TETRA THROUGH THE CHANNEL (TTC) TETRA UPDATES AND STRATEGY 2023

DANIEL SCOTNEY - June 2023

MOTOROLA SOLUTIONS

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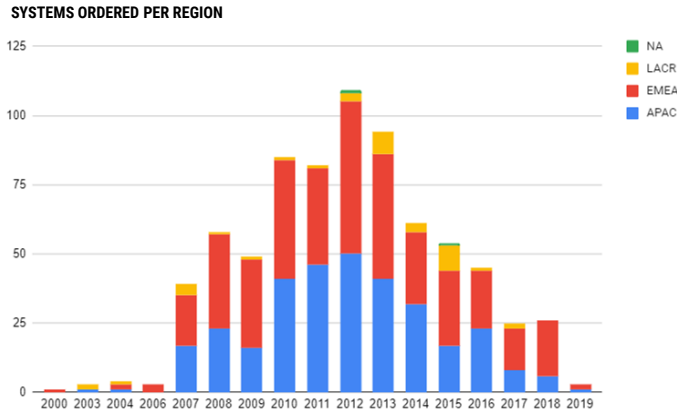EE, Poland & Baltics

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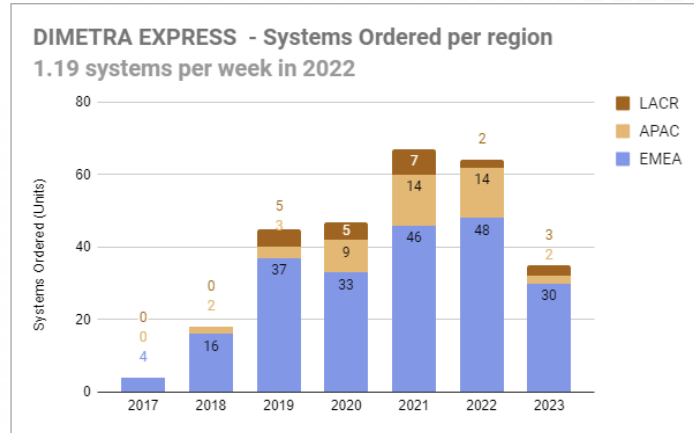
DIMETRA SMALL SYSTEMS
WORLDWIDE SHIPMENTS
60M SALES (DEVICES AND SYSTEMS) IN 2022

LEGACY SYSTEMS (DIPM+DIPC)

SYSTEMS ORDERED PER REGION

Legend: NA, LACR, EMEA, APAC

DIMETRA EXPRESS

DIMETRA EXPRESS - Systems Ordered per region
1.19 systems per week in 2022

Y-axis: Systems Ordered (Units)

Legend: LACR, APAC, EMEA

Year	EMEA	APAC	LACR
2017	4	0	0
2018	16	2	0
2019	37	5	
2020	33	9	5
2021	46	14	7
2022	48	14	2
2023	30	2	3

CONFIGURATION OPTIONS

DIMETRA EXPRESS
MTS4 TETRA SYSTEM
- The Express Server is integrated in the MTS Cabinet
- 1-3 Base Radios (As the DIMETRA Express server takes a base radio slot)

DIMETRA EXPRESS
MTS2 TETRA SYSTEM
- The Express Server is integrated in the MTS Cabinet
- 1 Base Radio (As the DIMETRA Express server takes a base radio slot)

DIMETRA EXPRESS
MTS1 TETRA SYSTEM
- Modular configuration MTS1 + Standalone Express Server.
- Can be mounted outdoors with the right housing
- 1 Base Radio (or 2 base radios in dual mode)

DIMETRA EXPRESS
STANDALONE TETRA SYSTEM
- Allows reuse of base stations
- Refresh of existing DIMETRA IP Compact or DIMETRA IP Micro

