

MOTOROLA IS UNIQUELY POSITIONED TO SERVE YOUR NEEDS, DELIVERING UNPRECEDENTED CAPABILITIES WITH NEXT GENERATION SOLUTIONS

# PARTNER WITH AN INDUSTRY LEADER

## TELL US HOW WE CAN HELP

To get ensure you get the maximum value from your Dimetra IP Compact network, we offer a comprehensive portfolio of services across the lifecycle of critical communications solutions - from consultation around initial concepts to design, integration and ongoing solution support.

### ASSESS, PLAN AND DESIGN

Professional Services: Industry experts offer technology assessments and planning and design services to help you prepare for next generation technologies.

### INTEGRATE AND OPTIMISE

Integration Services: Experienced teams bring together the right elements to address your end-to-end system customisation requirements by integrating large-scale, multi-service and multi-vendor solutions including software development and support that deliver measurable results.

### SUPPORT AND SECURE

Support Services: World-class operations centers and emergency response teams are committed to keeping your critical operations online and backing your technology investments with technical support.

### HOST AND MANAGE

Managed Services: Highly-secure, enterprise-class managed solutions and hosted services help you reduce costs and manage risk while allowing you to focus on your core mission.

For more information on our mission critical network solutions, please visit us on the web at: [www.motorolasolutions.com/tetra](http://www.motorolasolutions.com/tetra)

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DIMETRA\_IP\_COMPACT\_BROCHURE\_UK\_01/12



# A COMPLETE AND COMPACT TETRA SOLUTION

MOTOROLA DIMETRA IP COMPACT





# A COMPLETE AND COMPACT TETRA SOLUTION

Whether it's coordinating a rapid response or empowering mobile workers with essential information, wireless communications systems are being depended upon to drive business performance.

When critical operations are at stake, downtime in communication systems is simply not an option. It is this need for secure, reliable and high performance communication services that has driven the success and uptake of TETRA systems.

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## COMMUNICATIONS SOLUTIONS THAT CAN EVOLVE AS YOU GROW

COMPETITIVE FORCES COMBINED  
WITH PERSISTENT DOWNWARD  
PRESSURE ON BUDGETS HAVE  
RESET EXPECTATIONS ABOUT  
CRITICAL COMMUNICATIONS  
SYSTEMS.

Motorola TETRA solutions benefit from over 80 years of learning from customers operating in the most critical and demanding environments, across over 100 countries – providing the peace of mind and confidence that only a global leader can bring. It means that by working with Motorola, you can build on the widest technology portfolio in the industry and stay at the forefront of TETRA development – with compatibility and interoperability assured.

For enterprise environments, we understand that as well as providing the backbone of critical operations, communications systems must be matched to operational budgets. What this means is a system that is scalable and with the flexibility to adapt to the changing operational needs of the enterprise. That's where our Dimetra IP Compact TETRA system comes in.

Dimetra IP Compact is a fully integrated TETRA radio communications solution developed to meet the needs of public safety, industrial and commercial enterprise users of all sizes, across all market sectors. Modular, scalable, compact and affordable, Dimetra IP Compact provides a flexible architecture that supports all the high-quality voice and seamless data capabilities demanded by professional mobile radio users, in a solution that can grow as your user base expands or your operational requirement changes - enabling you to manage your investment. Whether you are starting small with a voice-centric solution or opting for our Geographical Redundancy solution, a modular approach means that you can expand coverage and services as demand grows – without disrupting your existing users.

### PROVEN CAPABILITY

Dimetra IP Compact uses the same software and technology platform as our nationwide Dimetra IP TETRA systems deployed for some of the world's most demanding and complex public safety networks. It provides users with the same tried and tested range of features plus a commitment to ongoing development and support that has established Motorola as the frontrunner in product innovation, network design and deployment. With the services offered by Dimetra IP Compact, you can increase the productivity and efficiency of your workforce – and strengthen your competitiveness.

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# A NEW LEVEL OF COLLABORATION

## MISSION CRITICAL PUSH-TO-TALK (PTT) SERVICES

With the Dimetra IP Compact, your mobile workers can benefit from mission critical group and individual PTT services. Users can immediately reach an individual, a team, a department or your entire organization at the push of a button – making them better able to immediately resolve any issue, on the spot.

