6.4.2.11 Others
6.5 Regional Segmentation
6.5.1 MCX/PTT Software & Core Infrastructure
6.5.2 MCPTT & Broadband PTT Terminal Equipment
6.5.3 Subscriptions & Service Revenue
6.6 North America
6.6.1 MCX/PTT Software & Core Infrastructure
6.6.2 MCPTT & Broadband PTT Terminal Equipment
6.6.3 Subscriptions & Service Revenue
6.7 Asia Pacific
6.7.1 MCX/PTT Software & Core Infrastructure
6.7.2 MCPTT & Broadband PTT Terminal Equipment
6.7.3 Subscriptions & Service Revenue
6.8 Europe
6.8.1 MCX/PTT Software & Core Infrastructure
6.8.2 MCPTT & Broadband PTT Terminal Equipment
6.8.3 Subscriptions & Service Revenue
6.9 Middle East & Africa
6.9.1 MCX/PTT Software & Core Infrastructure
6.9.2 MCPTT & Broadband PTT Terminal Equipment
6.9.3 Subscriptions & Service Revenue
6.10 Latin & Central America
6.10.1 MCX/PTT Software & Core Infrastructure
6.10.2 MCPTT & Broadband PTT Terminal Equipment
6.10.3 Subscriptions & Service Revenue

7 CHAPTER 7: KEY ECOSYSTEM PLAYERS

7.1 3AM Innovations
7.2 4K Solutions
7.3 AdvanceTec Industries
7.4 AINA PTT
7.5 AIR (American International Radio)
7.6 Airbus Public Safety and Security
7.7 Alea (Leonardo)
7.8 ALECOM
7.9 Alstom
7.10 AM Telecom
7.11 Amcom (Netherlands)

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7.12 Aqura Technologies (Telstra Purple)
7.13 ASELSAN
7.14 Athesi
7.15 Azetti Networks
7.16 BelFone
7.17 Bittium
7.18 BK Technologies
7.19 Blackview
7.20 Boxchip
7.21 Buddycom (Science Arts)
7.22 Bumicom Telecommunicatie
7.23 Caltta Technologies
7.24 Catalyst Communications Technologies
7.25 C-DOT (Centre for Development of Telematics)
7.26 Challenge Networks (Vocus)
7.27 Cirpack
7.28 Cobham SATCOM
7.29 Consort Digital
7.30 CROSSCALL
7.31 Cubic Corporation
7.32 Cumucore
7.33 Cybertel Bridge
7.34 Cyrus Technology
7.35 DAMM Cellular Systems
7.36 Druid Software
7.37 DTC Codan
7.38 Ecom Instruments (Pepperl+Fuchs)
7.39 Ecrio
7.40 ENENSYS Technologies
7.41 Entel (United Kingdom)
7.42 Entropia
7.43 Ericsson
7.44 ErvoCom
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7.59 Globalstar
7.60 Goosetown Communications
7.61 GroupTalk
7.62 Grupo Amper
7.63 Halys
7.64 Handsfree Group
7.65 Hanswell
7.66 HMF Smart Solutions
7.67 Hoimyung ICT
7.68 HPE (Hewlett Packard Enterprise)
7.69 Huawei
7.70 Hubbcat
7.71 Hypha (Wireless Innovation)
7.72 Hytera Communications
7.73 i.safe MOBILE
7.74 i2i Systems
7.75 Icom
7.76 IMPULSE Wireless
7.77 Inrico Technologies
7.78 Instant Connect
7.79 Intrado
7.80 Intrepid Networks
7.81 IoTAS (IoT & Approval Solutions)
7.82 IPLOOK Technologies
7.83 Iridium Communications
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7.98 Lyfo
7.99 LYNKNEX (Lynksys Technologies)
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7.114 Orion Labs (Vontas)
7.115 Orizon Mobile
7.116 Pei Tel Communications
7.117 Peplink (Plover Bay Technologies)
7.118 Phonemax
7.119 POCSTARS
7.120 Portalify (Northcom Solutions)
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7.123 Pryme Radio Products
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7.170 Walkie Labs
7.171 Zebra Technologies
7.172 Zello
7.173 Zetron (Codan)
7.174 ZTE