CONFIGURATION OPTIONS
WHEN TO POSITION DIMETRA EXPRESS Vs DIMETRA X CORE

	DIMETRA EXPRESS	DIMETRA X CORE	DIMETRA X CORE DEPLOYABLE
COVERAGE	10+ sites, single zone	1 - 5000+ sites, multi zone	1 - 120+ sites. Multi zone
CAPACITY	50 – 4000+ users	100 - 1M+ users	100 - 40k+ users
RESILIENCE	Link level redundancy, local / geographic redundancy	Site, link, edge, zone level, local / geographic redundancy	Customised resilience
SECURITY	Clear authentication, air interface encryption	Mission-critical security	Mission-critical security, customised security
PARTITIONING	Single user organisation	Multiple user organisations	Multiple user organisations
DEPLOYMENT	Flexible	Highly configurable	Fully customisable
APPLICATION	Enterprise & local	Public safety regional & nationwide	Military, defence & peacekeeping

ENSURE YOUR NETWORK
IS CYBER-SECURE

DIMETRA EXPRESS IS A SECURE NETWORK THAT PROTECTS AGAINST UNAUTHORISED USERS, SNOOPERS AND HACKERS

- Layered defence architecture
- Air Interface Encryption – encrypts over the air communications and signalling between radios and base stations
- Authentication
- Cyber Security
- Firewall
- OS hardening
- Regular software updates include
- OS security patches
- Regular, fully tested antivirus updates

*Access to this service is dependent on the customer having a valid software maintenance license applied to the system, i.e. a service contract.

SET UP IN MINUTES

- Get up and running quickly

- DIMETRA Express integrates the switch and base radios into your existing IT network using a single IP address

- Simple browser-based installer

- Bulk upload of multiple subscriber radios

- Approximately 15 minutes from start to finish

# BROWSER-BASED SYSTEM HEALTH MONITOR

- Tracks the health of your system

- Monitors status of servers, base stations

- Enables faults to be identified so corrective action can be taken

- For more detailed reporting - fault forwarding API enables a third party solution to be connected for extended fault management
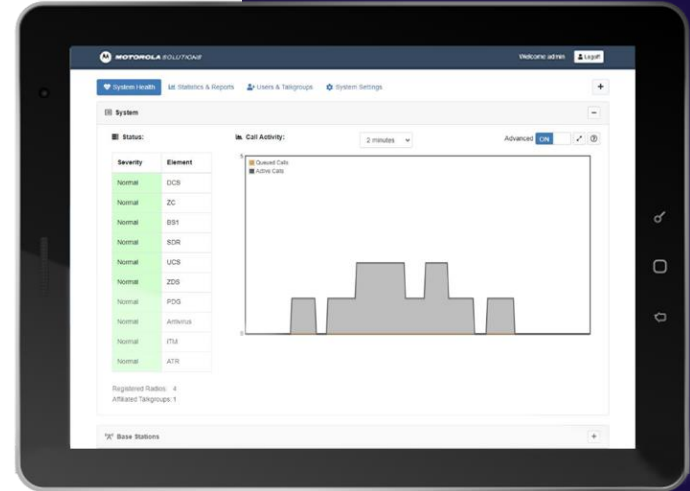
BROWSER-BASED RADIO CONTROL MANAGER APPLICATION

- Easily see what is happening in a radio fleet

  - Check emergency alarms

  - Monitor device status

  - Temporarily disable ("Stun") a radio

  - Remove a radio from the system

  - Add or remove talkgroups

  - Create or schedule reports

  - Revive recovered radios that had been temporarily disabled

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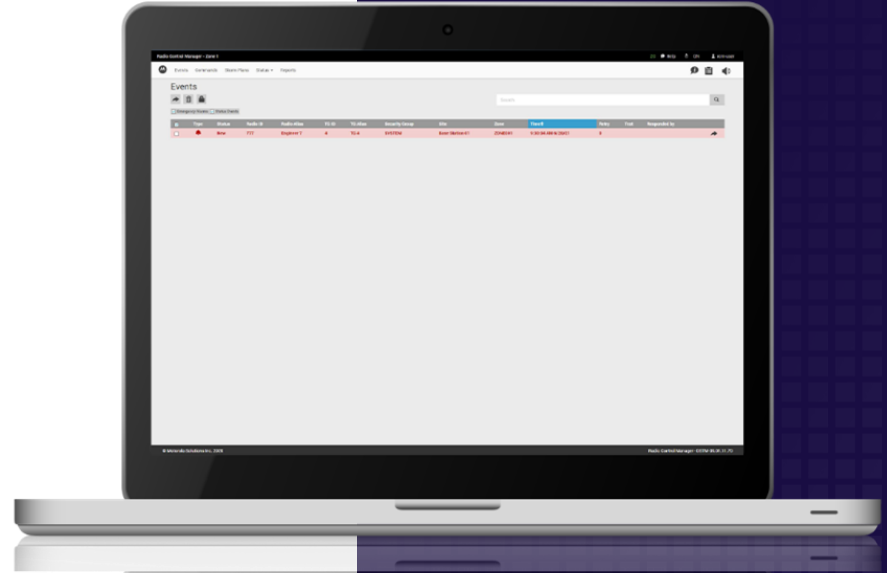
DIMETRA EXPRESS INFRASTRUCTURE SERVICES

