TETRA World Congress – 2004 Vienna

Picture supplied courtesy of Austria Center, Vienna

- **I wish I could meet a TETRA expert on...**
- **If only I knew what the TETRA manufacturers were planning for next year...**
- **I know there are TETRA users who have solved the same problems I've got, but how do I...**
- **Is there a TETRA application that will...**
- **It would really help me if I knew how others made their TETRA network do...**

Are these the sort of questions you'd like answers to?

Is there something else you would like to know? Whatever your interest – TETRA technology, applications, the way ahead or how TETRA users in similar organisations to your own may have solved particular operational challenges, the best place in the world this year to find the answers will be the TETRA World Congress, November 22nd – 25th. The event will be held at the Austria Center in the Austrian capital, Vienna.

Fresh international appeal

Choosing Vienna for this year's World Congress means you will be in the heart of Europe. Vienna is central to many of the countries who recently joined the European Community, and its role as a classic gateway to Eastern Europe is reflected with new presentations from several Russian user organisations as well as those from Bulgaria, Estonia and Slovenia. If you needed any proof of the exciting and international mix of presenters and case studies just look at this selection:

- Athens Olympics 2004 – Greece
- Ministry of the Interior – Austria
- Bangkok Metro – Thailand
- Ministry of Railways – China
- Ministry of Interior – Estonia
- Gauteng Police – S. Africa
- Madrid Municipality Medical Services – Spain
- TETRARUS – Russia
- Communications Industries Company – Iran
- RAKEL - Sweden

What's New for 2004?

These are just some of the topics with a great story to tell and with worldwide relevance for people tackling similar issues.

Ever wondered how others have found significant government finance support for major communication projects? Yancho Sirakov, consultant to the Bulgarian Council of Ministers may be able to help. His presentation on Conference Day 1 (23rd Nov, pm Stream B: Implementations) is titled 'Using EU Financing to Build the first TETRA network in the Balkans'.

On Conference Day 2 (24th November, morning Plenary: Growth, Development & Innovation), Igor Bogataj of the Slovenian MoI will have some real operational experiences to share of their TETRA networks in action to improve their measures to counteract border crime as Slovenia came under increased political pressure to step up border controls when it joined the EU on May 1st, 2004.

And, with more and more contracts for networks going in favour of TETRA in France, you might be wondering what influences high profile communication users to choose TETRA over competing technologies. Listen to Francois Deschamps from ADP Telecom on Conference Day 2 (24th Nov, pm Stream E: Transport and Utilities) to hear him outline the benefits of TETRA for users at the several airports serving Paris.

Largest TETRA exhibition ever dedicated to TETRA

There's even more space and more exhibitors who have already signed up for the exhibition area at the 2004 World Congress. Currently 41 companies have secured their space at TWC2004. There will be world class expertise in TETRA infrastructure, terminals, command and control equipment, applications, aerial systems, system integration as well as specialist consultancies in the exhibition area. The Applications Village will be better located to make it a lot easier for delegates to see the range of specialist applications on demonstration.

The TETRA MoU Association will have a stand at the exhibition where it will be possible to talk to representatives of the Association about the benefits of membership to your organisation. The Association will also hold the Annual General Meeting of its Members at the TETRA World Congress during the evening of Monday 22nd November as well as its annual Press Briefing for Journalist at lunchtime on Tuesday 23rd November.

For the latest list of exhibitors, check the Exhibitors section of the new TETRA World Congress website at **www.iir-tetra.com**. This year's website has been completely updated and should have all the information you need on the World Congress – agendas, exhibitors, speakers and the various conference ticket packages for users and non-users. And you can make your nomination for the 'Outstanding Contribution to TETRA' award on the website as well.

Specialist Seminars and Masterclasses

The main conference agenda runs from Tuesday 23rd to

mid-day on Thursday 25th November. To complement this, TETRA Seminars have been arranged for Monday 22nd and TETRA Masterclasses will run in the afternoon of Thursday 25th November. There's lots of new topics in the Seminar programme including 'Making the Business Case for TETRA', 'Developing the PEI' and a special focus on 'On-site Communications' that looks at TETRA solutions for compact geographical deployments such as manufacturing plants, airports and harbours.

The TETRA MoU will be running its whole day seminar 'An Introduction to TETRA' on Monday 22nd November. This seminar is always heavily subscribed as interest in TETRA continues to spread worldwide.

