

# Nokia TETRA to the rescue

This story could come true within a few years if Sweden and Norway follow Finland in selecting TETRA for their public safety networks. The Finnish network, VIRVE, is the first nation-wide TETRA network to serve public safety organisations. Here we see how the three networks could co-operate to save a hiker

It is January and snow covers the landscape of Finnish Lapland.

In Kilpisjärvi, officer Markko, a Finnish border guard, is patrolling on his snowmobile, close to the Swedish and Norwegian borders. He likes his job and with a new snowmobile equipped with a TETRA mobile radio, a rugged PC and a GPS system, he feels confident that he can communicate with his colleagues and with headquarters, however remote he may be.

Suddenly, in an isolated area of the

mountains, he finds an exhausted hiker. The man is clearly in a bad way - he can't even speak.

Officer Markko gives the hiker first aid, which revives him a little, but he is still unable to say his name. Checking the hiker's pack, officer Markko finds the man's driving licence. His name is Erik and he is Swedish.

## WAP for fast data

As well as a TETRA mobile radio installed in his snowmobile, officer Markko also carries a Nokia TETRA handheld terminal in his pocket. It is WAP enabled and gives immediate and secure access to data using a TETRA packet data service.

Officer Markko accesses a European-wide personal ID database and discovers that Erik is a diabetic from the small Swedish town of Kiruna, close to the Finnish border. As Erik already has a low temperature, officer Markko decides that he needs immediate medical care.

Without closing his packet data connection to the WAP server, officer Markko makes an emergency call to his home base dispatcher. Officer Markko's exact location is displayed on the dispatcher's screen, sent to him by the Automatic Vehicle Location application in the snowmobile.

During the emergency call, the dispatcher discovers that Kiruna's town hospital is 150 km away from the snowmobile and that the closest rescue helicopter is in Tromsø in Norway, 100 km away.



## Working together through ISI

Without disconnecting officer Markko's emergency call, the dispatcher makes two other TETRA calls - one to the rescue helicopter in Norway and the other to the hospital in Sweden, giving him some basic information on the hiker and his condition. This is only possible because the three countries have implemented the TETRA Inter-System Interface, allowing national TETRA networks to be connected together.

With a few clicks on his screen, the dispatcher sets up a temporary talk group for himself, officer Markko, the hospital in Sweden and the Norwegian rescue helicopter.

Officer Markko guides the rescue helicopter to a landing in the forest to pick up Erik.

The helicopter is equipped with UNIQMED, a system that uses TETRA packet data to transfer information to the hospital. The doctor in the hospital can follow the hiker's condition during the rescue flight.

Finally, Erik is taken to hospital - the rescue operation is over and the temporary talkgroup is deleted. Officer Markko continues his patrol, knowing that he saved a man's life, with the help of TETRA.



# World Congress News

The 4th TETRA World Congress



Thursday, December 12th, 2001

## Last chance to see the Exhibition area and Applications Village today



Make sure you haven't missed any of the companies exhibiting at this year's biggest ever Exhibition area and in the Applications Village. Representatives from nearly forty different companies are exhibiting the largest ever display of TETRA products and services here at the World Congress in Nice. On display are the newest TETRA terminals and infrastructure from the world's leading TETRA manufacturers. Live demonstrations of TETRA applications are in the

Applications Village and the Exhibition area. Solutions in action and companies to help find solutions are all there. This year we also have a number of vehicle and transport related static exhibits – have you driven the train?

The exhibition will close at the end of the lunch break on Thursday. Don't leave it too late to view everything. You will never have a better opportunity than here at the Acropolis. Make sure you make the most of it.

## Testing, testing, testing...

How do you know a TETRA radio is communicating using the correct TETRA protocols? Simple, use the new TETRA Radio Test Set from IFR, their IFR 2968, on display here in Nice for the first time. IFR's clear commitment to TETRA has established the company as the principal supplier of TETRA wireless test equipment. Delegates will be able to see the preview of Version 3.2 of its industry standard Test Set as well as demonstrations the 2310 TETRA Analyser and its TETRALOG Proto-col Analyser application. According to IFR, their 2968 TETRA Radio Test Set Version 3.2 contains new and enhanced features which will further strengthen its position as the de-facto industry standard

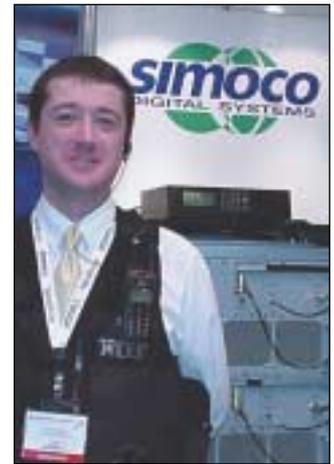
TETRA test tool for both Base Station and Mobile Station installation and maintenance.

Enhanced automatic testing functions will simplify and speed up terminal testing during routine maintenance and repair operations normally undertaken by the emergency services and managed terminal suppliers. These functions include automatic receiver bit error rate testing using 'TT' RF loopback, automatic TETRA equipment identification including power and receiver classes and flexible functional test selection allowing up to six different types of call set-ups and clear-downs to be specified in a built in test program.

