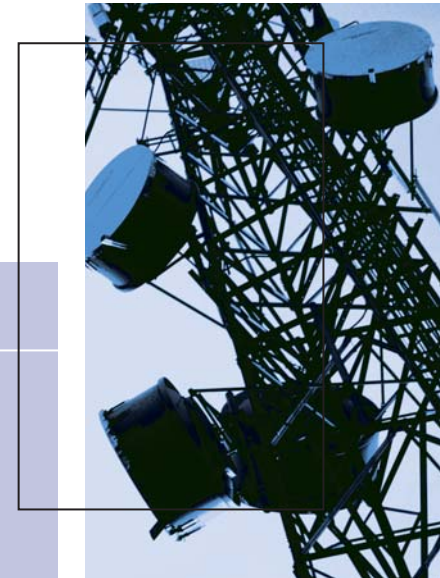


*HARNESSING THE  
STRENGTHS OF TETRA*





# efficiency



## **HARNESSING THE STRENGTHS OF IP**

**Motorola's TETRA solution unites voice, messages and mobile applications such as image transmissions, via a single, integrated and dedicated network, created through innovation and experience. Motorola has enhanced standard IP communications by addressing customers' prime requirements: fast call set up, network, resilience, scalability, operational efficiencies, emergency and priority calls.**

**Resilience and reliability** are uppermost in user minds since they may literally save a life or help protect the lives of others. Motorola IP resilience is based on proven software and hardware, plus IP routing through a flat-mesh structure of routers and servers.

**Compact, scalability and flexibility** can only be successfully supported through an IP based technology that allows the communication infrastructure to grow cost-effectively through easy steps.

**Efficiency** is gained through Motorola's IP packet data solution which enables a wealth of new applications. From the mobile office and command and control to pin-pointing the location of vehicles and personnel onto an electronic map, to solutions that remotely monitor river flow and flood defences.

## **HARNESSING THE STRENGTHS OF THE MOTOROLA TETRA SYSTEM**

Through the efficiencies gained from an IP based platform, Motorola links the range of voice, telephony and data services, then enhances these through the implementation of features uniquely designed to meet customer needs.

### **SECURE COMMUNICATIONS**

Maintaining private and secure communications is increasingly important. By adding Motorola's secure services, communications are not compromised.

- Critical messages get through – no degradation in audio quality or range with secure communications
- Remote secure key re-programming – through Over the Air Re-keying
- Users concentrate on day-to-day operational activities – security management simply runs in the background

### **TEAMING TOGETHER**

Any network supports routine operations...but what happens when situations require a co-ordinated response from multiple emergency agencies? This is when Motorola's TETRA solution becomes invaluable, by enabling temporary team coordination, intelligence and information sharing.

### **STAY IN TOUCH FOR IMPROVED SAFETY**

Personal protection for vulnerable staff is simply too important to be left to the individual. Motorola has taken user communications one-step further through the introduction of Personal Safety Services:

**Emergency Calls** are supported through an emergency "panic" button. When activated, a priority call raises an alarm at the dispatcher console, supported with visual information on the originator's identity and site location

**Ambience Listening** greatly improves safety. By activating the terminal microphone, console operators can monitor lone workers or staff emergencies

**Resource Pre-emption** ensures critical users have resource at all times

## **HARNESSING THE MOTOROLA PORTFOLIO**

Motorola's TETRA system portfolio, Dimetra IP and Compact TETRA has been designed to meet **differing** customer needs. From a large nation-wide inter-agency police force, to local bus services, or a transportable solution for emergency or short term communications.

### **PROVEN SOLUTIONS**

- Since the world's first commercial TETRA network at Gardermoen Airport in Norway, Motorola has deployed over 90 customer systems
- Motorola supplied the world's first TETRA secure system. This has now risen to over 20
- More multi-sourced terminals successfully operating on Motorola's TETRA system. Clear evidence of Motorola's commitment to TETRA as an open standard

## HARNESSING THE POWER OF TETRA

**Not all customers are the same. Only Motorola offers a wide range of TETRA terminal solutions to meet the unique requirements of markets from transportation to industrial, municipal to public safety**

### Delivering complete solutions

Supplying infrastructure and a wide portfolio of terminals is only the beginning of the process. Customers around the world are harnessing the power of TETRA Short Data and Packet Data services to improve their efficiency, increase safety and provide enhanced functionality. Motorola's array of solutions include vehicle location, database access, patient / medical telemetry and complex vehicle dispatch and management.

