



PMRExpo November 2010
Exhibition Hall

Improving our Services

At the moment the TETRA web portal of TETRA-Applications.com, has been launched just over 6 months ago.

We are proud to let you know that we have attracted many thousands of TETRA Industry professionals to our TETRA Web portal, we contributed in round table sessions, where present during PMR events around Europe and we have significantly improved our services for our members and visitors of our website.

During the last six months we have accomplished the following activities:

- We improved our search engine. You are now able to select the number of hits in one search
- We introduced our TETRAFlash newsletter, highlighting events and TETRA industry news
- We activated our YouTube Channel showing video impressions of events

and providing you Podcast Interviews

- We launched our own LinkedIn Group
- We provided you updates via Social media such as LinkedIn and Twitter

Recently we included two new features to our TETRA portal

1. TETRA Jobs
2. Our YouTube video selection at our Home Page

From today, all of the companies that are listed will be able to upload their latest job positions via our web portal. We expect to offer you a great variety of positions from engineering to sales, marketing, project management and we will keep on monitoring and improve our service constantly. We are pleased that many of our members have given us just the right feedback we needed. However as you

might understand, we are not always able to implement all of the requests.

TETRA-Applications.com is there to support you in your business activities related to TETRA Communications Industry.

Please, enjoy reading our latest edition of TETRAFlash!

Agnita Cheung

In this edition

1. Interview: Jyrki Koski, CEO, Creowave
2. OTTO celebrates 50 years of excellence
3. PMR Expo 2010
4. STOP Noise - 3 in 1 Remote Speaker Microphone
5. Teltronic - Synchronous Data Manager
6. New TETRA Industry Report - "The World Wide market for TETRA Terminals"

TETRAFlash is a quarterly
Newsletter for the TETRA
Communications Industry
Professional

TETRAFlash
"Dragon House"
Dragonweg 57
2215 BN Voorhout
The Netherlands
Editor-in-Chief: Agnita Cheung

Interview with

Jyrki Koski

Company: Creowave

Location: Oulunsalo, Finland

Position: CEO



We interviewed Jyrki Koski, CEO of Creowave and asked him why Creowave is so successful within the TETRA Communications market.

TA.COM: What were the reasons for founding the company, back in 2004? Before founding the Creowave, part of my previous history is related to industrial measurement using the radio waves for measurements in an industrial environment. A part of that work has been on the telecommunications side. With this knowledge, I founded the company back in 2004.

TA.COM: So the step to focus on radio communications and the production of repeaters for TETRA radios was quite a logical step? Yes indeed. When we founded the company, it was around measurements for the Oil and Gas Industry and at the same time we were very hungry to have more business areas to focus on. We already had all the knowledge and know-how of the products and we already knew some key customers as well.

TA.COM: Where these customers already using TETRA radio systems or where they still using analogue systems? They were using TETRA systems, as in Finland there were already customers using TETRA for some years. As you might know, Finland is one of the first countries worldwide that have deployed TETRA network at the very early stage, so the customers in Finland already existed when we decided to develop solutions for TETRA. This was a great advantage for us.

TA.COM: Back in 2007, you started to produce your first TETRA repeaters. Did everything go well from the first moment, or did you experience many challenges? The first product was developed in close cooperation with the Finnish TETRA operator and we did receive good feedback on what was important to them. The project went very well and because of the highly skilled people within our company, we did not get that many challenges during the development of the project. Also the product itself was very well accepted by the customer. I think that this success is partly coming from the fact that the mental attitude within our company is that we have always been focussing on delivering high quality and reliable products. We were already used to the fact that our Big International Oil and Gas customers had high demands for solutions in tough environments.

TA.COM: Is this where Creowave differs from its competition? I would like to name two main things where we differ from competition. On one side, we are the only company producing repeaters for harsh environments and secondly, we are always focussing on coverage only, whereas most of the competition has an engineering approach and is working around the products. To us, you have or don't have coverage.

TA.COM: Your company is based on 3 pillars of solutions; TETRA repeaters, Radio testing filters and Radio measuring solutions. Can you tell us how these pillars are divided within your company in terms of turnover and focus? The target within Creowave is to develop all 3 pillars at the same time in order to have a balanced business. However, the highest growth is expected to be in TETRA Communications Industry. In fact, this makes life a little bit challenging for the other businesses within our company. Currently the largest growth for TETRA repeaters is coming from Europe, since Europe has many countries deploying TETRA networks for a longer time. Currently the Middle East is growing very strong as well. We started our operations in the Middle East about 1,5 years ago and expect a steady growth in this area.