**Test it for yourself on their stand in the Exhibition area.**

## Award winners

The TETRA Awards for 2001 were presented last night at the Gala Dinner at 'La Siesta'. With a record number of nominations, choice for the delegates and the expert panel was difficult. However, as in any competition, there must be a winner - and the choices have been made. The awards, presented by Sir Ranulph Fiennes, crowned a fabulous evening for all the delegates and will be a lasting memory for the winners. The best New TETRA product was won by Simoco with their SRP2000 2nd generation portable radio. The SRP2000 is the smallest and lightest rugged second generation portable available. The whole Simoco team was delighted with their award. As we went to press, the innovative TETRA Service



Above: Winner of Best New TETRA Product, the SRP2000 from Simoco



Above: The Niros stand won approval with the knowledge and attitude of its staff

award and the Most Innovative Applications Development awards were subject to recounts as the last minute votes were too close to call.

Two other awards were made during the evening. The panel judged Niros' stand as the best in terms of look and greeting from its stand staff. The final accolade of the evening was for John Merrifield, the popular winner of this year's Outstanding Contribution to TETRA award. The award was given to John for his unstinting energy, drive and achievements as Chairman of the TETRA Business Solution Group. Under John's leadership the group has pushed forward the whole area of applications and has transformed this arena for TETRA and TETRA users alike.



Above: John Merrifield, the popular winner of the Outstanding Contribution to TETRA award



*In this issue: Turning TETRA into solutions; TETRA, the choice for communications in a crisis; Keeping transport services on track; Next year's events.*

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## Question of the Day – Turning TETRA Systems into Solutions

A worthy question to end the World Congress. We are all interested in solutions to our business and operational requirements. We will have heard in this morning's debate about the route planned for the TETRA roadmap with TETRA Release 2. Now it is the question of how TETRA will continue to provide solutions. The discussion will focus on two key issues – Data and IP (Internet Protocol). The joint chairs for this closing plenary session are well placed to guide us through the discussion – we have

the new and the old Chairman of the TETRA MoU Association keeping us on track this afternoon. And, as always, representation from users figures highly in the content – this time reaching around to the other side of world, to India – as they give us their perspectives.

To end the World Congress, the new Chairman of the TETRA MoU Association, Mr Ray Ginman, will address the plenary session with his closing remarks at the end of what, I am sure, will have been another success in the story of TETRA.

## Marconi don't miss the bus (or the boat!)

In two recent contract announcements, Marconi have demonstrated how their TETRA solutions can help transportation and port services manage their businesses more efficiently. The first TETRA solution will help Italian bus operator, Brescia Trasporti SpA, improve its service while reducing the number of vehicles it has in use. Marconi Wireless is providing a TETRA network that will allow the transport company to monitor and control its bus fleet more effectively, resulting in more efficient timetables and route selection, addressing current customer demands.

The system will be used to monitor vehicles' progress along their routes, ensuring that they keep to their timetables. It will allow control of passenger loading, provide communication in the event of an emergency, perform statistical analysis and help allocate the correct numbers of buses and drivers for each route. "Our key objective is to provide the most efficient and punctual public transportation service possible. Marconi is playing a

key role in helping us achieve this objective," said Dr Giorgio Schiffer of Brescia Trasporti SpA.

The second contract award is from LSCT - La Spezia Container Terminal SPA - the company that manages the movement of containers in the harbour of La Spezia, on the Ligurian coast of North-Western Italy. This contract is also the first for the new 450-470 MHz frequency band for civil applications in Italy. Marconi is providing a TETRA network that will allow voice communications between users and LSCT's control centre including remote locations around the harbour. It will provide secure radio communications for voice and will integrate with LSCT's existing management systems, including cargo management and despatch systems. Paolo Mussi, Technical Director of La Spezia Container Terminal SpA said: "Marconi was also able to offer us a tailored solution designed specifically for our needs. We particularly wanted to be able to integrate with our existing management systems."

## Debate of the Day — TETRA Release 2

With apologies to Sir Christopher Wren, the architect of London's St Paul's Cathedral, if you want some evidence of TETRA Release 1's success – look around you! Three days at a packed World Congress, the TETRA Awards and the live demonstrations of new TETRA products in the exhibition area are all the evidence needed. Clear evidence of the continuing success and growth of TETRA. But, there is inevitably a question hanging on the lips of many delegates – where does TETRA go from here? TETRA Release 2 is where we go from here and this forms the subject of the last debate in the TETRA World Congress.

Ranko Pinter, joint chair of today's debate, is ideally placed to guide the debate as he is the Chairman of WG1, the ETSI Working Group charged with specifying TETRA Release 2. The progress during this year of WG1 was one of the highlighted topics at yester-

days TETRA MoU Association Press Conference.

