

Terrestrial Trunked Radio (TETRA); TWC2007 Future of TETRA workshop report

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Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Terrestrial Trunked Radio (TETRA).

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1 Scope

The present document reports the results of the TETRA World Congress 2007 Future of TETRA workshop.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

- For a specific reference, subsequent revisions do not apply.
- Non-specific reference may be made only to a complete document or a part thereof and only in the following cases:
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Not applicable.

2.2 Informative references

The following referenced documents are not essential to the use of the present document but they assist the user with regard to a particular subject area. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Not applicable.

3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

API	Application Programming Interface
DMO	Direct Mode Operation
GCK	Group Cipher Key
GoS	Grade of Service
HSD	High Speed Data
IMS	IP Multimedia Subsystem
IOP	InterOPerability
IPI	IP Inter-working
LMB	Local Mode Broadband
MS	Mobile Station
MTBF	Mean Time Between Failure
OUA	Operators and Users Association
PMR	Private Mobile Radio
PSRG	Public Safety Radiocommunications Group
RF	Radio Frequency
SDS	Short Data Service
SwMI	Switching and Management Infrastructure
TEDS	TETRA Enhanced Data Service
TC	Technical Committee
TMO	Trunked Mode Operation also known as V+D
URS	User Requirement Specification
V+D	Voice plus Data
WBB	Wireless BroadBand

4 TETRA World Congress 2007 Future of TETRA workshop report

4.1 Background

Since the TETRA World Congress in November 2005, several meetings, seminars and workshops took place at which the future requirements of TETRA were mentioned:

- Various TC TETRA WG and Plenary meetings.
- TETRA Association Members workshop 2006.
- TETRA Association TEDS workshop 2007.
- TETRA Association OUA and PSRG Meetings 2006/07.

Besides new requirements, some areas of performance enhancements were also identified:

- TMO, DMO, TEDS, Packet Data, SDS.

New technology developments in other telecommunication areas also stimulated new user requirements:

- 3G/UMTS;
- WiMAX;
- Multi-Mode/Multi-Technology terminals (UMTS - GPRS - GSM - WLAN - Bluetooth®).

As a result of these numerous meetings, TC TETRA felt it appropriate to facilitate a workshop at the TETRA World Congress 2007 (with the added benefit of important input from outside Europe) to discuss the candidate TETRA enhancement areas.

4.2 Workshop Objectives

The objectives of TC TETRA for the workshop were:

- to provide a clear indication to TC TETRA of the weighting and relative importance of all candidate TETRA enhancement areas identified;
- to produce a set of User Requirement Specifications (URs) for use in TC TETRA to initiate new standardisation work by the technical Working Groups as required;
- to further enhance the portfolio of TETRA standards with new services and facilities, as well as performance enhancements, to ensure the continued evolution, success and longevity of TETRA as the technology of choice for traditional PMR user organisations.

4.3 Workshop Methodology

The Future of TETRA Workshop was held on Monday 11th June at the TETRA World Congress 2007, facilitated by selected members of Technical Committee (TC) TETRA in traditional workshop style.

The delegates received a welcome pack including:

- Workshop Programme;
- List of Candidate TETRA Enhancement Areas.

To ensure the maximum benefit to participating delegates and the TETRA industry as a whole in the limited time available, a list of candidate TETRA enhancement areas was enclosed for delegates to consider (prior to the workshop) regarding importance and relevance to their organisation's future needs. This list is available at annex C.

This comprehensive list covers requirements identified from a number of workshops and meetings facilitated by the TETRA Association and ETSI TC TETRA since the TETRA World Congress in November 2005.

The delegates were asked to complete questionnaire 1 (see annex A) on arrival.

The TC TETRA Chairman provided as part of the introduction and warm up to the actual workshop session an overview of all the 44 TETRA enhancement areas listed in questionnaire 2 (see annex B):

- TMO Network Enhancements (9).
- DMO Enhancements (14).
- Data Enhancements (6).
- General Enhancement Areas (10).
- Industry Performance Enhancements (5).

The actual workshop sessions were conducted in small groups of maximum nine people. Selected members of TC TETRA were assigned a workshop group to facilitate, record findings, and present findings to all delegates at the end of the session. The facilitators described in more detail the candidate enhancement areas and assisted with completion of questionnaire 2. Each delegate had:

- 100 currency units to spend in each enhancement area groupings to rank and rate importance of the requirements within the grouping;
- 100 currency units to spend across the five groups to assess the relative importance of the groups.

