

# Company Introduction

## **Business Update Presentation**

Marketing Operations [ACS]

May 2020

## Organization

Introduction to Consort Digital,  
Operations and Capabilities

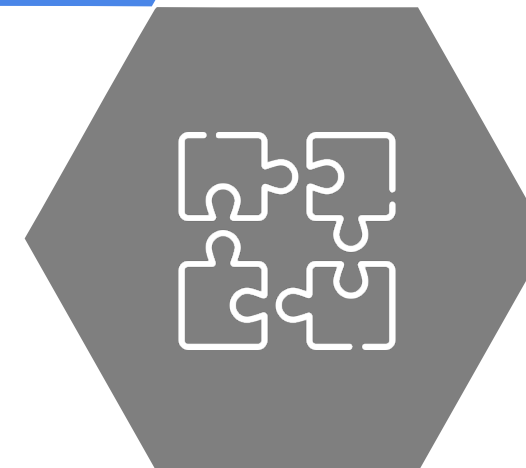


## Products

Portfolio of Consort Digital and  
third party products

## Technology

Technology in use based  
on proven OPEN standards



## Solutions

Mission-critical communication solutions  
for various industry verticals

## References

References and case studies  
across market verticals



## Services

Services for project deployment,  
operations and support

# Organization

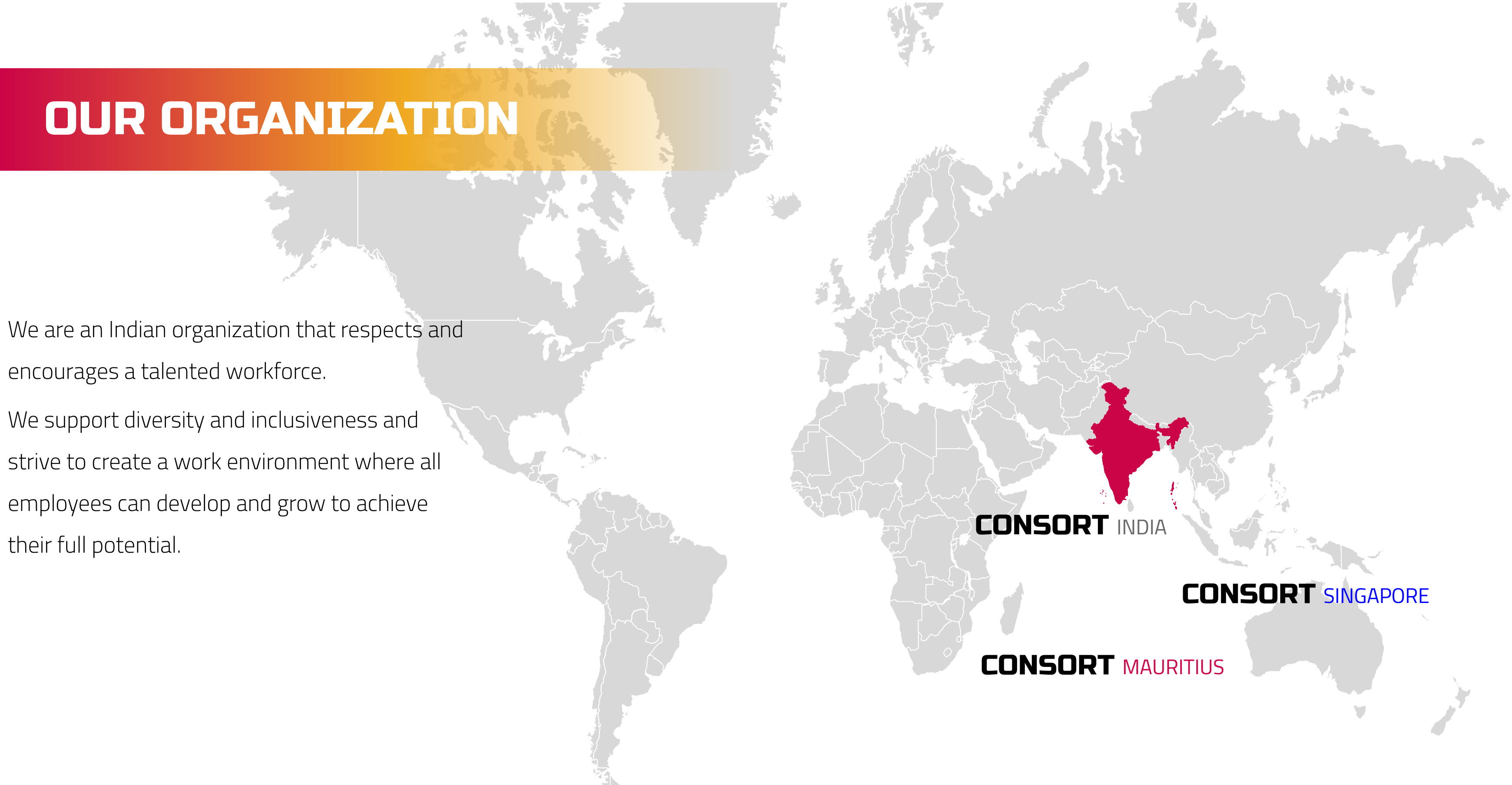
Introduction to Consort Digital, Operations and Capabilities