## ADVANCED INDIVIDUAL AND GROUP MESSAGING

Text messaging between co-workers improves collaboration and accountability. Using the TETRA Short Data Service (SDS), workers can send text messages that might not be appropriate using PTT. Supervisors can send task lists to groups or to individual staff members, and workers can send acknowledgements in the form of status messages, as each task is completed, providing a written audit trail.

## MOBILIZING INSTANT RESPONSE

As with all Motorola TETRA systems, Dimetra IP Compact has been engineered to facilitate immediate mobilization and a coordinated incident response.

## DYNAMIC TEAM MANAGEMENT

Through the powerful Dynamic Group Number Assignment (DGNA) feature, selected staff members can be brought together in a single talk-group by a designated operator – helping you achieve a faster, co-ordinated response to unforeseen events.

## LOCATION TRACKING APPLICATIONS

Dispatching the nearest, most appropriate staff members to an incident is often vital to ensuring the safety of the workforce as well as to successfully resolving incidents.

With the Motorola MotoMapping application, the locations of staff members carrying GPS-enabled TETRA radios can be tracked visually in real-time, against your chosen overlay. Alternatively, through our Location API's, you can produce your own custom mapping applications to track the workforce.

AT THE CORE OF DIMETRA IP COMPACT TETRA SYSTEM ARE A SET OF ADVANCED GROUP-BASED AND PRIVATE COMMUNICATIONS SERVICES.

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# INTEGRATED ENTERPRISE COMMUNICATIONS

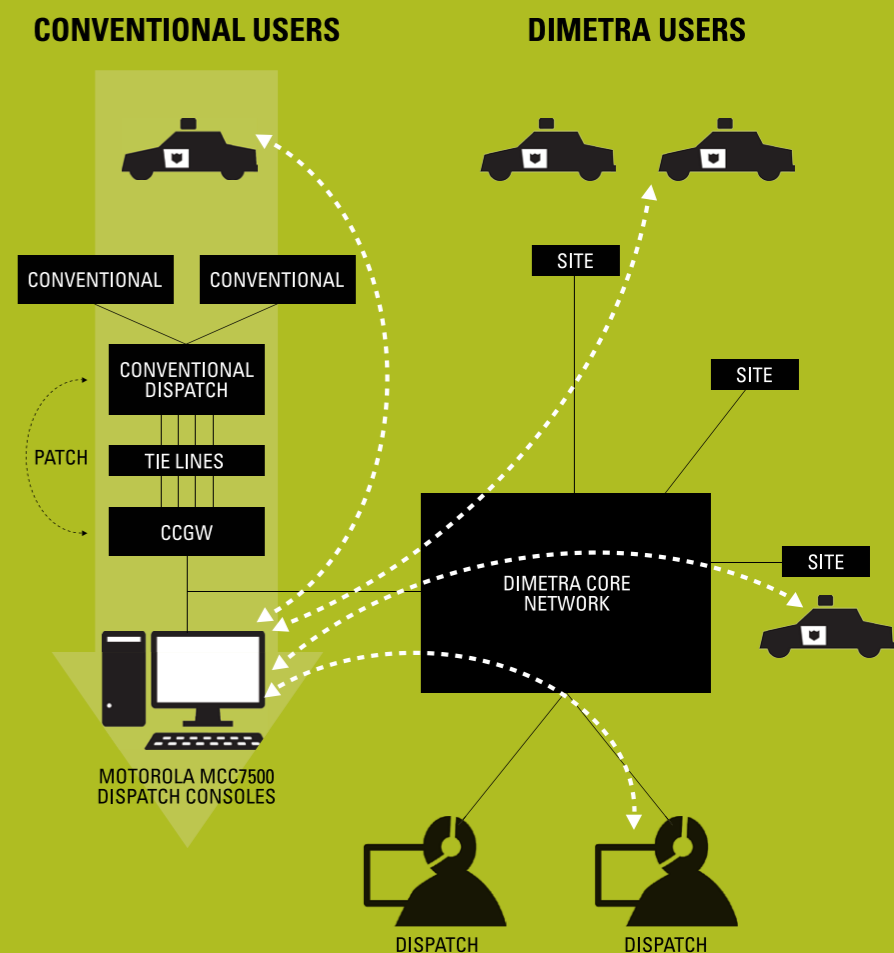
## SEAMLESS TELEPHONY INTEGRATION

With Dimetra IP Compact, you can extend the reach of your PABX system to workers on the TETRA network. The system can be connected to your PABX using either E1 or Ethernet transmission links and supports integration with both TDM (using the QSIG protocol) and SIP based IP PABX systems. By adding telephony services, you can improve access to, and communications with, not only your own personnel, but also those external to the TETRA network.

