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GLOSSARY OF TERMS

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MTH650
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ABO Automatic Busy Override.

AFFILIATION The process by which a Mobile Station identifies its location and talkgroup affiliation to the system as it moves through the coverage area.

AI Air Interface.

AL Ambience Listening.

ALIAS An alphanumeric name used to identify a mobile station, talkgroup or site.

ANNOUNCEMENT GROUP A special group which is used to address a number of normal groups which are associated to the announcement group.

API Application Programming Interface.

ASSI Assigned Short Subscriber Identity.

ATEX ATmosphere and EXplosive - European Standard for Electrical equipment installed in potentially explosive atmospheres in Europe. Substituting Standard for Factory Mutual.

ATG Announcement Talk Group.

ATS Alpha-numeric Text Service: A Motorola application used to send short data messages from a PC operating under Windows NT to display on a Mobile Station.

AuC Authentication Centre: A Motorola software application that allows system managers to manage encryption keys for Dimetra.

AUTHENTICATION A function which allows the radio system infrastructure to validate that a mobile station is genuine before granting access to system services.

AUTHENTICATION KEY A secret key used to validate a mobile station's ability to operate on the radio system.

BER Bit Error Rate: Used as the performance metric for the digitised form of voice.

BR Base Radio: Dimetra remote EBTS site equipment. Each BR provides one TETRA carrier, comprising four TETRA time slots. The BR is optionally equipped with three receivers for diversity reception which increases the coverage area and reception quality.

BS Base Station: Term used to identify the installation including the EBTS, antenna and ancillary equipment.

CADI Computer Aided Dispatch Interface: Enables the user to do remote network management through an API.

CCK Common Cipher Key.

CDMA Code Division Multiple Access: Multiple access is possible through coding each channel by a unique pre-assigned code. Identifying of individual user is through decoding the coded channel.

CENELEC Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones (300 MHz – 3 GHz).

CK Cipher Key.

CNE Central Network Equipment.

COMPACT TETRA Provides small to medium operations with a cost effective, technologically advanced, reliable digital communications solution. Easy to use, install and maintain whether your business has a few hundred users or as many as 10,000.

CPS Customer Programming Software: The software application used for programming Mobile Stations. Formerly called RSS.

CRYPTO CARD A PCI-based encryption module installed in the AuC server. The AuC Crypto Card provides encryption services to the AuC such as key generation and database encryption.

DATA GATEWAY SDR Short Data Router: provides TETRA short data services between host applications connected to Dimetra Mobile Stations or Master Site.

DATA ROUTER Separates Packet Data and Short Data traffic and routes the information to the Packet Data Gateway or Short Data Router as appropriate.

DC Dispatch Console.

DCK Derived Cipher Key.

DGNA Dynamic Group Number Assignment: Allows the user to create groups before or during group calls.

DIMETRA™ DIgital Motorola Enhanced Trunked RAdio: The Dimetra system family is a sophisticated range of digital radio equipment that delivers the full benefits of the TETRA standard.

DIMETRA CONSOLE (ELITE CONSOLE) A software based radio dispatch console working under Microsoft Windows NT/2000 operating system.

DISPATCHER A person logged onto the RCM terminal who monitors and transmits commands to radio traffic.

DMO Direct Mode Operation: Direct communications between 2 or more mobile stations without using any infrastructure.

DMO GATEWAY The ability for a terminal working in DMO to communicate with dispatchers and terminals operating in TMO via a DMO gateway (supplied e.g. by Cleartone).

DMO REPEATER Extends the DMO coverage between terminals communicating in DMO via a DMO repeater (supplied e.g. by Cleartone).

DTMF Dual Tone Multi Frequency.

DUPLEX TRANSMISSION Both parties in the call can send and receive traffic at the same time.

DW Dual Watch.

DYNAMIC REGROUP A Radio Dispatch Management option allowing a dispatcher to move radios from one talkgroup into another.

EBTS Enhanced Base Transceiver System.

ECK Encrypted Cipher Key.

EIA Electronic Industries Association.

EMC Electro Magnetic Compatibility.

ENCRYPTION The manipulation of a packet's data in order to prevent anyone but the intended recipient from reading that data (for security).

ENCRYPTION ALGORITHM A method of encrypting and decrypting information.

ESI Encrypted Short Identity.