### Always ready....

Every day millions of people around the world place their trust in Motorola's products. For over 70 years we've been supplying the most effective handsets to police officers, fire-fighters, paramedics and many other professionals.

Motorola's entire range is subjected to a rigorous accelerated life programme, simulating over 6 years of tough usage including water and dust ingress to IP54, drop and shock testing and aggressive temperature performance. Meeting and exceeding international standards of quality and performance is something you can rely on.

### Safe and secure...

Motorola is the leading provider of secure TETRA solutions, supplying encrypted TETRA systems for over 3 years. Since delivering the first encrypted terminals in the UK, Motorola have now delivered over 100,000 globally.

All Motorola's TETRA terminals support Class 2 or Class 3 Air Interface Encryption Algorithms, preventing interception of speech and data communications. Security is further added by over-air enabling / disabling should the radio fall into the wrong hands.

For users with the most stringent requirements, our latest terminals offer support for End-to-End encryption with full key management facilities including Over-the-Air-Keying.

### TRIED, TESTED & PROVEN

#### MTH500

#### Bringing TETRA to a wider audience

The MTH500 is the lightest TETRA handset on the market, weighing in at only 193g. Its attractive yet robust design makes it ideal for undercover situations and a good choice for managerial use

#### MTP700

#### Strong and tough

The MTP700 is a tough handset for use in frontline situations. It delivers the highest levels of robustness and whilst being incredibly durable, is lighter than its predecessors

#### MTM700

#### Communication on the move

The MTM700, with its large range of accessories, is the ultimate tool for frontline personnel on the move. Offering tailored solutions such as the data box version, designed to provide easy interconnectivity for data applications and the remote version for strong, reliable performance in any vehicle be it on land or water

*From behind the scenes to the frontline - we've got it covered*



*When there's no room for compromise, you can rely on Motorola's TETRA Terminals*

## NEW & INNOVATIVE SOLUTIONS

#### MTH650

#### Customer-driven solutions

Based on extensive end user research, the MTH650 provides the ultimate in reliability, performance and security. Rugged yet light, the ergonomic form-factor makes it ideal for wearing in any configuration – on the lapel, the belt or in the hand

#### MTP750

#### Tailored solutions

Building on the successful MTP700 platform, the MTP750 utilises the high-resolution display to offer full support for Chinese language including the creation of text messages

#### MTH800

#### Motorola's latest terminal

Building upon the success of the MTH650, the MTH800 introduces a number of ground-breaking innovations:

- A fully integrated GPS receiver, using Motorola's new Instant GPS single-chip solution and a patented antenna design to offer superior sensitivity and low power consumption
- Support for high security encryption using an optional internal end-to-end encryption module - tested by the world's leading security authorities
- High-resolution colour display and powerful new graphical interface offering user customisation

*Accessories are fundamental to the overall experience and complete the whole communication solution*



### COMPREHENSIVE ACCESSORY PORTFOLIO FOR PERSONALISED COMMUNICATIONS AND OPTIMAL PERFORMANCE

#### Core solutions by Motorola



#### Customised solutions through Specialist Partners



#### Building World Class Partnerships

- Utilising 'best in class' industry experts – tailor-made solutions to meet niche market requirements
- Ruggedised accessories for highly demanding environments such as military and firearms
- GSM-style accessories for everyday use

# solutions

## INTEGRATED SOLUTIONS

### Putting Critical Intelligence at Points of Decision and Action

Raw data is of limited value on its own. But, organise the data and it becomes information. Then set up rapid access to and deployment of the information by bringing technology components, process workflows and mobility together and the Emergency Services are always informed - even on the move - resulting in better informed decision making in mission-critical situations.

Motorola's Integrated Solutions Division are the enabler that make intelligent solutions possible. By linking and leveraging the considerable benefits of TETRA with our applications portfolio and our partnerships with market leading businesses in complementary, specialised disciplines, we aim to help our customers take intelligence driven action - fast.