8 CHAPTER 8: CONCLUSION & STRATEGIC RECOMMENDATIONS

8.1 Why is the Market Poised to Grow?
8.2 Future Roadmap: 2025 – 2030
  8.2.1 2025 – 2027: Continued MCPTT & Broadband PTT Deployments
  8.2.2 2028 – 2030: Widespread Adoption of 3GPP-Compliant MCX Solutions
  8.2.3 2031 & Beyond: Accelerated Transitions From Digital LMR Systems
8.3 Carrier-Integrated & OTT Service Offerings
8.4 MCX Over Critical Communications Broadband Networks
8.5 Dynamic National Roaming & Multi-Operator Redundancy
8.6 MCPTT Call Setup Time & Voice Quality Comparison With LMR
8.7 Cloud-Hosted Broadband PTT Service Deployments
8.8 Staged Migration From Legacy Systems to 3GPP MCX Services
8.9 Hybrid LMR-MCX Networks With Interoperability
8.10 Scaling MCX: The Need for eMBMS/5G MBS Technology
8.11 Interim Solutions for Off-Network Communications
8.12 RSM (Remote Speaker Microphone) Companion Devices
8.13 Dual-Mode LMR/Broadband Radio Terminals
8.14 Field Trials & Demos of MCX Over 5G NR Sidelink
8.15 Supplemental Satellite NTN Coverage for PTT Services
8.16 Strategic Recommendations
  8.16.1 MCX & PTT Technology Suppliers
  8.16.2 Mobile Operators & Critical Communications Service Providers
  8.16.3 Business & Mission-Critical End User Organizations

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List Of Figures

LIST OF FIGURES

Figure 1: Value Chain of MCPTT & Broadband PTT Services
Figure 2: MCPTT & Broadband PTT System Architecture
Figure 3: 3GPP IWF for MCX-LMR/GSM-R Interworking
Figure 4: 5QI/QCI Values for MCX Services
Figure 5: Standardization of MCX-Related Features in 3GPP Releases 12 –
Figure 6: Global MCX/PTT Software & Core Infrastructure Revenue: 2025 – 2030 ($ Million)
Figure 7: Global MCX/PTT Software & Core Infrastructure Revenue by Segment: 2025 – 2030 ($ Million)
Figure 8: Global MCX/PTT Client & Application Server Platform Revenue: 2025 – 2030 ($ Million)
Figure 9: Global eMBMS/5G MBS Middleware & Network Component Revenue: 2025 – 2030 ($ Million)
Figure 10: Global LMR-Broadband Interworking Solution Revenue: 2025 – 2030 ($ Million)
Figure 11: Global MCX/PTT Dispatch & Control Room System Revenue: 2025 – 2030 ($ Million)
Figure 12: Global MCX/PTT Recording & Lawful Interception Revenue: 2025 – 2030 ($ Million)
Figure 13: Global MCX/PTT Software & Core Infrastructure Revenue by Standards Compliance: 2025 – 2030 ($ Million)
Figure 14: Global 3GPP-Compliant MCX Software & Infrastructure Revenue: 2025 – 2030 ($ Million)
Figure 15: Global Non-MCX Broadband PTT Software & Infrastructure Revenue: 2025 – 2030 ($ Million)
Figure 16: Global MCPTT & Broadband PTT Terminal Equipment Unit Shipments: 2025 – 2030 (Millions of Units)
Figure 17: Global MCPTT & Broadband PTT Terminal Equipment Unit Shipment Revenue: 2025 – 2030 ($ Million)
Figure 18: Global MCPTT & Broadband PTT Terminal Equipment Unit Shipments by Device Form Factor: 2025 – 2030 (Millions of Units)
Figure 19: Global MCPTT & Broadband PTT Terminal Equipment Unit Shipment Revenue by Device Form Factor: 2025 – 2030 ($ Million)
Figure 20: Global MCPTT & Broadband PTT Smartphone Shipments: 2025 – 2030 (Millions of Units)