AT-A-GLANCE

SERVICES	WARRANTY	ESSENTIAL	ADVANCED
Network Updates			✓
24x7x365 Remote Technical Support - Critical Faults (Priority 1)		✓	✓
8x5* Remote Technical Support	✓	✓	✓
Self-installed Security Update Services	✓	✓	✓
Self-installed Software Updates	✓	✓	✓
1-Year Hardware Repair	✓	✓	✓

NOTE:

*9am-5pm GMT, Mon-Fri excluding public holidays.

The service duration for DIMETRA Express Warranty and Essential is 3 years, and the Advanced Service package has a duration of 6 years.

You can purchase the following as options with any of the support packages:
• Extended Hardware Repair
• Hardware Repair with Advanced Replacement
• 2 or 3 day On-Site Technical Support

DIMETRA Express
Online Training

▶ 1.5 h	DMT1087 DIMETRA Express Installation, Configuration and Maintenance	🔗
▶ 0.5 h	SLS0075 DIMETRA Express Sales Training	🔗
▶ 0.5 h	DMT0038 DIMETRA Express Redundant System Design, Installation, Configuration, and Maintenance	🔗
▶ 0.5 h	DMT1114 DIMETRA Express Security Features:Installation, Configuration, and Maintenance	🔗
▶ 0.5 h	DMT0047 How to Program a TETRA Radio	🔗

DIMETRA Express
Instructor LED Training

👤 2 days	DMT0036 DIMETRA Express Installation, Configuration, and Maintenance Workshop	🔗
👤 2 days	DMT0070 DIMETRA Express Advanced Workshop	🔗
👤 2 days	DMT0072 DCX9000 Workshop	🔗

DIMETRA EXPRESS: MIGRATION

MOTOROLA SOLUTIONS

DIMETRA EXPRESS - MIGRATION

DIMETRA MICRO

SMOOTH MIGRATION AND SITE UPDATES

DIMETRA COMPACT

DIMETRA EXPRESS 2.3

DIMETRA EXPRESS LEGACY

SUA - MOTOROLA SOLUTIONS UPDATE PROGRAM

WHY YOU NEED TO MIGRATE YOUR EXISTING DIMETRA SYSTEM

MOTOROLA ANNOUNCED THE END OF LIFE OF DIMETRA IP COMPACT AND DIMETRA IP MICRO IN MAY 2018

All Support for DIPM and DIPC ended December 2021

Higher cost of maintaining your network

Your server is at risk of cyber attack

In the event a core server failure your network fails

Lead times for replacement parts are extremely high

Upgrade now to ensure continuity of service

MIGRATE EASILY FROM YOUR EXISTING DIMETRA SYSTEM

Simply replace your existing DIMETRA core with the standalone DIMETRA Express server

Preserves the investment in your existing Radio Access Network (RAN)