The Masterclasses run on the last afternoon. This helps with travel and accommodation costs as it keeps the whole TWC programme to just four days – a hit from last year's TWC. This year's Masterclasses include sessions that look at 'The Challenge of Interoperability', 'Migration from legacy systems' and intriguingly 'Beyond the TETRA Technology' – a session that will examine the ways in which user experiences with TETRA can be enhanced and additional functionality can be provided.

Networking opportunities at TWC 2004

Every year, feedback from TWC conference delegates picks networking as one of the main objectives and successes for them at the World Congress. The 2004 event has plenty of networking opportunities – conference, exhibition and refreshments all located in a single building; coffee breaks in the exhibition area with time to look around the exhibits; carefully structured afternoons to help delegates get the most out of their personal programme and evening events including the opening day reception and a Gala Evening on Wednesday.

Vienna is a compact city with a variety of hotels to suit all pockets. The Austria Center is very close to the city centre and is well served by public transport (metro and bus). It will be very easy to meet up for an evening discussion with colleagues and fellow delegates to explore more TETRA ideas and experience. Vienna is, after all, one of the premier gastronomic capitals in Europe – their coffeehouses are world famous and the restaurants cater for all tastes.

What do I do to register?

The World Conference Brochure is available for download at the World Congress website at **www.iir-tetra.com** or email registration@iir-conferences.com or call on **+44 (0)20 7915 5055.** Various discount packages and group discounts are available.

As always, the earlier you register, the more you can potentially save. Make sure you call right away to find out how the TETRA World Congress 2004 can help you in your search for TETRA answers.

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TETRA World Congress 2004 – What's New?

- 37 Case Studies – 70% of presentations in the main congress are case studies and most of them explore new topics
- Over half of the Seminar programme focuses on new subjects
- First time for the World Congress in Austria – easy access for Eastern and Central European delegates
- Poster sessions by manufacturers during the breaks that will highlight their very latest products in more detail
- Biggest exhibition yet – 100% devoted to TETRA and TETRA support products and services
- New TETRA World Congress website – www.iir-tetra.com that includes links to help find suitable accommodation
- Eleven commercial sponsors and nine media partners to keep the World Congress at a high profile
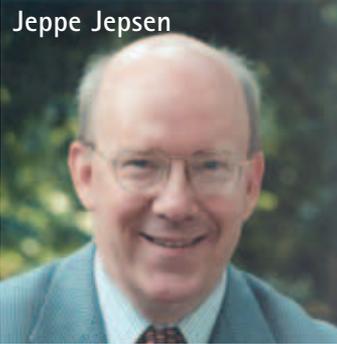
TETRA helps flood rescue work

O2 Airwave responds to Boscastle emergency in the South West of England

August's unseasonably high rainfall caused a major problem for the inhabitants of one of the UK's most charming coastal villages, Boscastle, in Cornwall. The village, situated at the end of a deep valley by the sea with two converging rivers above it was devastated following flash floods. Houses and cars were simply swept away by a freak deluge of water. Several helicopters were involved in the rescue of people stranded by the floods.

O2 Airwave received an urgent request from Devon and Cornwall Constabulary to make the Airwave service available to them and other first responders. The problem they faced was very poor radio coverage from their existing analogue radios, and patchy mobile phone coverage. The network was not due for formal hand-over in this area for some months, but O2 Airwave was able to provide a full service in the local area and assist the police's management of the incident. Within less than 24 hours of receiving the request, the service was up and running well, supporting some 35 terminals, a large proportion of which Airwave provided direct to the police. Immediate feedback from users has been extremely positive.

Interoperability @ Work

Jeppe Jepsen

The Athens Olympics Games 2004 have been successfully completed in spectacular style – and the Olympics were equally a great success for TETRA (there's more detail on page 5). The two systems from Motorola provided service during the games and more than 40,000 terminals were operational from Nokia, Sepura, Cleartone and Motorola. Frequentis provided a major portion of the Command & Control consoles on the Public Safety System and Siemens integrated the whole solution. OTE S.A., the Hellenic Telecommunications Organization, owned and operated the commercial system. Now – this really is **Interoperability @ Work**. Who said Open Standards would not be a success?

TETRA is, as we all know, the only ETSI Standard for Professional Mobile Radio usage. The promise of a truly Open Standard is now reality. Multi-vendor sourcing and interoperability are fundamental goals of the user community within the TETRA MoU. There are now 7 infrastructure suppliers and 9 terminal suppliers participating in TETRA MoU organized IOP testing. This is **Interoperability @ Your Service**!