ETS ETSI Technical Specification.

ETSI European Telecommunications Standards Institute: The organisation responsible for the TETRA open standard.

FE DMO Frequency Efficient DMO.

FM Factory Mutual: Standard substituted by ATEX.

GCK Group Cipher Key.

GPS Global Positioning System: Uses satellites to provide a continuous time positioning system. The EBTS uses this system to maintain system synchronisation.

GSSI Group Short Subscriber Identity.

GUI Graphical User Interface.

HALF-DUPLEX TRANSMISSION Means that only one Mobile Station (MS) can send traffic in a call at any time. All other MS's in the call will receive traffic.

HW Hardware.

INDIVIDUAL CALL Or Private Call: A call between two radios or between a radio and a console operator.

INFRASTRUCTURE The equipment and facilities that make up the Dimetra IP radio system. These include zone, EBTS site and network management devices.

INHIBIT A Dimetra RCM feature cancelling transmit and receive functions of a radio.

IOP Inter OPerability.

IP Internet Protocol: A protocol used for carrying packets of data primarily in Ethernet based systems.

IP54 Environmental protection specification - Rating for Protection against Dust and Water.

ISI Inter System Interface.

ISSI Individual Short Subscriber Identity.

ITSI Individual TETRA Subscriber Identity: Consists of ISSI plus country and network codes.

KHZ Kilohertz.

KVL Key Variable Loader: A portable device used to load encryption keys to a secure entity.

LED Light Emitting Diode.

LST Local Site Trunking: When a system fails or many of the sites lose connection to the CNE, the sites are designed to go into a fall back situation known as LST. When the sites are forced to go into LST, the radios (users) are randomly distributed across all the sites and communication between radios is dependant on which site they are registered. Only radios registered at a particular site can communicate to each other.

MBTS Mini Base Transceiver System.

MCCH Main Control CHannel: The channel is used by Mobile Stations to register on the system and to request and setup speech calls with other Mobile Stations.

MHZ Megahertz.

MMI Man Machine Interface.

MOL Motorola On Line: Ordering system for Indirect Channels.

MR Mobile Release.

MS Mobile Station: A two-way voice and data communications TETRA Mobile Station (portable and mobile radios).

MULTIGROUP A talkgroup composed of other talkgroups.

NM Network Management: A management system that offers control from any authorised user terminal in the system and includes the following: the User Configuration Subsystem (UCS), the FullVision INM, and the Zone Manager (ZM) Subsystem.

OTAK Over The Air Keying.

OTAR Over The Air Rekeying.

PABX Private Automatic Branch Exchange also called PBX.

PAMR Public Access Mobile Radio.

PD Packet Data.

PDG Packet Data Gateway: Provides IP connectivity between host applications connected to Dimetra Mobile Stations or between a host application connected to a Dimetra Mobile Station and a host application connected through the Dimetra Master Site.

PDM Packet Data Mode: A data mode selected from the radio. It offers the possibility of transferring data in the packet data format.

PDR Packet Data Router: The PDR is one of the two software packages in the PDG. The PDR handles the IP functionality. See also RNG.

PDS Packet Data Service: A TETRA bearer service that allows IP hosts to communicate using the Internet Protocol.

PEI Peripheral Equipment Interface.

PIN Personal Identification Number.

PMR Private Mobile Radio.

PrC Provisioning Centre: The PrC consists of a Client/Server and database application.

PROMPT A command template, which allows you to search the databases e.g. for Social Security numbers etc.

PS Public Safety.

PTT Push-to-talk: Button on a Mobile Station radio unit that allows the subscriber to transmit.

PUK PIN Unblocking Key.

RAM Random Access Memory.

RCM Radio Control Manager.

RF Radio Frequency: A general term for the range of frequencies used in radio communication systems. Radio communication is the electromagnetic energy wavelengths above the audio range and below visible light. Typically between 30 KHz and 300 GHz.

RNG Radio Network Gateway: One of the two software packages in the Packet Data Gateway. The RNG handles the EBTS interface. See also PDR.

The two software packages, PDR and RNG, cannot function as standalone applications, i.e. both must be in operation before PDG functionality is available.

ROAMING The movement of a radio user from one site to another. The radio registers and affiliates on each site as the user moves from one coverage area to another.

ROM Read Only Memory.