Can be scheduled during a regular service visit

No unplanned downtime

Onsite technical support for ease of migration

Full operator training

Up and running smoothly

WAVE PTX

™

TAKE INSTANTANEOUS COMMUNICATIONS FURTHER
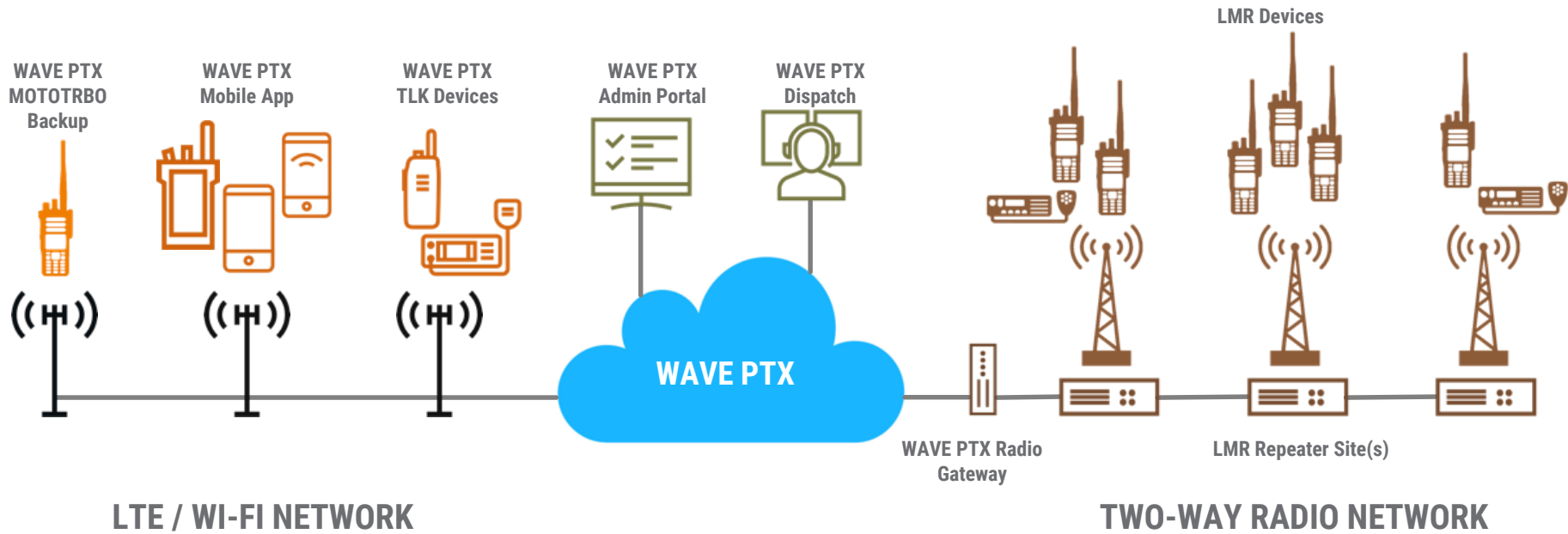WITH NETWORK-INDEPENDENT BROADBAND
PUSH-TO-TALK

Daniel Scotney

EMEA Sales

MOTOROLA *SOLUTIONS*

WAVE PTX LMR INTEROPERABILITY
ADVANTAGE OF WIRELINE INTEGRATION

WAVE PTX MOTOTRBO Backup

WAVE PTX Mobile App

WAVE PTX TLK Devices

WAVE PTX Admin Portal

WAVE PTX Dispatch

LMR Devices

WAVE PTX

WAVE PTX Radio Gateway

LMR Repeater Site(s)

LTE / WI-FI NETWORK

TWO-WAY RADIO NETWORK

SOLUTION BENEFITS
- Stay connected when outside your LMR coverage areas
- Bring non-radio users into the conversation
- Leverage existing devices that you already own
- Communications without compromise

FEATURES SUPPORTED
- Group calls & private calls
- Alias & Called ID
- Emergency receive functionality*
- Single gateway, multiple concurrent conversations

SYSTEMS SUPPORTED USING WIRELINE INTEGRATION
- MOTOTRBO IP Site Connect
- MOTOTRBO Capacity Max
- MOTOTRBO Capacity Plus
- DIMETRA Express
- All other systems supported via ROIP Gateway (Donor Radio)

MULTI TENANT GATEWAY
HARDWARE MINIMUM SPECIFICATIONS - TIER 1 (10 talkpaths)

Minimum Requirement

- Processor family - Intel 9th generation Core i5 (recommended i5-8500T/9500T)
- Process cores - 4/6 core with 2.2 Ghz
- RAM - 8GB DDR4
- Storage - 250GB SSD
- Networking - 1 NIC
- Remote management - Remote desktop connectivity
- Support - As per customer requirement
- Software requirement (customer to provide license keys only)
  - Windows 10 Pro OS

MSI recommendation : HP PRODESK 400 G5 DESKTOP MINI

Note : For Tier 1 hardware, the OS is required to be pre-installed by customer before initiating configuration request to MSI.