# OUR ORGANIZATION

We are an Indian organization that respects and encourages a talented workforce.

We support diversity and inclusiveness and strive to create a work environment where all employees can develop and grow to achieve their full potential.



# Technology

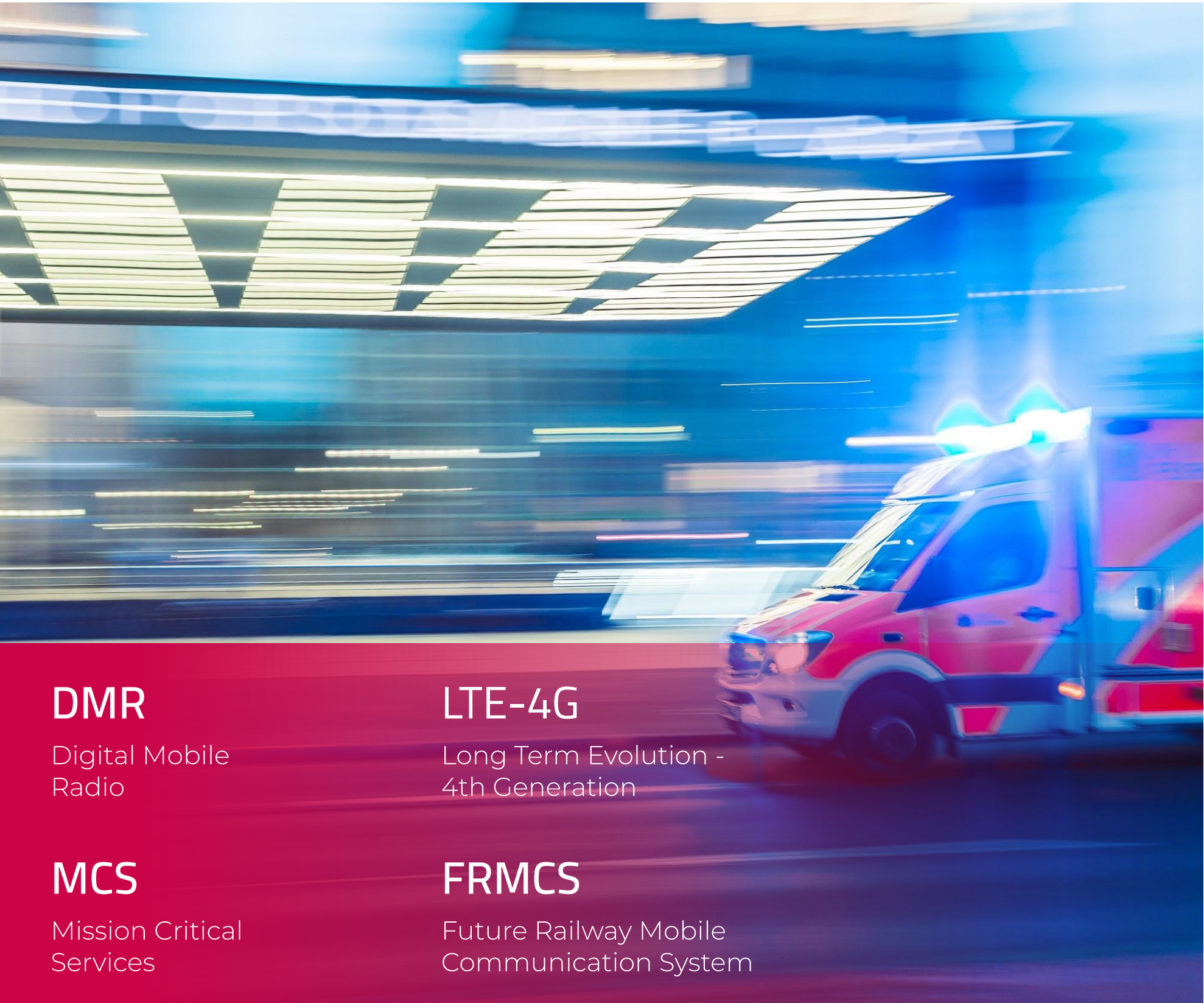
Technology in use based on proven OPEN standards