RUSRN Radio User Specific Routing Number: Feature which provides for "aliasing" i.e. calls being made using a numeric ID rather that the terminal's "technical ID" (ITSI).

RSM / RSOM Redundant Switchover Module: The Redundant Switchover Module in a call processing hardware configuration is the mechanism used to switch manually from the active zone controller to the stand-by zone controller (and vice versa) to maximise system availability and to maximise system performance during hardware or software upgrade procedures.

RSS Radio Service Software.

RSSI Radio Signal Strength Indicator.

SC Site Controller: SC is capable of controlling up to 7 BRs (28 logical channels) and contains the SRI (Site Reference ISA) time and frequency reference module.

SCK Static Cipher Key: A key used for encryption between subscribers and EBTS base radio.

SDR Short Data Router: Provides TETRA short data services between host applications connected to Dimetra Mobile Stations or between a host application connected to a Dimetra Mobile Station and a host application connected through the Dimetra Master Site.

SDS Short Data Service: A flexible bearer service that transfers information from one interface to another.

SDTS Short Data Transport Service.

SITE WIDE CALL A SWC goes out to all radio users and talk groups registered on the sites selected for the call.

SLM Site Link Multiplexer: Combines all the necessary control, management, IP data, and voice/data traffic into one n * 64 kbit Frame Relay formatted link between the master and remote sites. This allows efficient use of the links between the remote and master site which are often expensive leased links. The SLM also ensures system synchronisation to the network, i.e. the provider of the leased synchronous lines.

SR System Release.

SRAM Static Random-Access Memory.

SSI Short Subscriber Identity.

SW Software.

SwMI SWitching and Management Infrastructure.

TDMA Time Division Multiple Access: A multiplexing method that divides a single communications channel into a number of separate channels by dividing a fixed time period into time slots. This allows the transfer of multiple streams of voice and data over the same physical transmission medium.

TEA 1 TETRA Encryption Algorithms (General Purpose).

TEA 2 TETRA Encryption Algorithms (Western Europe PSR).

TEA 3 TETRA Encryption Algorithms (in addition/supplementary to TEA1).

TEI TETRA Equipment Identity.

TETRA TErrestrial Trunked RAdio: TETRA is an open standard, which is defined by the European Telecommunications Standardisation Institute (ETSI) to meet the needs of the most demanding professional mobile radio users in both business and government markets.

TETRA networks deliver integrated communications including two-way radio, cellular, paging and data functionality – enabling the user to instantly connect with one person or hundreds with a touch of a button.

TETRA MOU The TETRA Memorandum of Understanding (MoU) was established in December 1994 to create a forum, which could act on behalf of all interested parties, representing users, manufacturers, operators, test houses and telecom agencies to support and promote the TETRA standard world-wide. The forum enables information and ideas to be shared and exchanged amongst a wide variety of individuals who share a common interest in the success of the standard.

Further information: www.tetramou.com

TG Talkgroup: A group of radio users that can share calls and messages as a group. A talkgroup is comprised of users who normally have a need to communicate with each other.

TG SCAN A feature that allows a Mobile Station to scan those talkgroups that have an affiliated member at the scanning radio's site. The Talkgroup Scan list(s) must be programmed in the radio.

TIA Telecommunications Industries Association.

TIG Telephone Interconnect Gateway: Dimetra master site equipment providing a computer telephony-based Telephone Interconnect Gateway function providing easy adaptation of current and new analogue and digital line interfaces.

TRUNKING The automatic and dynamic sharing of a small number of communication channels between a large number of radio users.

TSC TETRA Site Controller.

TXI Transmit Inhibit.

UCM Universal Crypto Module.

V+D CHANNEL Voice and Data Channel.

ZC Zone Controller: Dimetra master site equipment providing very fast call control for group communication in a wide area network.

ZCM Zone Configuration Manager.

ZLM Zone Link Multiplexer: The ZLM ensures inter-zone connectivity.

ZM A network management product allowing configuration of the Dimetra system and system management activities.

ZONE

1) A geographical region covered by a Dimetra system. The zone design comprises sites to allow intra-zone communications and roaming between sites/subsystems within a zone.

2) The equipment (Network Management, Data Management, Networking, Switching, Infrastructure, i.e. SwMi) that forms the central part of a Dimetra radio communications system with interfaces to air, telephone and other zones/radio systems.