## INTEGRATION WITH LEGACY NETWORKS

With the Conventional Channel Gateway (CCGW), you can connect legacy networks to Motorola MCC7500 Dispatch consoles hosted on the Dimetra IP Compact system. This allows you to provide interoperability with other network users and provides an easier transition period when migrating legacy network users onto the Dimetra IP Compact system.

<sup>1</sup> For further information on TEAM solutions, please visit us at [www.motorolasolutions.com/TEAM](http://www.motorolasolutions.com/TEAM), contact your local Motorola TEAM authorized partner or access our global directory at [www.motorola.com/enterprisemobility/contactus](http://www.motorola.com/enterprisemobility/contactus).





## ADVANCED DISPATCH CAPABILITIES

Our MCC7500 consoles extend IP communications into the control room, giving the dispatcher instant access to a powerful feature suite to manage and communicate with your radio fleet.

Motorola's MCC7500 Dispatch Console is specifically designed for critical IP communication, meeting your demand for high availability and reliability of your radio dispatch network to protect, prevent and respond. The MCC7500 Dispatch Console is designed to help reduce your total cost of owning a robust, reliable dispatch solution, without compromising on the high quality you expect from Motorola.

## VOICE RECORDING

A key part of the continuous improvement process is to understand precisely how events unfolded and to identify system weaknesses. This process is made easier with the optional Logging Recorder. The logging solution is comprehensive, capturing Group Calls, Private and Telephone Interconnect Calls.