TA.COM: Does this have to do with the Oil industry, or is it just the fact that TETRA is growing in this area anyway? I think both are right: Communications in the Oil and Gas industry is moving towards TETRA. Just take a look at the investment Aramco is making within this industry. At the same time in general, the TETRA business is moving fast in the Middle East.

TA.COM: Do you work closely with Infrastructure manufacturers? We deploy a variety of business models. We use direct sales in situations after a network is up and running and we work with the manufacturers of base stations during or before the implementation of a network. For example; in Norway there are a lot of Railroad tunnels. During the deployment of the TETRA network it is already necessary to implement repeaters immediately. Basically, we are a very flexible company and adjusting our approach to the customer- and market need.

OTTO celebrates 50 years of excellence

Known today as a prominent leader in the controls and communications industries, OTTO engineers and manufactures equipment for federal, military and commercial applications around the globe. In the Controls division, OTTO produces several styles of switches from pushbuttons to toggles to rockers in addition to control grips used in heavy operating machinery for industrial, agriculture, construction and aerospace sectors, among others. OTTO Communications provides a comprehensive line of two-way radio accessories such as speaker microphones, surveillance kits and headsets employed in public safety, industrial and hospitality industries. All OTTO products are relied on to provide exceptional performance under the most rigorous routines, the harshest conditions and the most strenuous activities.



The OTTO facility in Carpentersville, IL

In 1961, Jack Roeser founded the company as a high-quality manufacturer of ultra-dependable controls. Though much expanded since, the Controls line still includes the inaugural product – a basic snap-action switch. In the 1980s, OTTO was presented with an opportunity to design and manufacture a basic switch used inside of a surveillance kit and offered to produce the entire finished good. Thanks to the vertically integrated manufacturing resources in place, OTTO realised the opportunity for new business and launched its Communications division. Years of dedication, innovation and precision have built OTTO into a globally respected, high-quality manufacturer with more than 200,000 square feet of manufacturing capabilities.



OTTO's latest TETRA RSM with LED

All of OTTO's design, testing and manufacturing processes are based in the US, and have earned the company a worldwide reputation for superior performance and engineering. Understanding that the key to success in the global marketplace is to remain proactive and flexible, has enabled OTTO to cultivate a rich history and maintain its forward-thinking vision. All of OTTO's employees, partners and clients have played a role in building OTTO into the company it is today. CEO since 1987, the founder's son, Tom Roeser, has taken OTTO to new heights through the introduction of innovative products, acquisitions and selling strategies, growing the company tenfold. Of the company's progress, founder Jack Roeser says "We appeal to the customer because of our close working relationship between sales, engineering and responsive manufacturing."

This business philosophy has also helped OTTO establish itself as a valued member of the Carpentersville community. The company contributes regularly to numerous charitable organisations and has worked with the local school system to establish career paths for high school students.

OTTO proudly celebrates its 50-year history throughout 2011 and has big plans for a bright future involving growth, innovative ideas, new product development and leadership.



PMRExpo 2010

TETRA ready for German Public Safety Organisations and for end users within Industry & Public Transport ready

Increased number of companies offering TETRA Applications & Solutions

It has been a while ago, however the 10th PMRExpo took place 23rd to 25th November 2010 at the Koelnmesse.

The event was organised under the patronage of Ralf Jäger, Minister for Home Affairs and Local Government of North Rhine-Westphalia, who held the opening speech at the congress on command & control centres on 24th November and later informed himself by touring the exhibition.

With 177 exhibitors from 14 countries at 2,747 m² exhibit space (2009: 169 exhibitors at 2,519 m²), 2,941 professional visitors as well as more than 400 registrations for the 2-day colloquium and more than 500 participants in the congress on command & control centres last year's numbers could be excelled.

The traditional elements exhibition, colloquium, congress on command & control centres as well as the sessions, which took place for the second time, offered targeted information for a

special participant circle. In addition to these the Application Forum was introduced this year. This is a space within the exhibition hall where companies can present their solutions and applications by giving a lecture in German or English and showing them at a small information booth. The organisers hope to include this element even more successfully into the frame of PMRExpo next year, because the demand as well as the supply of such applications for digital mobile radio are growing strongly. Furthermore it is clear that there was a lot of interest in the various presentation that were held in the applications forum. Many well established companies such as Portalify, Mentura, Siemens and Kolibri as well as other less well known Applications developers were present to explain about their applications. One of the reasons for this success was due to the location of the Applications forum and the exhibitors of applications that were showing live demonstrations of their applications right at the entrance



During this year PMRExpo we noticed a large increase of companies that are specialised in TETRA Communications. Not only companies focused on the GERman Public Safety network were present but also Companies offering smaller TETRA networks for small to medium size networks were present. Also in Germany it can be said that TETRA is there to stay and that it will penetrate the industry and transport market as well.