I don't believe the PMR community has ever seen so much innovation and so many new products as the TETRA market has experienced over the last three to four years. That is what Open Standards is all about – I invite readers to compare this situation to alternative cases where other proprietary PMR technologies from European single source manufacturers are involved.

We in the TETRA MoU are all looking forward to this year's TETRA World Congress – I'm sure there will be many new products being introduced there and the programme for the World Congress has lots of new case studies and speakers. On behalf of the TETRA MoU, we all look forward to meeting you there.

Jeppe Jepsen – Vice Chair, TETRA Association

More TETRA for the Middle East

OTE SpA has been selected by the Emirates Telecommunications Corporation (Etisalat) to supply an integrated TETRA PAMR network.

A new Emirates-wide Public Access Mobile Radio (PAMR) Network based on TETRA will soon be offered to a variety of regional organisations. The strength of TETRA for PAMR solutions as well as Public Safety networks is already acknowledged around the world. The OTE Elettra System will be supplied as the first phase of the national network.

The digital network will provide advanced mobile voice and 4 slot high speed data communications to future Etisalat network subscribers.

The company say their Elettra network will offer subscribers across the Emirates an advanced and secure Digital Public Access Mobile Radio service. The flexibility and functionality of the system coupled with the open standard protocols of TETRA technology will enable Etisalat to provide a service to greatly improve operational efficiencies and deliver overhead cost reductions to a wide range of diverse subscriber bases.

And now it's Paris…

Photo courtesy of RATP

One of the world's largest public transport organisations has opted for a TETRA solution to upgrade its current communication network.

The Parisian public transport agency (RATP), will upgrade its private mobile radio network with digital TETRA technology from Nokia. RATP has awarded the contract for its network modernisation to Alcatel, which will deploy Nokia TETRA equipment to cover Paris's extensive Metro, express line and bus system. According to the supplier, the project will improve performance of the transport network in terms of efficiency, continuity of services and security.

The TETRA network to be deployed comprises six TETRA switches and around 500 TETRA base stations, as well as operator consoles using Nokia's open interfaces and Alcatel's mass transit-specific applications. The network will enable mobile voice and data connectivity for over 10,000 personnel including bus, express-line and metro conductors, as well as maintenance crews and security personnel.

New Digital Radio System for Brussels National Airport

Airport to receive a new 2 million Euros communications network

The Board of Directors of Belgocontrol, the Belgian air navigation service provider, has chosen a Motorola Dimetra IP TETRA system to provide communications for their Brussels National Airport. Belgocontrol is in charge of Belgian civil airspace including Brussels National Airport and air traffic control for the country's four regional airports.

Brussels National Airport is Belgium's primary airport and has established itself as one of the most important business travel hubs in Europe. Over 15 million passengers passed through the airport in 2003, and there are over 19,000 staff on the ground. The network will consist of three sites covering the airport and it will be used by approximately 1,000 personnel for both voice and data aided communication between different airport organisations and departments. The network is expected to be in use by early 2005.

Geert De Mesmaeker, Head of Service Communication, Belgocontrol said the organisation was looking for a future-proof network capable of expansion to other Belgian airports when necessary. High maintenance costs for the existing 9-year-old analogue network acted as the catalyst for the procurement of a new radio system.

Double Gold for TETRA at the 2004 Olympic Games

The 2004 Olympic Games in Athens have been a triumph for all concerned - athletes and organisers alike. Managing the logistics of an event of this size and scope in a variety of venues spread over a wide area is simply not possible without a comprehensive communications network system. During the Athens 2004 Olympics there were two TETRA systems networks in operation based on equipment supplied by Motorola. A new one, the highly secure TETRA network supplied, commissioned and operated by Siemens and Motorola for use by the Greek Public emergency agencies including the Police, Fire Brigade, Coast-Guard etc., and an existing commercial one operated by OTE which was given extended coverage. This system has been used by a variety of transport organisations as well as Olympic Committee Volunteers.

Terminals from Nokia and Motorola supplied, programmed and supported by Siemens were in daily use as a highly visible and highly effective demonstration of interoperability. In addition, Siemens supplied and installed Cleartone specialist terminals for the Police and Fire brigade. Motorola and Siemens included in their scope of supply a Frequentis integrated dispatch communications system. The massive systems integration project in the main Police command centre as well as 30 regional ones was successfully executed by the Siemens-Motorola technical team. The secure TETRA network with more than 100 EBTS's has been implemented by the Siemens-Motorola team within a record time of 10 months.