# Technology & Standards

Mission Critical technologies are undergoing advancements & evolution on the basis of changing user requirements. ETSI has delivered successful standards such as TETRA and DMR for narrow-band communication.

TEDS provides increased data capacity retaining benefits of trusted narrow-band technologies. Further, 3GPP is working to enhance the current LTE standard to support MCPTT and other MC Services such as Mission Critical Data and Video.

The newer 5G is not a replacement for 4G and we will find LTE 4G and 5G technology working together for the foreseeable future.



**TETRA**

Terrestrial Trunked Radio

**TEDS**

TETRA Enhanced Data Service

**DMR**

Digital Mobile Radio

**LTE-4G**

Long Term Evolution - 4th Generation

**LTE-5G**

Long Term Evolution - 5th Generation

**MCPTT**

Mission Critical Push To Talk

**MCS**

Mission Critical Services

**FRMCS**

Future Railway Mobile Communication System



# MCX Standard



## OPEN Standard

MCX is being developed as an OPEN Standard by ETSI with industry support and contribution. This ensures standardised specifications and interfaces.

## 3GPP Roadmap

3GPP SA6 Working Group standardised MCPTT in Rel-13 during 2016. MCX enhancements are since then part of each new 3GPP release.



## Interoperability

Global Certification Forum (GCF) & The Critical Communication Association (TCCA) joint taskforce is creating an agreed testing and certification system for MCX.

## MCX Objective

The convergence of voice, data and video is compelling the demand for new standards of Mission Critical Communication.



### Smart Devices

Next- Generation professional devices available support voice, data and video communication





# MCX Benefits

1

**Push To X** - MCX allows instantaneous Group communication for voice, data and video. Provision to use broadband 3GPP as well as Non-3GPP Access Networks ensure support for new generation broadband applications.

2

**Enables New features** - New features such as multi device access, multi-user floor control, multi-service talkgroups for PTT, Data and Video among others

3

**Standards & Interoperability** - MCX being part of the 3GPP Standard evolution will ensure continuous enhancement and development. Interoperability will ensure networks, application servers, user apps etc. work seamlessly with each other.

4

**COTS Advantage yet purpose-built technology** - MCX Solutions utilizes user devices which are built of COTS technology yet include consideration for demanding use by professional users.