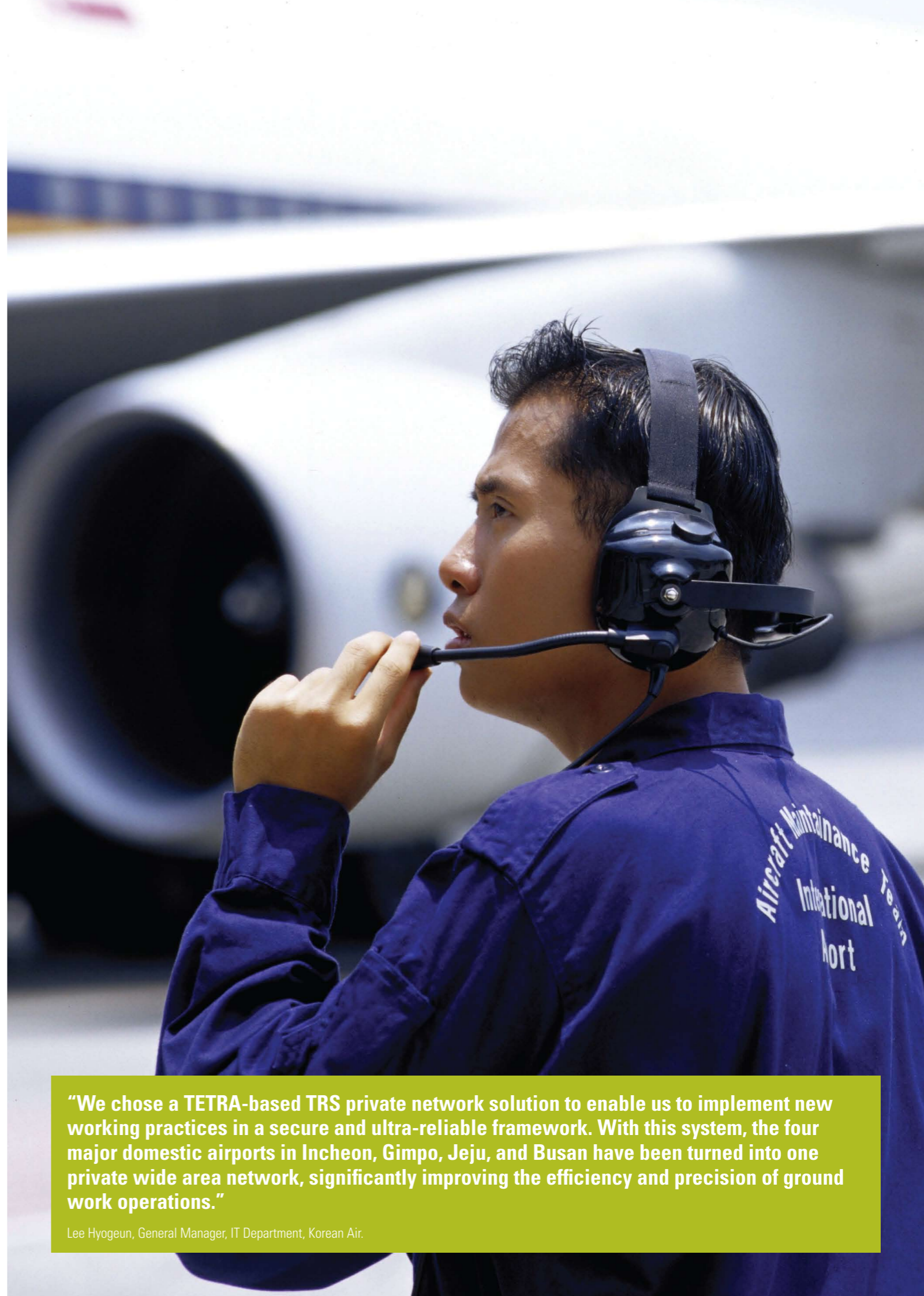
## TRANSFORMED WORKFORCE EFFICIENCY

In addition to voice, Dimetra IP Compact offers data services that can help provide your mobile workers with instant access to business-critical server-based applications. By providing staff members with access to business intelligence wherever they happen to be, the Dimetra IP Compact can help you elevate the productivity and efficiency of the workforce.

The data services provided by Dimetra IP Compact are unparalleled, comprising SDS, Multi-Slot Packet Data (MSPD) and TETRA Enhanced Data Service (TEDS). With its comprehensive support of data services, Dimetra IP Compact offers you the flexibility and the capacity to support a wide range of applications.

## FLEXIBILITY IN APPLICATION SUPPORT

In addition to the core Motorola applications that are offered with the Dimetra IP Compact, you can also call on our Applications Partner to deliver highly tailored solutions for your business. Motorola approved Application Partners are able to create customized applications that integrate with the Dimetra IP Compact through robust system APIs. For further information about our Application Partners, visit [www.motorolasolutions.com/tetra](http://www.motorolasolutions.com/tetra)



**"We chose a TETRA-based TRS private network solution to enable us to implement new working practices in a secure and ultra-reliable framework. With this system, the four major domestic airports in Incheon, Gimpo, Jeju, and Busan have been turned into one private wide area network, significantly improving the efficiency and precision of ground work operations."**

Lee Hyogeun, General Manager, IT Department, Korean Air.



# OVER 1,700,000 RADIO SHIPMENTS

## INDUSTRY LEADING PERFORMANCE ENHANCING THE SAFETY OF YOUR WORKFORCE

Our radio design approach has consistently been to combine insights gleaned from working closely with customers, with extensive studies of human performance in high stress situations. The result is the industry's most comprehensive portfolio of TETRA devices, designed with the user in mind.

Our TETRA radios support emergency calls, activated at the press of an optimally located button or through a "Man-Down" event. The radios also offer the option of an integrated GPS receiver for location reporting using SDS, to a control room location or to another TETRA device.

Additionally the Dimetra IP Compact's exceptional resilience will ensure that it is an always available lifeline for critical communication workers.

# ENSURING MAXIMUM SYSTEM UPTIME PROVIDING INFORMATION ASSURANCE

### NETWORK RESILIENCE

Motorola's network architecture is proven through years of operational use in the most exacting environments. But for extra peace of mind, additional system redundancy and even Geographical Redundancy ensures optimum performance – when and where it is needed most.

### COMPREHENSIVE NETWORK SECURITY

TETRA solutions offer the protection inherent in digital communications. Where even greater security is required, Dimetra IP Compact offers a number of enhancements including authentication, the latest Group Cipher key encryption which provides privacy between user groups, as well as support for End-to-End Encryption.

### OUTSTANDING PERFORMANCE COST-EFFECTIVE OPERATION

#### INDUSTRY LEADING RESILIENT RF COVERAGE

Offering the industry's most comprehensive base station portfolio, Motorola is uniquely positioned to deliver cost effective TETRA coverage solutions. Dimetra IP Compact systems interoperate seamlessly with the same industry leading base stations used on our larger-scale Dimetra IP systems.

