Critical communications for all professional users

About TETRA

- TETRA (Terrestrial Trunked Radio) is the accepted digital radio standard for critical communications. TETRA is an open standard where the focus is on meeting the critical communications needs of public safety and security agencies and an increasingly wide range of other market sectors. The technology has been standardised by ETSI (The European Telecommunications Standards Institute).

- As with GSM and other mobile networks, the radio infrastructure of TETRA is based on a cellular radio propagation technology. The frequency range used by TETRA in Europe is 380-400 MHz for emergency communication.

- The first TETRA voice network in the world was implemented at Gardermoen Airport in Norway in 1997. Since then the standard has undergone continuous development. In its current version, TETRA supports voice communication and packet and circuit switched data transfer, short data messages, and an increasing number of data applications being developed specifically for the critical communications user.

- 250+ TETRA networks are being used by Governments for public safety, military and defence, and other public services.

- The largest TETRA network to date is Airwave in Great Britain, which has 3600 base stations and approximately 350,000 users.

- Germany's network, nearing completion, will become the largest in the world, with more than 500,000 users.

- The North American market has just been opened up to TETRA technology, and networks are already in place in the USA and Canada.

- Nationwide public safety TETRA networks are being built, or are already in use, in Andorra, Austria, Bahrain, Bulgaria, Croatia, Denmark, Egypt, Germany, Greece, Israel, Ireland, Jordan, Luxembourg, Monaco, The Maldives, The Netherlands, Norway, Portugal, Romania, Swaziland, Sweden, Turkmenistan, the Vatican and the United Kingdom, among others.

- ETSI has already standardised TEDS (TETRA Enhanced Data Service), which will provide TETRA users with much higher data speeds. The standard allows up to 691 kb/s, but limitations in spectrum availability typically give users a net throughput of around 100 kb/s.

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Why TETRA?

- TETRA is a global standard used throughout the world.

- TETRA is specifically designed and optimised to serve mission critical organisations and their users.

- TETRA is optimised to deliver group call voice services and data services for positioning information, database queries etc.

- TETRA is scalable, allowing networks to be built on both small and nation-wide scales.

- TETRA networks are typically built redundant at multiple levels and without a single point of failure.

- The ultimate fallback mode is Direct Mode Operation (DMO), where TETRA terminals can talk to each directly, irrespective of network availability.

- TETRA terminals are available for all user groups, in all emergency services and industry sectors.

- TETRA is the preferred critical communications solutions for European Governments .

- TETRA has been chosen to provide critical communications by every major European airport.

- TETRA is routinely used for major events, including the London 2012 Olympic and Paralympic Games, where a dedicated network was installed in all Games venues.

- Today's TETRA technology is implemented on the most robust, resilient and technically advanced network platforms.

Read the Pocket Guide to TETRA here.

For further information on TETRA and its role in providing critical communications worldwide, please visit www.tandcca.com