# References

References and case studies across market verticals

## Mass Transit



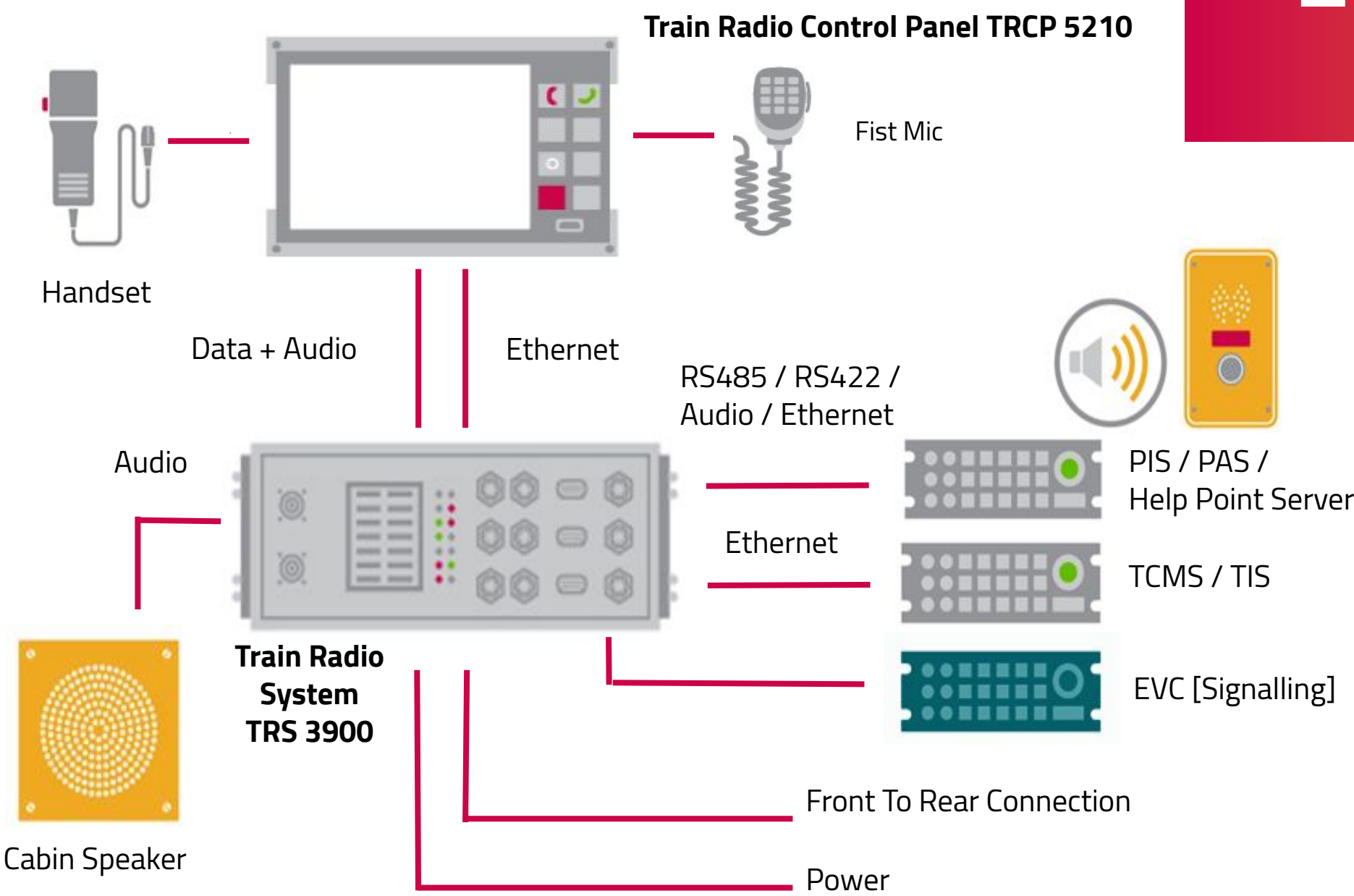
- Nagpur Metro
- Mauritius Metro
- Mumbai Metro Line 2A, 2B, 7
- Dhaka Metro
- Western Rail
- Mumbai Monorail