Note: Hardware monitoring is Customer's responsibility

Note: This hardware is recommended for iPSite Connect and Dimetra Express Interop.

DCX9000

FOR DIMETRA™ EXPRESS

MOTOROLA SOLUTIONS

VOICE

Utilises extensive DIMETRA dispatch capabilities and ensures a reliable connection – from any location.

- Voice calls – group and private
- Emergency calls
- Ambiance Listening calls
- Multiselect transmissions
- Group patching
- Motorola or any commercially available audio accessories
- Voice logs

TEXT

Share business-critical information as events unfold with workgroups and other stakeholders right from the dispatch console.

- Short Data Messages (SDS) over TETRA – incoming and outgoing
- Instant messaging (sent via Telegram Messenger) supporting:
  - Chats
  - Multimedia messages
  - Supports any file type

This is a zoomed view for instructional purpose.

TRACK

Enable your team to communicate with vehicles and teams in-map quickly and easily.

- Automatic Vehicle Location (AVL) and mapping
- Monitor defined areas for safety and operational efficiency improvements.
- Real-time display of GPS position of TETRA terminals on a Web Map Service (WMS) such as OpenStreetMap.
- Click the map icon to establish an individual call via TETRA.
- Acquire GPS coordinates at regular intervals and track radio users.
- Create predefined geographical areas by drawing fences on the map (Geofencing).
- Apply rules to radios that can enter/exit geofences.

This is a zoomed view for instructional purpose.

RECORD

Instantly replay voice logs to confirm business-critical information when coordinating or reviewing a response.

- Search and playback voice calls.
- Calls and call-related data recorded with Archiving Interface Server (AIS).
- Recorded audio is decoded and converted to analogue for playback.
- Download as MP3 or WAV files — requires a security fingerprint.
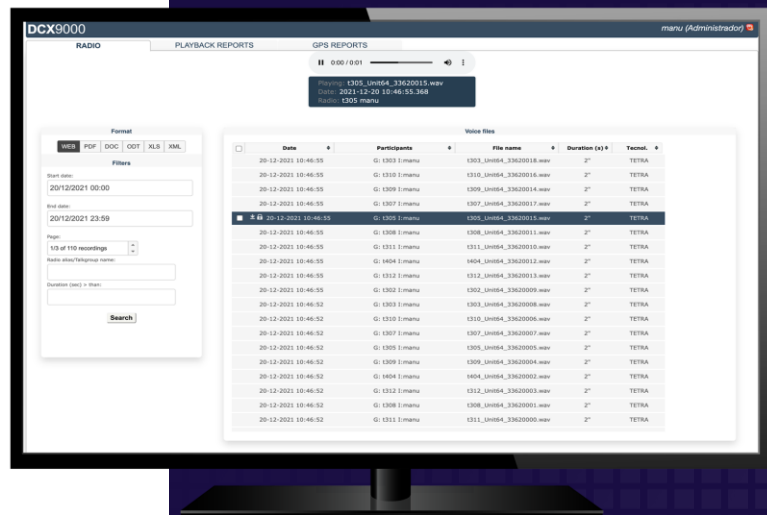
CYBERSECURITY FEATURES:

DCX9000 Server

ISO 27001 Security Policies Applied:

- Information Security Policy
- Security Incident Management Policy
- IT Security Policy
- Information Classification Policy
- Service Availability Plan
- Corporate Security Architecture

Accredited in Software Engineering, Quality Requirements and Software Product Evaluation

ISO-25010 compliance in all aspects which include:

- Functional Suitability
- Performance efficiency
- Compatibility
- Usability
- Reliability
- Security
- Maintainability
- Portability

Complies with the cybersecurity requirements of the ENS

This includes the following:

- Equipment protection
- Communications Protection
- Protection of Information Media
- Protection of computer applications
- Data protection
- Protection of services

DCX9000 has also successfully passed internal product assessment security requirements by Motorola Solutions, Inc.