New 'Personal Best Performance' by team TETRA

Many athletes at the Olympic Games achieved race times or performances that exceeded any they had managed before - these were their 'personal best' performances or PB's as they call them. The TETRA performance statistics are impressive, especially as this was the first time a TETRA system had been used at the Olympic Games. The public safety C4i system installed for the Athens Games averaged more than 200,000 calls per day and passed the three-million call mark by the end of the games. Subscriber deployments were massive with some 17,000 subscribers overall using the C4i system. The Olympic Volunteers alone needed over 8,000 terminals for their purposes on the OTE commercial TETRA system. Given the nature of users requesting information and the logistical demands of catering, team management and the massive transport requirements, this system exceeded 9 million calls by the end of Athens 2004.

Secure mission critical radio system for Public Safety users

A Motorola Dimetra network was installed and made operational in a record breaking ten months to give Greek public safety and other government agencies secure communications for their routine and emergency operations. Offering secure voice and data communications with almost instant access, the network provided a genuine mission critical solution. Officers communicating on the network used Nokia's TETRA THR880 portable and TMR880 mobile radios. The radios were supplied over a very short period of time to meet the urgent customer needs and the portables came with a variety of accessories and carrying options including Nokia's active holder for shoulder mounting.

The presence of hundreds of thousands of athletes and other team members, event visitors, reporters and officials kept the local authorities busy around the clock. The most important task for Greek authorities during the period of the Athens Olympic Games was to secure the safety of visitors and residents and ensure the smooth running of competition events as well as cope with the day to day logistics. Reliable, effective and easy to use communications technology was clearly of paramount importance. The TETRA technology, based on an open standard, has proved more than capable in Athens and feedback from the Greek capital also showed that interoperability had been implemented reliably between the Nokia terminals and the C4i public safety Siemens - Motorola network.

Nokia Public Safety terminal users' lives were also made a lot easier with voice feedback and screen texts in the Greek language enabling them to browse group lists on their radios or compose text messages in their own language. Some of the mobile radios used by the authorities were integrated by Siemens with a positioning system which enabled the extensive AVL (Automatic Vehicle Location) services to the command and control centres.

When the 2004 Olympic Games are a distant memory, the system will still be in use by a wide variety of Greek government agencies, including:

- Police Forces
- National Ambulance
- Customs Directorate General
- Coast Guard
- Fire Brigade

Commercial communication system managed complex transport and volunteer logistics

In March 2001, a Motorola TETRA solution for a commercial system with integrated voice and data, including infrastructure and terminals at the new Athens International Airport went live. For the Olympic Games, this system was expanded and upgraded with an additional 60 sites to cover more of the densely inhabited region of Attika, the Olympic cities and part of the connecting highways.

The system provided communications to more than 15,000 users. Commercial organisations included Athens International Airport, Attiko Metro, Attiki Odos (the urban highways), TRAM and OLP (Pireas Port Authorities). During the Olympics, the system also supported many new users from TV operators to athletics delegations. However, the most significant new group was the 8,000 or so Olympic Committee Volunteers. Using Motorola's MTH650 and MTH500 handsets, they relied on the system to coordinate their efforts and support on site logistics at Athens 2004.

More multivendor support and interoperability in action

Two other TETRA equipment suppliers involved in making the Athens 2004 Olympics a success were Cleartone and Frequentis. Cleartone Telecoms supplied to Siemens over 1000 dual mode TETRA/VHF mobiles which allowed the emergency services to communicate both on existing analogue as well as on their TETRA network. Working with the Motorola infrastructure and Nokia handportables, the Cleartone CM9000 mobile also provided DMO Gateway and Repeater operation which successfully improved radio coverage in certain vulnerable areas. Frequentis supplied their VCS3020MCC integrated dispatch communications system (IDCS) to Motorola, and Sepura handportables were in use on the OTE commercial TETRA system.

TETRA wins at the end of the day

It would be difficult to argue that stage one of the Olympics of 2004 have has been anything but a massive success. Certainly visitors who experienced the sports and the opening or closing ceremonies will have many stories to tell about their positive experiences. And of course the athletes who were focussed on their personal targets will also have benefited from the way in which communications helped manage their lives. TETRA has received positive feedback from all the terminal users, network operators and control room staff. It seems everyone thought TETRA was a winner. But the Olympics didn't finish there. The Paralympics Games took place from 17th to 28th September with 4,000 athletes representing 145 countries in 19 sports also enjoying the management and security support of the TETRA systems. And, when the last athlete left Athens, everyone was looking forward to a similar success for TETRA at the 2008 Olympic Games in Beijing!