# Products

Portfolio of Consort Digital and third party products

# LTE TRAIN RADIO SOLUTION



- MCPTT, MCDATA Release 15 Compliance
- 3GPP Release 12 + QCI RF Compliance
- Multi LTE module support [ 2/4/8]
- Included Multi Access Router for ETCS 2 Signalling
- Antenna Diversity
- Accessories : Handset / Cab Speaker / High Gain Train Antenna
- Front /Rear redundancy
- Interfaces :
  - TCMS / TIS
  - Onboard PIS/PAS/PA
  - Onboard Help Point
  - Signalling / Onboard AVLS
  - CCTV

# LTE TRCP 5207

- MCPTT, MCDATA Release 15 Compliance
- 3GPP Release 12 + QCI RF Compliance
- Touch Screen Option
- Configurable Hot Keys
- Maximum harmonized LTE Band Support
- Built In Test Equipment
- IP 65 / EN Rail Compliance
- Micro USB for Data Backup & Logging
- Accessories : Handset / Speaker / Train Antenna





# Train Radio System TRS 3900

- 19' Rack for easy installation
- MCPTT, MCDATA Release 15 Compliance
- 3GPP Release 12 + QCI RF Compliance
- Multi LTE module support [ 2/4]
- Antenna Diversity
- Front - Rear Redundancy
- 110VDC Input / EN 50121-2-3 Compliant
- Interfaces :
  - TCMS / TIS
  - Onboard PIS/PAS/PA
  - Onboard Help Point
  - Signalling / Onboard AVLS
  - CCTV
- EN 50155 Compliant





## MCDX DISPATCHER SOLUTION

- MCPTT, MCDATA Release 15 Compliance
- Role Management
- Functional Addressing
- Location based Calling
- COMMUNICATION View : MCPTT & MCDATA Communication
- TRAINS View : Train Position AND Point & Click MCPTT
- ALERTS View : Rolling Stock Alarms
- Web Based Interface
- Support for Redundant Configuration
- MCPTT Compliant Interfaces

# LTE Radio Control Panel

- MCPTT, MCDATA Release 15 Compliance
- 3GPP Release 12 + QCI RF Compliance
- 10" Touch Screen
- Configurable Hot Keys
- Maximum harmonized LTE Band Support
- Built In Test Equipment
- Accessories : Gooseneck Mic / Speaker / Flat inbuilt Antenna