Command and Control  
Incident Management  
Systems

Mobile Applications

Mobile Data Hardware

*Motorola design and deliver integrated hardware and data applications to provide customers with a predictable, secure and reliable grade of service - particularly vital to mission-critical users. We have developed a number of techniques and approaches so our data applications make the most of any available bandwidth, whatever the technology platform*



# ISD

## TETRA APPLICATION PARTNER PROGRAM

### Harnessing the Potential. Powering Motorola's TETRA Solutions

The partner program delivers a comprehensive and tested TETRA solutions portfolio embracing all critical aspects of your operational needs. Globally, Motorola's open and non-exclusive program works with and accredits selected technology developers. These partnerships enable us to provide a wide range of high quality, integrated, customer focused applications.

The formal accreditation process establishes and recognises a partner's

ability to develop and integrate applications on Motorola's TETRA platforms.

The approved solutions process recognises and certifies the robustness and performance of a partner's TETRA system application.

The program is founded on quality and performance and the services of Motorola's TETRA support team are available to members around the world, ensuring the highest levels of quality and customer satisfaction.

Email enquiries to:  
[applicationpartnerprogram@europe.mot.com](mailto:applicationpartnerprogram@europe.mot.com)



*As the opportunities TETRA provides become more sophisticated and pressure on reducing costs increases, the need for advanced network administration and control while maintaining optimum streamlined operations becomes more challenging*

## **MiBAS**

### **Optimised Billing and Subscriber Provisioning**

To address these challenges Motorola offers MiBAS, the Motorola integrated Billing & Administration System. MiBAS provides enhanced provisioning capabilities for TETRA networks that allow fast and accurate activations, combined with a flexible and sophisticated billing engine to manage charging and cost allocations.

This integrated platform helps to smooth operations, minimise overheads and reduce costs:

- Supports comprehensive provisioning and billing for dispatch, telephony, SDS and packet data, for private and shared networks of all sizes - from local and regional to nationwide systems
- Allows regional centres and other remote organisations and administrators to self control their fleets of terminals via the Internet/Intranet using a multi-lingual Browser-based application
- Built for the future and committed to upgradeability, MiBAS also adheres to the DIMETRA IP latest standards
- A single system can seamlessly manage an entire cluster of TETRA networks, significantly reducing operational complexity and costs
- Unique billing features, rate plans and administrative aids deliver greater flexibility and functionality, particularly where integrated dispatch, telephony and data services are utilised
- A consolidated, single database maintains all relevant network and terminals information, providing a streamlined operation



Technology

**MANAGED SERVICES**

Customer Operations



*Understanding the strategic direction of the customer*

## **MOTOROLA MANAGED SERVICES**

Motorola's Managed Services solution offers optimum lifecycle management and maintenance of a customer's wireless communications system or network. The solution can be customised to meet differing needs, from streamlining people, processes and technology elements to providing full end-to-end management.

Motorola's Managed Services team works with our customers to ensure operational support needs are matched to business needs now and in the future.

### **Motorola's Managed Services include:**

#### **Repair Services**

- Component level depot repair
- Subscriber device repair services
- On-site infrastructure repair
- Technical assistance services

#### **Operational Support Services to mutually agreed service levels**

- Preventative maintenance activities
- Software subscription agreement
- Advance Exchange service for modules and boards
- Network monitoring
- Emergency on-site support
- Remote technical support
- Field engineering
- Program management services and activities



#### **MANAGED SERVICES VALUE-ADD**

The value of any product or service is determined by its ability to meet a customer's objectives. Motorola's Managed Services solution provides customer benefits as follows:

##### **Manage Expenditures and Budgets**

Provides a consistent, regular monthly payment option to cover wireless costs, enabling customers to budget for the services and levels they need

##### **Focus on Core Business**

Eliminates worry, allowing businesses to concentrate on day-to-day operational activities

##### **Achieve Higher Levels of Service**

Enables higher system quality and service by providing access to technology, maintenance and management capabilities, as well as processes, documentation and reporting capabilities

##### **Reduce Costs**

Competitively priced to represent a lower cost to the customer's organisation than their current expenditure associated with maintenance, management and operational activities. In addition, if a shared system is deployed, the investment may be leveraged across multiple organisations, leading to additional cost reductions



*While receiving all of the benefits of Motorola's network technology, superior reliability and feature sets, customers can be relieved of the work of implementing, maintaining and operating their systems.*

*Motorola's Managed Services agreement assures that the appropriate level of attention and proactive management is devoted to the customer's wireless system, since we believe it is imperative to optimise system availability for mission-critical communications.*