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Figure 21: Global MCPTT & Broadband PTT Smartphone Shipment Revenue: 2025 – 2030 ($ Million)
Figure 22: Global MCPTT & Broadband PTT Rugged Handset Shipments: 2025 – 2030 (Millions of Units)
Figure 23: Global MCPTT & Broadband PTT Rugged Handset Shipment Revenue: 2025 – 2030 ($ Million)
Figure 24: Global MCPTT & Broadband PTT In-Vehicle Device Shipments: 2025 – 2030 (Millions of Units)
Figure 25: Global MCPTT & Broadband PTT In-Vehicle Device Shipment Revenue: 2025 – 2030 ($ Million)
Figure 26: Global MCPTT & Broadband PTT Accessory & Other Device Shipments: 2025 – 2030 (Millions of Units)
Figure 27: Global MCPTT & Broadband PTT Accessory & Other Device Shipment Revenue: 2025 – 2030 ($ Million)
Figure 28: Global MCPTT & Broadband PTT Terminal Equipment Unit Shipments by Device Access Technology: 2025 – 2030 (Millions of Units)
Figure 29: Global MCPTT & Broadband PTT Terminal Equipment Unit Shipment Revenue by Device Access Technology: 2025 – 2030 ($ Million)
Figure 30: Global Broadband-Only MCX/PTT Device Shipments: 2025 – 2030 (Millions of Units)
Figure 31: Global Broadband-Only MCX/PTT Device Shipment Revenue: 2025 – 2030 ($ Million)
Figure 32: Global Hybrid LMR-Broadband Device Shipments: 2025 – 2030 (Millions of Units)
Figure 33: Global Hybrid LMR-Broadband Device Shipment Revenue: 2025 – 2030 ($ Million)
Figure 34: Global MCPTT & Broadband PTT Subscriptions: 2025 – 2030 (Millions)
Figure 35: Global MCPTT & Broadband PTT Service Revenue: 2025 – 2030 ($ Million)
Figure 36: Global MCPTT & Broadband PTT Subscriptions by Standards Compliance: 2025 – 2030 (Millions)
Figure 37: Global MCPTT & Broadband PTT Service Revenue by Standards Compliance: 2025 – 2030 ($ Million)
Figure 38: Global 3GPP-Compliant MCX Subscriptions: 2025 – 2030 (Millions)
Figure 39: Global 3GPP-Compliant MCX Service Revenue: 2025 – 2030 ($ Million)
Figure 40: Global Non-MCX Broadband PTT Subscriptions: 2025 – 2030 (Millions)
Figure 41: Global Non-MCX Broadband PTT Service Revenue: 2025 – 2030 ($ Million)
Figure 42: Global MCPTT & Broadband PTT Subscriptions by Vertical Industry: 2025 – 2030 (Millions)
Figure 43: Global MCPTT & Broadband PTT Service Revenue by Vertical Industry:

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2025 – 2030 ($ Million)
Figure 44: Global MCPTT & Broadband PTT Subscriptions in the Public Safety Vertical: 2025 – 2030 (Millions)
Figure 45: Global MCPTT & Broadband PTT Service Revenue in the Public Safety Vertical: 2025 – 2030 ($ Million)
Figure 46: Global MCPTT & Broadband PTT Subscriptions in the Defense Vertical: 2025 – 2030 (Millions)
Figure 47: Global MCPTT & Broadband PTT Service Revenue in the Defense Vertical: 2025 – 2030 ($ Million)
Figure 48: Global MCPTT & Broadband PTT Subscriptions in the Transportation Vertical: 2025 – 2030 (Millions)
Figure 49: Global MCPTT & Broadband PTT Service Revenue in the Transportation Vertical: 2025 – 2030 ($ Million)
Figure 50: Global MCPTT & Broadband PTT Subscriptions in the Utilities Vertical: 2025 – 2030 (Millions)
Figure 51: Global MCPTT & Broadband PTT Service Revenue in the Utilities Vertical: 2025 – 2030 ($ Million)
Figure 52: Global MCPTT & Broadband PTT Subscriptions in the Oil & Gas Vertical: 2025 – 2030 (Millions)
Figure 53: Global MCPTT & Broadband PTT Service Revenue in the Oil & Gas Vertical: 2025 – 2030 ($ Million)
Figure 54: Global MCPTT & Broadband PTT Subscriptions in the Mining Vertical: 2025 – 2030 (Millions)
Figure 55: Global MCPTT & Broadband PTT Service Revenue in the Mining Vertical: 2025 – 2030 ($ Million)
Figure 56: Global MCPTT & Broadband PTT Subscriptions in the Construction Vertical: 2025 – 2030 (Millions)
Figure 57: Global MCPTT & Broadband PTT Service Revenue in the Construction Vertical: 2025 – 2030 ($ Million)
Figure 58: Global MCPTT & Broadband PTT Subscriptions in the Manufacturing Vertical: 2025 – 2030 (Millions)
Figure 59: Global MCPTT & Broadband PTT Service Revenue in the Manufacturing Vertical: 2025 – 2030 ($ Million)
Figure 60: Global MCPTT & Broadband PTT Subscriptions in the Healthcare Vertical: 2025 – 2030 (Millions)
Figure 61: Global MCPTT & Broadband PTT Service Revenue in the Healthcare Vertical: 2025 – 2030 ($ Million)
Figure 62: Global MCPTT & Broadband PTT Subscriptions in the Retail & Hospitality Vertical: 2025 – 2030 (Millions)