DIMETRA EXPRESS PACKAGE DEAL

Get your customers talking at a very competitive price
Buy the Complete Package for less than the Portable Radios alone
Package includes DIMETRA Express Server - MTS2 Base Station and MTP8550Ex or MXP600 Portable Radios

FLEXIBLE PACKAGE COMBINATIONS

PACKAGE 1
€79,880 | **$80,000** | £69,168

Integrated
MTS2 Base Station and
DIMETRA Express Server

x60
MTP8550Ex
incl. antenna, battery, Belt Clip, SUC

PACKAGE 2
€55,916 | **$56,000** | £48,418

Integrated
MTS2 Base Station and
DIMETRA Express Server

x60
MXP600
incl. antenna, battery, Belt Clip, Travel Charger

PACKAGE 3
€82,277 | **$82,400** | £71,243

Standalone
DIMETRA Express Server
and MTS2 Base Station

x60
MTP8550Ex
incl. antenna, battery, Belt Clip, SUC

PACKAGE 4
€58,313 | **$58,400** | £50,493

Standalone
DIMETRA Express Server
and MTS2 Base Station

x60
MXP600
incl. antenna, battery, Belt Clip, Travel Charger

Limited time offer of highly competitive price for DIMETRA Express Accredited Partners.
Offer closes 31st December, 2023
T1 partners and Distributors can place as many package orders as required during this period
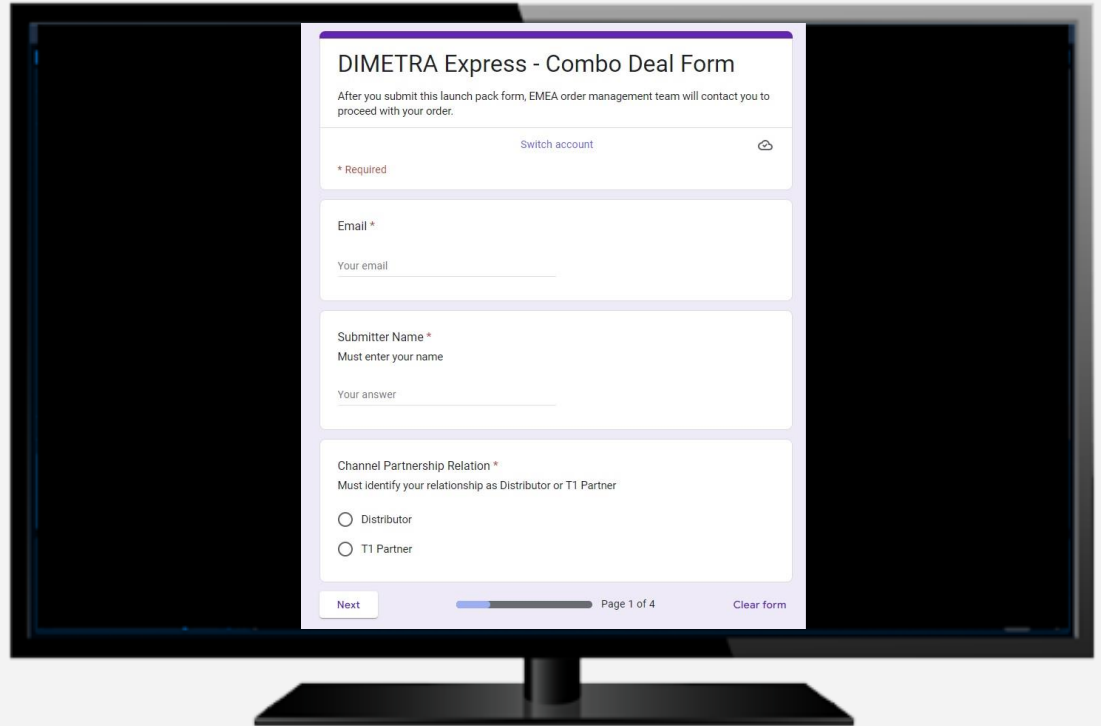
HOW TO BUY

- Fill out the online form **here**

- Select your package and RF band

- You will be sent a confirmation email

- Send the email to the Ordering team dimexp@motorolasolutions.com

MOTOROLA SOLUTIONS

THANK YOU