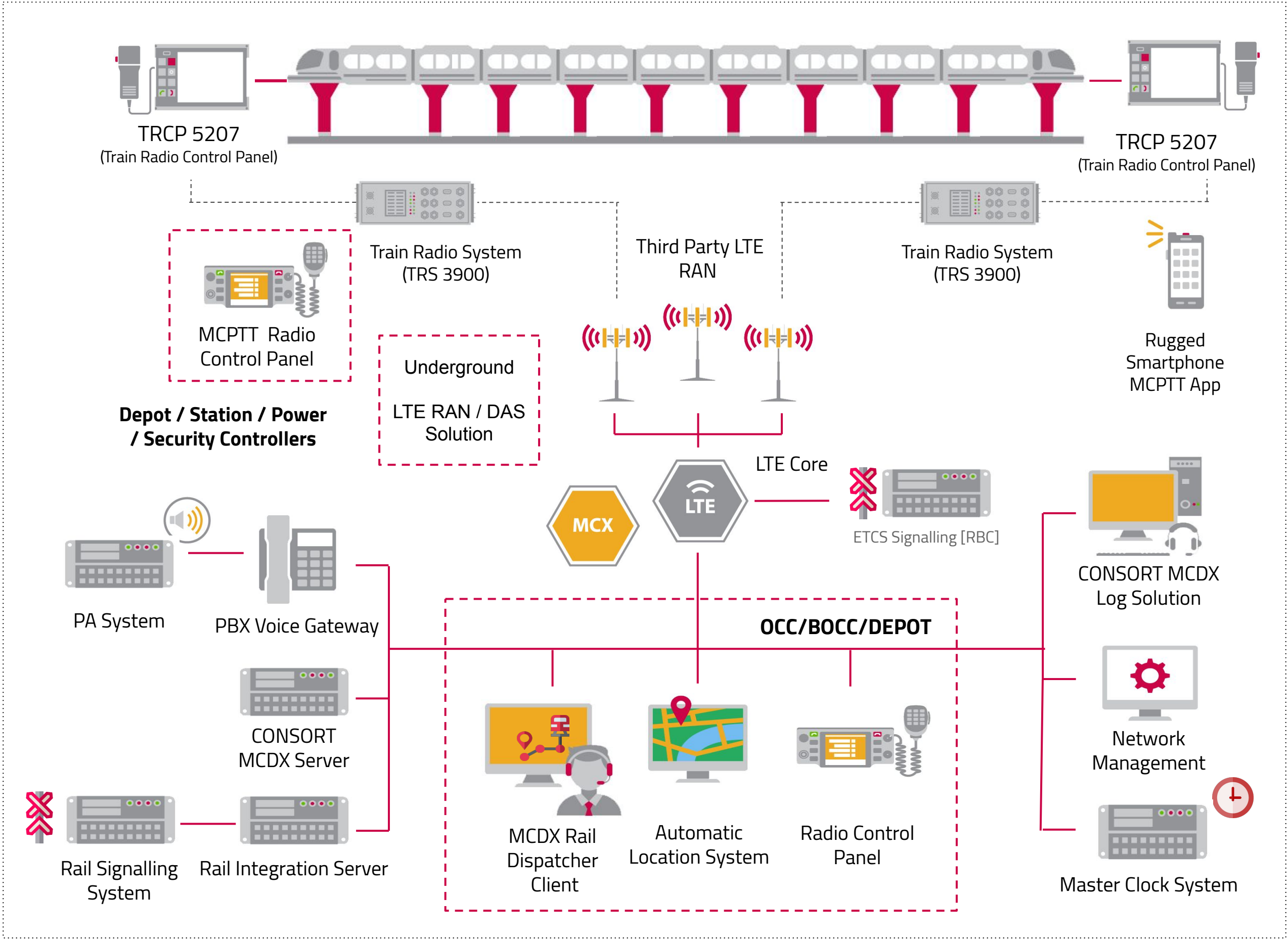




# Solutions

Introduction to MCX, Standardization, Objective & Roadmap

LTE Radio Solution



All Manufacturing **Mass Transit** Mining National Defense Oil & Gas Public Safety Transportation



Mass Transit >  
LTE Train Radio System for Metro Rail



Mass Transit >  
TETRA Radio System for Metro Rail



Mass Transit >  
Mobile Train Radio Communication System



Mass Transit >  
TETRA Radio Solution for Light & Mono Rails

Transport Solutions



# Services

Services for project deployment, operations and support

# Services

## Design & Engineering

Design & Engineering services includes coverage analysis, traffic modelling, detailed design documentation, RAMS modelling.

## Installation & Commissioning

Achieve trouble free installation and early go-live by specialized and professional teams for mission critical solutions

## Project Management

Managing teams to achieve project deliverables as per customer requirements



## Application Development

Developing custom applications for various end user industries across multiple technologies and standards

## Managed Services

Users can focus on their core business or mission while we ensure end to end management of their mission critical solution

## Support Services

Support services help customers operate and maintain mission critical networks in normal or emergency situations



For more info : - [www.consortdigital.com](http://www.consortdigital.com) | info@consortdigital.com