After speaking to many of the exhibitors we can state that we look forward to next years event. We expect even a larger amount of companies focusing on TETRA Applications.

PMRExpo is the annual branch meeting place for professional mobile radio (PMR and Trunked Radio) as well as command & control centres. The event addresses annually more than 1,500 executives and specialised visitors and participants from the target groups: BOS (authorities and organisations with security tasks – police, fire departments, rescue services, THW), local public transport (ÖPNV), utility companies (electricity, natural gas, water, telephone assets), industry, logistics and specialised trade as well as from municipalities. Literally all well-known companies in this field present their latest products and solutions. End users talk about experiences and developments.



PMRExpo has developed to a leading international branch meeting place for visitors and exhibitors from Germany and abroad over the past years and offers the ideal platform for the exchange between providers and end users. However, the main focus lies on the German speaking community.



DID YOU KNOW?

TETRA is

being used in Formula one racing and that ASTRID the operator in Belgium for Nationwide Public Safety network has supplied the TETRA communications services for the Spa-Francorchamps circuit since 2005

That at SECURITY Essen TETRA has been presented by more than 7 organisations and that we **Schneider Security introduced a TETRA intercom** solution?

That **TETRA-Applications.com** expects to have about **2.000 members** at the end of our first year of operation and that the TETRA web portal has been visited by more than **15.000 visitors** in the first few months?

With the **GPS based Waypointer function in TETRA radios**, pilots simply send the warm spot coordinates to the team on the ground

That the **TETRA Applications corner during the PMRExpo 2010** in Cologne, Germany was a great success

That the Control Room Event in Amsterdam was very successful and that the **IIR is organising a new PMR event in Barcelona**

3 in 1 Multi handset Remote Speaker Microphone

3 in 1 Multi Handset from Stop Noise utilizes modern technologies and data capabilities of TETRA to improve users' performance

We spoke to Mikko Salonen from Stop Noise Finland Ltd. The company presented their barcode reading Multi Handset for TETRA terminals in PMRExpo 23.-25.11.2010 and published also new coming features for the handset: RFID reader and biometric identification methods.

It is very clear that The Stop Noise Multi Handset may look like "just a speaker microphone with keypad" but the fundamental idea behind it is to offer a possibility to collect data and send it over TETRA network to a database, from which feedback can be automatically sent for example to the user's terminal. Multi Handset offers an interface for various modern data collection technologies (barcode, RFID and fingerprint reading). Together with partner companies Stop Noise is able to deliver larger customer

specific complete solutions to TETRA user organizations.

An example case to clarify the idea: A police officer stops a car, scans the driver's license and vehicle registration document with Multi Handset and gets more information about the driver and car in SDS messages to the TETRA terminal. If there is anything out of the ordinary, the message arrives as a flash message straight to the terminal's display with a different message alert tone to get the officer's attention. By introducing this kind of new working method for traffic control, cost efficiency and reliability can be improved while making the officers' work easier.

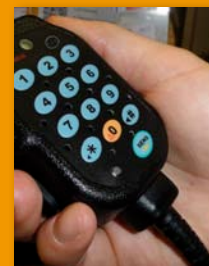
The data collection technologies for 3 in 1 Multi Handset include barcode reading, RFID reading and fingerprint reading so several different versions will be available. The accompanying picture shows the appearance and feature list of barcode reading Multi Handset.

"In PMRExpo we received a lot of positive feedback concerning our Multi Handset. Not only end users but also distributors showed great interest, which is good because we are seeking new distributors worldwide." says Mr. Markku Nieminen, Managing Director of Stop Noise



Mikko Salonen

product manager



Trials of TELTRONIC's Synchronous Data Manager (SDM) demonstrate an impressive fifty-fold increase in GPS positioning refresh rates in Bahia State, Brazil

TELTRONIC's network data optimisation tool, Synchronous Data Manager (SDM) allows Bahia State Public Safety Secretariat to read as many as 50 positions a second over its TETRA network

TELTRONIC has a long relationship with public safety authorities in Salvador, Bahia, Brazil having deployed an analogue trunked (MPT 1327) network at the beginning of the past decade. In 2005, TELTRONIC won an important contract to supply Bahia State Public Safety Secretariat with a modern TETRA system comprising 22 base stations and around 4,000 terminals fully integrated to the existing analogue systems via a modern call centre. This TETRA network is shared by the Military Police, Civil Police, Scientific Police and Fire Brigade achieving cost savings, increased functionality and greater cooperation between forces.