ASTRID helps in the Tour de France

Both Police and Red Cross officials had only positive things to say about their recent experience with ASTRID, the national public safety TETRA system in Belgium, during its use to support the complex security and management demands of the world's most famous cycle race – the Tour de France

This year the Tour de France started in the Belgian city of Liège and then spent four days winding through the local Wallonia region of Belgium before heading to France. In order to manage this huge event, Belgian public safety officials used the ASTRID network for their communications. It was a case of rapid reaction as the Namur district police had only very recently acquired their TETRA radios and they were immediately put into service. Afterwards, Superintendent Eric De Gent was enthusiastic: "We did not have the least concern. Our force used the system during the Walloon Festival last September but of course the Tour de France was quite another experience because of the number of people involved. Everything went as planned; we were completely satisfied with the radios both in terms of performance and ease of use. Three talk groups were programmed into the radios: one for personnel patrolling the Tour, one for officers securing the royal visit and a third shared with the fire services. The users were delighted with the system."

Red Cross: rescue operations with ASTRID

For the start of the Tour de France in Liège, ASTRID put a dozen handheld radios at the disposal of the Red Cross. These were used as command tools by the organisation's field staff and operational command. Operations Manager Joël Reynen related his experiences: "ASTRID is a really capable tool and the equipment was easy to use. We used the radios for 14 or 15 hours on Saturday. We started using the radios without knowing what to expect from them. At the end of the first day, everyone was delighted."

In Charleroi too, the Red Cross used ASTRID for its radio communication. Christian De Prijck, operational manager for the East Hainaut rescue zone, said: "The initial goal was to back up our analogue network with the ASTRID network. Because of the quality of the coverage of ASTRID, we ended up using it as the working frequency." In addition to the quality of the network, Christian thinks it can help reduce costs: "The use of ASTRID at the Red Cross should lead to substantial reductions in expenses because we would no longer need to communicate by means of fixed telephones lines or mobile phones."

TWC for first timers

If you have never been to the TETRA World Congress before and are wondering if you should, then the answer is definitely YES. It is a highly professional and friendly event. Here are some observations that may help you make your mind up.

Global centre of excellence and information – it really is true to say that the world's expert users, technologists and manufacturers attend the TETRA World Congress. If you have a number of questions to ask – commercial, technical, operational and more, this is the most time effective way to meet the best people to help you.

Sharing ideas and experiences from others – the users who attend are a very friendly lot! They are only too happy to share their operational experiences of TETRA with you (good and bad!) in order to help you. And there is a good deal of time built in to the programme to help networking.

Professionally organised event – the TETRA World Congress is managed by one of the world's leading conference companies, IIR, and the programme has been put together under the guidance of the TETRA MoU Association. The event takes place in a single venue so very little travel is required and you can

get the most out of every day.

Keeping your costs down – there are big discounts for users who attend the World Congress and a variety of accommodation is available in Vienna to suit all budgets. The World Congress website even has a link to an accommodation information area.

Very latest news of new products and services – the TETRA exhibition that runs alongside the conference will be the largest single exhibition in the world devoted to TETRA. There will be no other place where you can meet so many commercial organisations at one time.

Helping to make your visit a success – IIR will have a help desk at the venue and their representatives will be on hand to help with any problems you have. The TETRA MoU will also have representatives there who can advise you on how to get the best out of your visit.

For more information, visit the TETRA World Congress 2004 website at www.iir-tetra.com. Remember, the sooner you book your place, the cheaper it will be.

World Firefighters Games rely on TETRA

Every two years, firefighters from around the world compete at the World Firefighters games. This year, a wide mixture of sports, activities and other challenges, were held in the UK city of Sheffield in August. Whilst not on the same scale as sporting activities taking place in Athens at the same time, nevertheless the security and efficient management of some 5,000 people needed a good communication system. O2 Airwave and Motorola came to the rescue. O2 Airwave offered use of their national public safety network in the South Yorkshire region and Motorola supplied a large quantity of terminals. From request to go-live, the whole process took just over a week, including building the fleetmap, programming radios and training users.