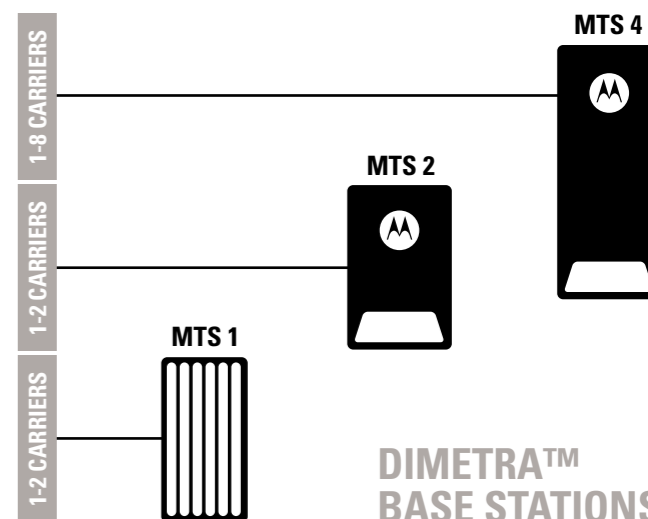
Our base stations provide intelligent site trunking capabilities, allowing vital communications to continue on a site even if links to the core infrastructure fail. In addition, base stations support base radio and site controller redundancy, providing an additional level of resilience.

With a receiver sensitivity performance of at least 7dB better than the standard TETRA base station requirement, Motorola's base stations can achieve considerable coverage improvement with fewer sites, without compromising on the grade of service – enabling significant reduction in capital and operational costs.

### FLEXIBLE SYSTEM CAPACITY

With built-in system capabilities such as Common Secondary Control Channel, Preferred Subscriber Class and Valid Sites, our powerful MTS base stations are able to minimise localised congestion problems. Such advanced features truly set Motorola MTS base stations apart from conventional solutions.

HUNDREDS OF ENTERPRISES AROUND THE WORLD HAVE PLACED THEIR TRUST IN MOTOROLA TETRA SOLUTIONS FOR THEIR CRITICAL COMMUNICATION NEEDS.



# SCALABILITY TO SUIT YOUR NEEDS

## ENHANCED SYSTEM RACK

Dimetra IP Compact's Enhanced System Rack provides a platform designed to meet both current and future communication needs. The scalable architecture enables you to deploy a solution to meet your current operational requirements and when the time is right, add new services or expand your coverage as your business and requirements grow. The Enhanced System Rack supports a wide range of services from telephony and voice recording, through to data services such as Short Data (SDS) for messaging, location and other services, and Packet Data (Single-Slot, Multi-Slot and TEDS) for higher bandwidth connectivity, enabling rich applications to enhance productivity and access information in the field. Further modules include Security (Authentication and Encryption) to protect information and access to your network, and System Redundancy to enhance resilience to ensure ongoing communications.

## GEOGRAPHICAL REDUNDANCY OPTION

This option supports geographical redundancy thereby ensuring system availability even in the event of a disaster. Geographical redundancy is achieved in a highly cost effective manner by locating redundant core networking equipment at a separate geographical location. The Geographical Redundancy option is based on the components from the enhanced system. Just like the enhanced system, it can then be extended with the various optional feature subsystems.

## SYSTEM SHARING

With the powerful Agency Partitioning feature, independent user groups can share a Dimetra IP Compact system for cost savings and interoperability, yet manage and maintain control over their own resources, such as talkgroups, encryption keys, and configuration data.

## COST-EFFECTIVE NETWORK OPERATION

To maximise operational efficiency, Dimetra IP Compact leverages the latest virtualisation technology and world class IT server hardware. As well as delivering lower power consumption, the IT server based architecture delivers enhanced manageability through simplified system software management as well as enhanced core design flexibility.

OUR COMPREHENSIVE RANGE OF TETRA RADIOS PROVIDES FLEXIBLE OPTIONS THAT MEET MISSION CRITICAL COMMUNICATION NEEDS – WHATEVER THE REQUIREMENT.

COVERING 182 SQUARE KILOMETRES, THE ADVANCED DIMETRA IP COMPACT TETRA NETWORK ALLOWED USERS TO MAKE INSTANT GROUP AND INDIVIDUAL CALLS, SEND TEXT OR PRE-PROGRAMMED STATUS MESSAGES TO OTHER RADIOS FROM THE DISPATCHER, AND SUPPORTED MULTIPLE TALK-GROUPS.



**“Integration of the various municipal service units has proved to be decisive. We have been able to integrate services across different areas – for both companies within the group and those of the third parties that work for us”**

Juan Eduardo Gonzalez, Services General Manager, Gijón Municipality