Today's TETRA Release 2 covers a lot of ground. Starting with a look at Spectrum challenges guided by Reiner Leibler on behalf of CEPT, the debate then moves on to look at security requirements with contributions from the experience of Sue Young (BT Airwave) and Trevor Evans (PITO – the Home Office liaison group responsible for managing the specification and application of BT Airwave for the UK's Police forces). The panel discussion broadens out the topic so we can hear from industry as it is in their hands to deliver the TETRA Release 2 benefits in the products of the future. Doug Gray will give us all the 'school report' for the first year of TETRA Release 2's three year programme. Will it be 'steady progress' or 'must try harder'? Let's wait and see. The debate closes with an address from Karl-Heinz Rosenbrock, Director General of ETSI.

## TETRA Masterclasses: *It's not over yet!*

The World Congress may finish today but the TETRA activity continues tomorrow with the TETRA Masterclasses. As the name suggests, these are in-depth workshops looking at some highly specialised topics. Friday's line-up covers:

Broadband Services & Applications  
TETRA + PEI  
TETRA Release 2  
\*❖\*★ Security

Top industry TETRA experts and users lead all the Masterclasses. The Broadband class is led by representatives from project MESA (Mobile for Emergency & Safety Applications). Infomatrix, who have implemented an innovative data application or the States of Jersey Police, lead the PEI class. The TETRA Release 2 class is led by a team including the chairman of EPT WG1, Ranko Pinter and the Chairman of ETSI project TETRA, Brian Oliver. Finally, the Security class will be in the safe hands of the SFPG chairman, Gert Roelofsen and his team. If you are booked on any of these classes, they will form the perfect end to a TETRA banquet that has lasted all week. Bon appétit!

## TETRA MoU Association doesn't pull its punches — use TETRA for crisis communications

At a Press Conference held by the TETRA MoU Association yesterday, Doug Gray pressed home the suitability of TETRA as the public safety communications platform in times of crisis. He argued strongly that the time had come for "Governments, Administrators, Legislators and Public Safety Users to work together" to bring the obvious benefits of TETRA to public safety organisations in their response to disasters. The call was for all the emergency services

and related public safety organisations to be mandated to use the same technology and frequency band of operation. The audience heard how some of the emergency service personnel responding to the dreadful events of September 11th in New York had to carry three portable radios to be fully in-touch. Gray also pointed out there was a danger in the UK of the procuring multiple communication solutions for the emergency services as the Fire

Brigades were not being mandated to use the new national TETRA system for the police, BT Airwave.

Attendees heard progress reports on IoP – the MoU is driving the process to appoint a new independent test house with a goal for it to be operational by May 2002 - and TETRA Release 2. There was good news from the 3-country pilot project involving Germany, Holland and Belgium. Hans Borgonjen, speaking on behalf of the TETRA MoU said:

"Only TETRA meets the Schengen requirements of a solution following a European norm and operating on a common frequency." He was very confident about the eventual success of the scenario testing in the project, "More time will be spent resolving the complexities of the legal and operational situation than proving the technology works".

The Press Conference was the first formal MoU event for the new Chairman, Ray Ginman.

## TETRA Events for 2002 – make a date in your diary now

Enjoyed this year's TETRA World Congress? Make a note in your diary of these IIR events for 2002.

### TETRA Applications Congress (including 'Communications for Disaster Relief') April 8 to 11, London.

Contact: Victoria Hughes +44 (0) 20 7915 5649  
or e-mail [vhughes@iir-conferences.com](mailto:vhughes@iir-conferences.com)

### TETRA Asian Congress – May 2002

Contact: Michael Cherrington e-mail [mcherrington@iir.com.hk](mailto:mcherrington@iir.com.hk)

### TETRA Seminars – June, London.

Contact: Andrew Thake +44 (0) 20 7915 5099  
or e-mail [athake@iir-conferences.com](mailto:athake@iir-conferences.com)

### TETRA WORLD CONGRESS 2002 – 18-22 November

Nice Acropolis, France.  
Contact : Andrew Thake +44 (0) 20 7915 5099  
[athake@iir-conferences.com](mailto:athake@iir-conferences.com) or see the website [www.tetra2002.com](http://www.tetra2002.com)

## Crossword solution

*Did you find the answers to all the clues?*

For all those stumped by the clues, here is the crossword solution,

T	E	T	R	A			T	I	P
H		E		M	U			I	
E	T	S	I			W	A	R	C
W		T	D	M	A		I		O
O						T	U	R	I
R	A	D	I	O					G
L		O		B	O	A	T		R
D	A	T	A			N	I	C	E
	G			R	U		M		S
M	O	U				N	O	E	L



## Dimetra IP – Fully Compliant TETRA Solutions for Mission Critical Operations



Visit the Motorola stand for an introduction and demonstration of their new high performance TETRA infrastructure Dimetra IP:

- Fully compliant to TETRA air interface standards
- Flexible coordination of public safety operations
- Secure communications against sophisticated criminals
- Maintained communications through high system resilience
- Simple and cost effective system expansion and enhancement
- Integration of mobile communications with other information systems
- Backed by Motorola service, maintenance and support