

Mission Critical Services (MCX)

Overview

Mission Critical Services (MCS) under 3GPP standards provide secure, low-latency communication tailored for emergency and public safety operations, ensuring prioritized, high-quality audio and video calls with robust location and role-based functionalities.

Salient Features

- 3GPP Standard Compliant: Ensures adherence to global standards for mission-critical communication.
- Location-Based Calling: Facilitates communication based on the user's geographic location.
- Role-Based Calling: Enables calls tailored to specific roles within an operation.
- Prioritized Services over Network: Guarantees priority handling of critical communication.
- Priority Calling: Supports high priority calls, essential in emergencies.
- High Definition Audio/Video Call: Provides clear, high-quality audio and video communications.
- Optimized for Minimal Latency: Designed to minimize delays for instant communication.
- Highly Secure and Confidential: Ensures that all communications remain secure and private.

MCPTT MCVIDEO • Private Call

- Group Call
 Emergency Call
- Emergency Call
- Broadcast Call
- Imminent Peril CallAmbient Listening Call
- First to Answer Call
- Floor Control

Private CallGroup Call

- Emergency Call
- Broadcast Call
- Iminent Peril Call
- Ambient Viewing Call
- Video(Push/Pull)

MCDATA

- SDS(Short Data Service)
- FD (File Distribution)
- · Notification HAndling
- Location
- Emergency Alerts

Target Industries

- Security and Emergency Forces (NDRF, SDRF)
- Utilities (Oil & Gas, Electricity, Mines, etc.)
- Hospitals, Fire and Traffic Department
- Transport (Railways, Buses, Metros, Trams)
- Ports and Airports
- · Army and Defence
- Commercial Sector Uses (Shopping Malls, Hotels)



CDOT MCX Application

- MCX Client Android application for handheld devices
- Support for real time MCPTT MCDATA, MCVIDEO Communication Support
- Intuitive and Interactive Interfaces
- Support for Location Services
- End to End Security

CDOT MCX Server

- Support for MCX Application Server(AS)
- Support for Common Services Core Servers(IDMS, CMS, GMS, LMS, KMS)
- Support for Map Server
- Support for Admin Control Server

CDOT MCX Dispatcher

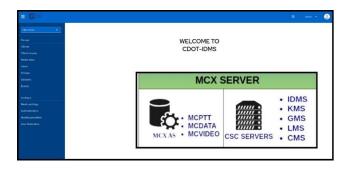
- Support for seamless communication and control
- Support for real time MCPTT MCDATA, MCVIDEO communication
- Support for Advanced Location Services
- End to End Security

Highlights

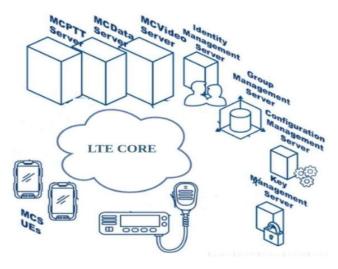
- C-DOT Successfully Participated in 4th FRMCS PlugTests (Seamless Interoperability with various International counterparts)
- C-DOT Successfully Completed POC for Indian Railway











High Level Architecture