Many of the radio users were serving UK firemen and this was the first time they had used TETRA in action. Feedback from everyone was extremely positive. Many were surprised they could use handportables to talk to colleagues on the other side of their county – something that their current communications cannot achieve. Coverage was also excellent – especially important for the mountain bike racing that took place in remote and hilly forest where 22 safety marshals were spread out over a 60 km^2 site. The Games Director, Nigel Durrant, said "This communications solution gave me the peace of mind I needed on the key aspect of safety and security for such a high profile event".

Vienna's local TETRA network provides communications for major transport company

Frequentis, the TETRA technology supplier based in Vienna, began operating its city-wide TETRA radio network in June 2004. The network is open to all private and public users. Their first customer is Wiener Lokalbahnen AG - one of the main public transport providers for Vienna and its southern suburbs. Their busy transport fleet carries about 15 million passengers per year. The network, operated by the Frequentis subsidiary Blue Call, uses Frequentis equipment and applications. Especially significant is the use of its newly developed base station. So, delegates at this year's TETRA World Congress in Vienna who use Wiener Lokalbahnen's trams may well have their journey efficiently managed thanks to TETRA.

Ceremony marks official handover of C2000 network – the TETRA network for mobile communications for the Dutch Public Safety community

The Netherlands Minister of the Interior, Minister Remkes is now officially the owner of the C2000 network. Almost 400 antenna sites, landlines and associated equipment were transferred to him at a recent ceremony by TetraNed's Managing Director, Marteen Tijssens. The new owners believe their C2000 network is unique, making the Netherlands the only country in the world to have one integrated network for Police, Fire, Ambulance and Military Police.

In his speech Minister Remkes emphasized that C2000 is the best available technology today and he pointed out that other countries have since opted for the same technology (TETRA) as the Netherlands chose many years ago. Further good news from the Minister was that the costs are inside the boundaries of the original estimations.

Annual MoU workshop
– helps shape the future

The annual workshop for Members of the TETRA Association is an opportunity for representatives from any of the member organisations to discuss key TETRA issues and help the Board and the Association focus its marketing and commercial activities where the members feel is most appropriate. The 2004 workshop, held in Brussels in June, saw over 30 delegates along with several Board members tackle a number of subjects in a truly interactive style. Key issues discussed included a session on 'What I want from the Association' – facilitated by a neutral chairman and without any Board members present in order to help an open and candid debate. This is another example of the many ways in which the Association seeks constructive feedback to make sure it meets the needs of its members.

Tehran Metropolitan Police TETRA Network Begins Operation

The Islamic Republic's first TETRA network was formally handed over to the Greater Tehran Metropolitan Police on 31st May, 2004, by OTE SpA. The System Acceptance Certificate was signed by Iran Communications Industries (ICI) on behalf of the Law Enforcement Forces of The Islamic Republic of Iran.

The Elettra network consists of a multi-site, multi-switch system providing seamless service to 16,000 subscribers and covering all of Tehran and its satellite cities and towns –in excess of 1600km^2. This network will provide the highest level of resilience, with load-sharing between switches, ring topology, and automated reassignment of traffic in case of switch failure or unavailability. An additional feature is also planned to include a user interface for Farsi, the local language.

TETRA helps to find the buses in Barcelona

Automatic Vehicle Location (AVL) services, using a Teltronic TETRA NEBULA infrastructure, will assist the Metropolitan Transport Company of Barcelona (TMB) to manage their fleet of 1200 buses.

Teltronic has been awarded a contract to supply, commission and maintain a TETRA infrastructure with 7 sites and a total of 30 carriers to support the fleet of 1200 urban buses in Barcelona. Bus locations, using the AVL application on the existing analogue radio network, will be enhanced and adapted to take advantage of both voice and data services provided by TETRA. Teltronic has developed a secondary control channel standard service and an optimised polling algorithm which improves location information updating periods as well as other types of data transfers related to the AVL service.

Mersey ambulance choose Sepura terminals

The Mersey Regional Ambulance Service (MRAS) in the north-west of England has selected Sepura radios to help them speed up emergency response and improve patient care. Of the UK Regional Ambulance Services, often referred to as 'Trusts', the MRAS is one of the first Ambulance Trusts to select the O2 Airwave Network service for its future communications.

MRAS will be using Sepura SRM2000 mobiles that can deliver both Internet Protocol (IP) Packet data and Short Data Service (SDS) in the same radio on the O2 Airwave network. These will be able to provide secure, robust data communications to the Trust's extensive ambulance fleet.