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Figure 63: Global MCPTT & Broadband PTT Service Revenue in the Retail & Hospitality Vertical: 2025 – 2030 ($ Million)
Figure 64: Global MCPTT & Broadband PTT Subscriptions in Other Verticals: 2025 – 2030 (Millions)
Figure 65: Global MCPTT & Broadband PTT Service Revenue in Other Verticals: 2025 – 2030 ($ Million)
Figure 66: MCX/PTT Software & Core Infrastructure Revenue by Region: 2025 – 2030 ($ Million)
Figure 67: MCPTT & Broadband PTT Terminal Equipment Unit Shipments by Region: 2025 – 2030 (Millions of Units)
Figure 68: MCPTT & Broadband PTT Terminal Equipment Unit Shipment Revenue by Region: 2025 – 2030 ($ Million)
Figure 69: MCPTT & Broadband PTT Subscriptions by Region: 2025 – 2030 (Millions)
Figure 70: MCPTT & Broadband PTT Service Revenue by Region: 2025 – 2030 ($ Million)
Figure 71: North America MCX/PTT Software & Core Infrastructure Revenue: 2025 – 2030 ($ Million)
Figure 72: North America MCPTT & Broadband PTT Terminal Equipment Unit Shipments: 2025 – 2030 (Millions of Units)
Figure 73: North America MCPTT & Broadband PTT Terminal Equipment Unit Shipment Revenue: 2025 – 2030 ($ Million)
Figure 74: North America MCPTT & Broadband PTT Subscriptions: 2025 – 2030 (Millions)
Figure 75: North America MCPTT & Broadband PTT Service Revenue: 2025 – 2030 ($ Million)
Figure 76: Asia Pacific MCX/PTT Software & Core Infrastructure Revenue: 2025 – 2030 ($ Million)
Figure 77: Asia Pacific MCPTT & Broadband PTT Terminal Equipment Unit Shipments: 2025 – 2030 (Millions of Units)
Figure 78: Asia Pacific MCPTT & Broadband PTT Terminal Equipment Unit Shipment Revenue: 2025 – 2030 ($ Million)
Figure 79: Asia Pacific MCPTT & Broadband PTT Subscriptions: 2025 – 2030 (Millions)
Figure 80: Asia Pacific MCPTT & Broadband PTT Service Revenue: 2025 – 2030 ($ Million)
Figure 81: Europe MCX/PTT Software & Core Infrastructure Revenue: 2025 – 2030 ($ Million)
Figure 82: Europe MCPTT & Broadband PTT Terminal Equipment Unit Shipments: 2025 – 2030 (Millions of Units)
Figure 83: Europe MCPTT & Broadband PTT Terminal Equipment Unit Shipment

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Revenue: 2025 – 2030 ($ Million)
Figure 84: Europe MCPTT & Broadband PTT Subscriptions: 2025 – 2030 (Millions)
Figure 85: Europe MCPTT & Broadband PTT Service Revenue: 2025 – 2030 ($ Million)
Figure 86: Middle East & Africa MCX/PTT Software & Core Infrastructure Revenue: 2025 – 2030 ($ Million)
Figure 87: Middle East & Africa MCPTT & Broadband PTT Terminal Equipment Unit Shipments: 2025 – 2030 (Millions of Units)
Figure 88: Middle East & Africa MCPTT & Broadband PTT Terminal Equipment Unit Shipment Revenue: 2025 – 2030 ($ Million)
Figure 89: Middle East & Africa MCPTT & Broadband PTT Subscriptions: 2025 – 2030 (Millions)
Figure 90: Middle East & Africa MCPTT & Broadband PTT Service Revenue: 2025 – 2030 ($ Million)
Figure 91: Latin & Central America MCX/PTT Software & Core Infrastructure Revenue: 2025 – 2030 ($ Million)
Figure 92: Latin & Central America MCPTT & Broadband PTT Terminal Equipment Unit Shipments: 2025 – 2030 (Millions of Units)
Figure 93: Latin & Central America MCPTT & Broadband PTT Terminal Equipment Unit Shipment Revenue: 2025 – 2030 ($ Million)
Figure 94: Latin & Central America MCPTT & Broadband PTT Subscriptions: 2025 – 2030 (Millions)
Figure 95: Latin & Central America MCPTT & Broadband PTT Service Revenue: 2025 – 2030 ($ Million)
Figure 96: Global MCPTT & Broadband PTT Service Revenue: 2025 – 2028 ($ Million)
Figure 97: Future Roadmap of MCPTT & Broadband PTT Services: 2025 – 2030

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