City of Salvador, Bahia, Brazil

TELTRONIC's Ethernet/IP-based NEBULA infrastructure is based on standard, digital TETRA technology which offers increased network capacity and efficiency when compared with previous analogue solutions.

TETRA is highly efficient for managing high levels of voice calls between groups of users. However, as automatic vehicle location (AVL) and personal location (APL) services are introduced using GPS technology incorporated into

TETRA terminals, there is a real danger that the network will become saturated during peak hours and major incidents. Authorities are then left with two options: either increase network capacity with more sites and base stations, potentially involving millions of dollars of additional investment or find an even more efficient way of dealing with voice and data traffic. TELTRONIC has therefore developed its Synchronous Data Manager (SDM) solution for the more cost-effective second option.

Bahia State Public Safety Secretariat has therefore been trialling TELTRONIC's SDM solution within its TETRA network. Based on optimised polling methods, SDM maximises the use of each radio channel within the network. This is allowing Bahia State to read as many as 50 positions per second (around 3,000 positions per minute) – an improvement of as much as 50 times during busy periods - with no noticeable effect on network performance, even during this year's Salvador Carnival, which is consistently described as the largest Carnival in the world. TELTRONIC has also implemented its brand-new CeCo-Fleet solution (part of its CeCoCo control centre portfolio) to allow web access for greater management of network resources.

“TELTRONIC has built up a strong working relationship with the Bahia State Public Safety Secretariat over a number of years. We always strive to provide it with the most up-to-date communications solutions. We listen to our customers, understand their needs and offer value for money,” stated Mauricio Rio, Regional Director, TELTRONIC Brazil.



State of Bahia, Brazil

TELTRONIC understands that a mission-critical TETRA network is likely to be operational for at least 15 years and needs to be able to grow according to the needs of the users as new functionality is added and operational procedures change. This requires the most flexible communications platform and a close relationship with the customer. TELTRONIC has developed all the necessary network elements and applications to make this a reality.



NEW MARKET REPORT PUBLISHED:

"The World Market for TETRA Terminals"

IMS Research, a Member of the TETRA Association, has just published the 2011 version of its market report "The World Market for TETRA Terminals".

The report provides a highly detailed study of the worldwide market for TETRA terminals to 2015. In-depth analysis of factors affecting each country/regional split is combined with comprehensive market forecasts for the installed base, terminals shipped and terminal revenues for all vertical markets across over 70 countries. Qualitative analysis is combined with a detailed discussion on future handset design trends, TEDS, TETRA broadband and the overall competitive environment.

The report addresses a number of key questions, including:

- How many TETRA terminals were sold in 2010? How will this change during the next five years?
- What are the projects that are driving the TETRA terminal market? What new projects will drive more medium term growth?
- How will TETRA perform outside of its main market of public safety and security? What are the other key applications?
- As some of the early TETRA projects start to reach maturity, what sort of terminal replacement rates are being seen?
- How does the TETRA terminal market break down by tier? What are the prospects for TEDS terminals?
- To what extent does Europe dominate the TETRA market? What are the technology's prospects in other regions such as MEA, Asia, Latin America and the contentious North America?

"Following a difficult 2009, TETRA terminal shipments have shown a number of positive signs in 2010. Emerging markets that many believed to be jeopardy, have shown steady growth in 2010. Looking to the future, many believed that the TEDS standard was all but dead. However, 2010 has seen two significant developments that has brought TEDS to the fore again. Combining this with a number of established networks now entering a strong replacement phase, the overall TETRA market is forecast to remain robust in the medium term."

Alex Green, IMS Research



World Wide TETRA Events

events where TETRA products & solutions will be exhibited and discussed

Jan 25, 2011

[TETRA Association Congress the Middle East](#)

[Sheraton, Abu Dhabi - United Arab Emirates](#)

Feb 2, 2011

[TETRA Association Congress Turkey Istanbul - Turkey](#)

Mar 1, 2011

[CeBIT 2011](#)

[Hannover - Germany](#)

Mar 9, 2011

[IWCE 2011](#)

[Las Vegas Convention Center, Las Vegas, NV - United States](#)

Mar 16, 2011

[TETRA Forum Norway](#)

[To be announced - Norway](#)

Mar 19, 2011

[Counter Terror Expo](#)

[Olympia, London - United Kingdom](#)