Each of its 150 ambulances and support vehicles are being provided with radios that will transmit real-time incident location and status information between the ambulances and the control centre. Staff in the control centre will be able to locate the nearest ambulance to an incident and automatically send patient details to a mobile data terminal in the ambulance. Paramedics will be able to confirm they have received the details of the incident, notify the control room when they have reached the patient, and then provide the hospital staff with status, details of the patient, and medical attention they are providing.

Paris and Lyon united with TETRA

The French motorway operator, Societé des Autoroutes Paris-Rhin-Rhône (SAPRR), has chosen a TETRA solution from Nokia for its new communication network.

SAPRR operates a number of motorways across central eastern France, including the prestigious Paris-Lyon route, and has signed a contract for a Nokia TETRA system to replace its current analogue systems. Its new TETRA system will bring full secure professional mobile radio (PMR) coverage to its motorway networks. Under the contract, Nokia will supply a complete TETRA system featuring the Nokia TETRA Neat architecture which the company say is tailored for motorway network applications.

"Our motorways span more than 2,200 kilometres and serve more than 135 million vehicles per year. Therefore, we need a secure system that will enable us to provide reliable, high-quality PMR services over a large area," says Valéry Chalimon, Motorway Traffic and Maintenance Manager, SAPRR. Deliveries and implementation of the network have already begun. France is rapidly becoming a TETRA centre as more and more contracts for new communication networks are fulfilled with TETRA technology, many of them in the transport sector.

New hand portable from Nokia has GPS receiver and high-resolution colour display

The latest TETRA portable from Nokia has just been announced. Their THR880i radio incorporates a GPS receiver to allow TETRA command and control centres to locate and track radio users. Radio users can also send their coordinates to a predefined address simply by pressing the red key of the radio.

With their new radio, the company says public safety professionals can benefit from many of the latest usability innovations in mobile devices. With its 130 x 130 pixel, 65,356 colour display and XHTML browser, it can show colour pictures, graphics as well as XHTML and HTML pages even in varying light conditions.

Deliveries of radios for the 380 and 410 MHz bands are planned for the 4th quarter of 2004 and for the 800 MHz band during the 1st quarter of 2005. You can see the new radio at the 2004 TETRA World Congress in Vienna.

Spa-Francorchamps Formula 1 at full speed

During the weekend of 27-29 August, ASTRID provided some hundred TETRA radio terminals to the safety and emergency services supporting the Formula I Grand Prix at Spa-Francorchamps. The police, the fire brigade, the Red Cross and the race organisers all agreed that the ASTRID radios worked perfectly. This was the second time that TETRA has been used to support a major motor-racing event in Belgium as the radio system had already been thoroughly tested at the end of July at the Francorchamps 24 Hour endurance race.

Middle East successes for Rohde & Schwartz

Q-Tel in Qatar has chosen Rohde & Schwarz as their partner for a nation wide PAMR TETRA network that will offer communications to a wide variety of commercial and industrial organisations in the peninsula. As a first step, two central switches will be installed in Doha to support base stations at different locations. Coverage will be provided around Ras Laffan City where approximately 20 petrochemical plants are located. The system will be handed over for commercial operation in January 2005.

Further north in the region, the National Iranian Central Oil Company (NICOC) will be implementing a Rohde & Schwarz TETRA system through a local Iranian company. The system is planned to provide communications for exploration sites and pipelines. According to Rohde & Schwarz, 15 base stations will be dispatched to NICOC by December 2004.

News from the Secretariat

The Association is delighted to welcome a further 4 new members

- Airtech I & C Co Ltd – Korea
- Européenne de Télécommunications (ETSA) – France
- PMeV, German TETRA Forum – Germany
- Rheinmetall Defence Electronics GmbH – Germany

By the time you read this, the Association will have run another one day conference and exhibition on September 22nd in Seoul, South Korea. At the time of writing we have ten exhibitors, all members of the Association. With delegate registration numbers currently 250, things are looking promising for another interesting and successful MoU Association event.

TETRA Events Diary 2004

EVENT	DATE	VENUE	INFORMATION
All Russian TETRA Conference & Exhibition	4 – 6 October	Moscow	www.tetraforum.ru
7th TETRA World Congress	22 – 25 November	The Austria Center Vienna, Austria	www.iir-tetra.com