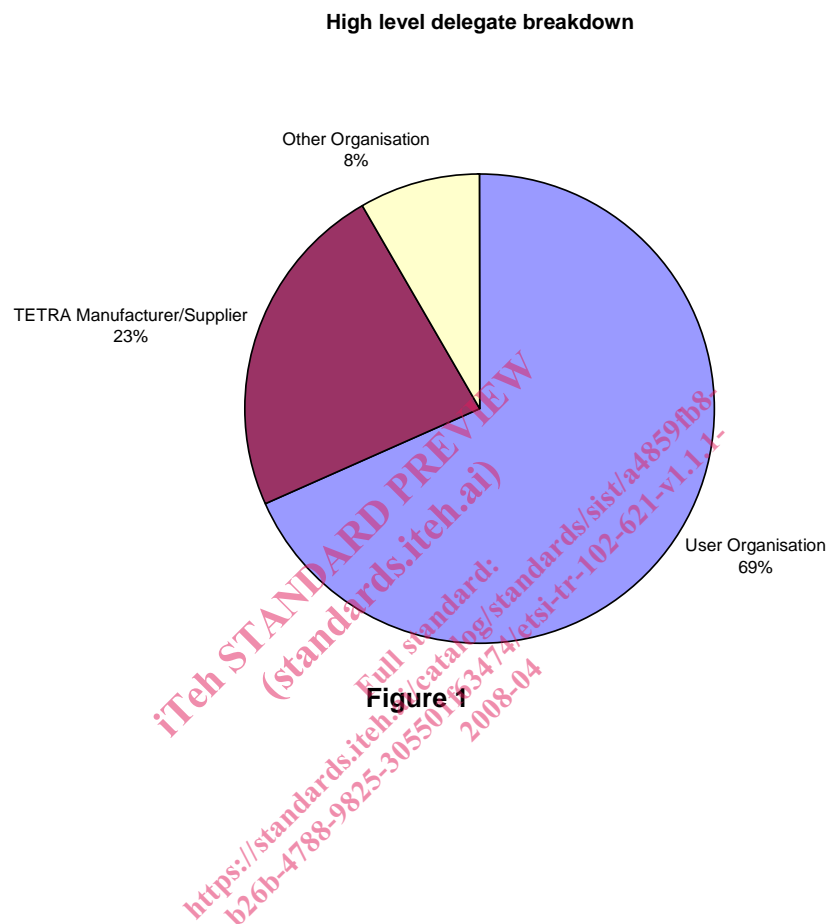
After the workgroup sessions the findings from each session were presented to all delegates.

A question and answers session was used to refine and agree the main findings from the workshop as a whole.

4.4 Delegate breakdown

The workshop resulted in 60 valid responses useful for analysis. A breakdown of the composition of the delegates is provided in the charts in figures 1 to 10.

4.4.1 High level delegate breakdown



4.4.2 User delegate breakdown

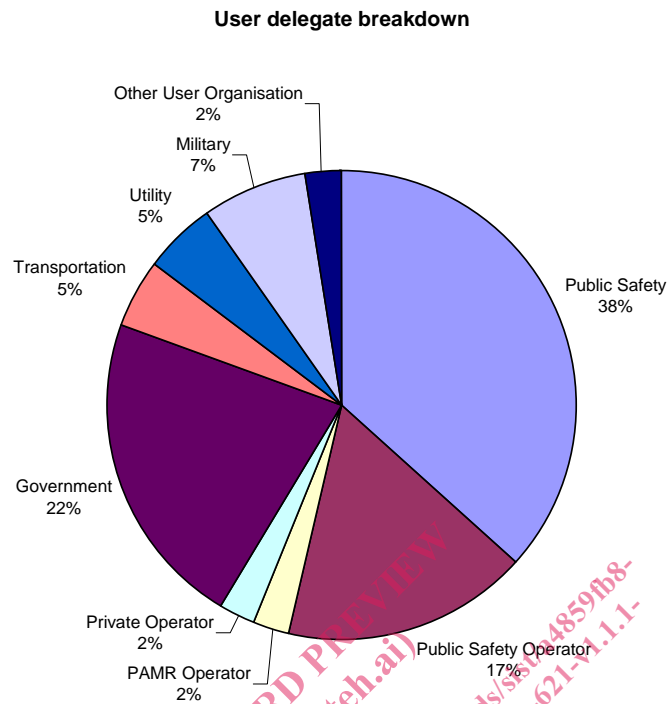


Figure 2

4.4.3 TETRA Manufacturer / Supplier delegate breakdown

TETRA Manufacturer/Supplier delegate breakdown

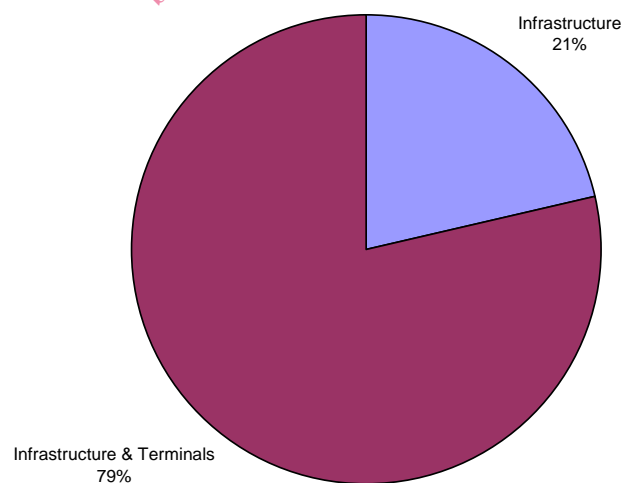


Figure 3

4.4.4 Other delegate breakdown

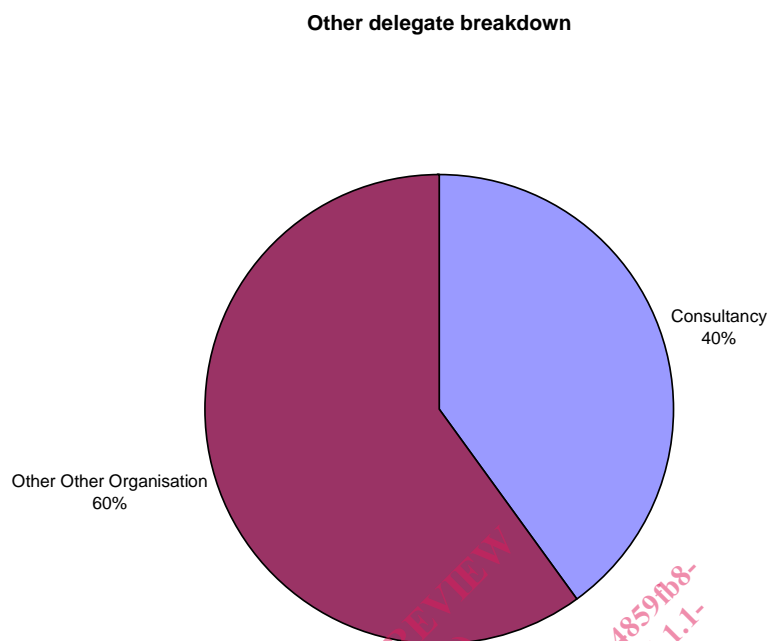


Figure 4

4.4.5 Public Safety and Security User delegate breakdown

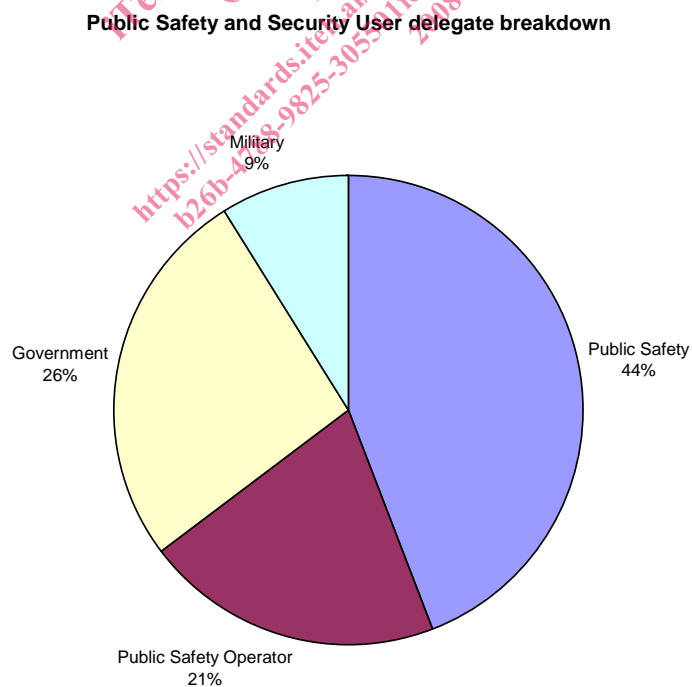


Figure 5