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Hytera customer publication & channel news

Issue 2, 2012

Digital Reality
is Coming to PMR

Online Marketing

Good Customer Service and Quality
are Worth Their Weight in Gold

Hytera Case Study News Update

New Products

- X1p
- ATEX
- SmartDispatch 3.5

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CONTENTS

02 Preface

03 DMR Focus
Digital Reality is Coming to PMR

05 Solution & Case Study
Solution for PMR Operator
Choosing Efficiency
Bringing Two-way Radio Clarity to Connecticut
Solution for Oil & Gas
DMR Trunking Communication for CNPC
Hytera DMR Solution in America's Cup
The Wireless Triathlon
Hytera Case Study News Update

23 News & Events
World's First DMR Trunked Tier III Solution Provider Awarded IOP Certificates
2012 Windsor Award Approves the Excellent Performance of Hytera UK
Hytera Mobilfunk Takes over German Specialist for Wireless Protocols
Euro 2012 Stadium Adopts Hytera DMR Solution
Bangladesh Police is Replacing Their Analog Radios with DMR Handsets
Kazakhstan Railway Adopts Fully Digital TETRA Radio Communication System
PD70X DMR Portable Radios, Ruggged Enough for Dallaglio Flintoff Cycle Slam
Hytera Mobilfunk Showcases Complete Transport Solution at InnoTrans 2012
Tailored Digital Communications Solutions was Showcased at PMR Forum Russia
PT580H Portable Radio Gets the Spot Light at TETRA in India 2012

29 Hytera in the News

31 New Products
X1p
ATEX
SmartDispatch 3.5

33 Online Marketing

35 Partner Interview
Good Customer Service and Quality are Worth Their Weight in Gold

37 Event Calendar

38 Contacts & Feedback

Another New Year to **Stay Focused**, Stay Innovative

Dear partners and customers,

On behalf of Hytera and all my colleagues, I'd like to take this opportunity to thank you all for your support in the year of 2012, and wish you a happy new year in 2013.

The past year is an exciting one. Our professional communication solutions have been deployed around the world. Since Hytera delivered the first DMR Tier III trunking system to our end users in 2011, we have been awarded DMR trunking projects in North America, Latin America, Europe, Russia, UK, etc. Meanwhile, our R&D team keeps bringing new features and products into Hytera DMR portfolio to meet customers' evolving demands. With its expertise in TETRA infrastructures, Hytera Mobilfunk offered valued services to old customers, and succeeded in penetrating new markets by integrating technical prowess of the headquarters.

We see healthy growth of Hytera overseas subsidiaries including Hytera America, Hytera Mobilfunk (Germany), Hytera Telecommunication (UK) in 2012. Along with multiple branch offices, Hytera subsidiaries have taken on the role of local support, and they further allow us to deliver advanced and innovative solutions more quickly and to feedback to partners and customers more efficiently.

2013 is the 20th anniversary of Hytera. In the past 20 years, we have managed to keep doing one thing in a better way year by year. That is bringing trustworthy PMR products and solutions to the market, home and abroad. Thanks to the recognition and support from our partners and customers, we have achieved a lot. It is also the expectation from them that stimulates us to keep innovating.

Happy new year again, and all the best wishes to you, to those who you care and who care about you in the year to come.

陳清州

Mr. Chen Qingzhou
President & CEO of Hytera

Digital Reality
is Coming to PMR

A year ago I wrote an article about the transfer of analog to digital radio and I said, just embrace it and don't wait to see if DMR or dPMR will be the main standard to be adopted. Waiting for a new standard with a wider channel requirement will take five years to develop and a further five years to come to market. Now we have DMR and dPMR, so just use them – they won't disappear.

For those customers who are still undecided whether digital is going to stay, I think it's very obvious this year that there has been tremendous growth, with all the players in digital PMR already putting out their systems.

MPT has been a very good solution for many, many years, but it is becoming a little bit out of date. Just to get clearer voice, digital is the way to go. Major public safety organizations nowadays tend to choose TETRA, TETRAPOL or P25, thanks to their well-developed range of features, strong security and encryption capabilities. But for second tier security organizations, enterprises and commercial users looking for a more affordable, less feature-rich option, the digital choice comes down to DMR. The fundamental thing about DMR is to assist the migration from analog to digital.

The future for DMR is very bright, and the ease of migration and ease of use is the key for the next two to three years of digital migration. For any customer, the way they migrate from analog to digital will differ, but the most important thing is to know when there is a need to have more capacity. That's the point you should target first. It's cheaper to do it now because you don't need to invest any more on equipment that you know is going to be obsoleted.

We think we have very effective and affordable products – but it seems that the market is looking for even more affordable products. I've been very busy in the past few years looking at the new generation of DMR and at future generations of DMR with broadband facilities, and also looking at low-end DMR. How are we going to solve the market problem? That has occupied the bulk of my time.

At Hytera, with heavy investment in digital for the past five years, our current product platform has matured. We now offer a complete portfolio of both conventional and trunking modes, including portable & mobile radio, covert radio, intrinsically safe radio, repeater, data application, multisite IP connection, simulcast system and trunking infrastructure. Our hand portable series is already fully loaded in terms of features, bands, and capabilities. We've got the base station out and we are still working on the conventional trunking, which is lower-cost compared with the system trunking that we have.

In 2011, Hytera became the first manufacturer to release a DMR Tier III solution, which offers much the same functionality as TETRA, although without the same breadth of features. The first Tier III system went to Guatemala and then subsequently this year we have got more multi-system setups. Earlier this year, we released our covert DMR radio in the shape of the X1e – the smallest and slimmest full power digital portable radio. The DMR covert range is being extended with the X1p, which comes with keypad and display, and the X1s, a simplified version with just six keys. This September, Hytera was awarded the first DMR Tier III Interoperability (IOP) certification by Digital Mobile Radio (DMR) Association following IOP tests between Hytera trunked terminal (Tier III) and third party trunked infrastructure, and between Hytera trunked infrastructure (Tier III) and third party trunked terminals. By next year, we should also have a second series of DMR products, and our DMR ATEX radio – which we've been demonstrating at shows this year – should be commercially available.

Hytera is now very focused on innovations and customer satisfaction. So we listen to our customers and try to implement solutions for them so that they can go to market and they can solve their problems. That's in line with our company objectives of Respond and Achieve. Hytera has won the battle for the professional market, but is still working hard to get a solution for the commercial market. We respond to customers' requests and achieve our goal of getting the best terminals out to the world.

DMR DIGITAL MOBILE RADIO ASSOCIATION TETRA PDT

Solution & Case Study

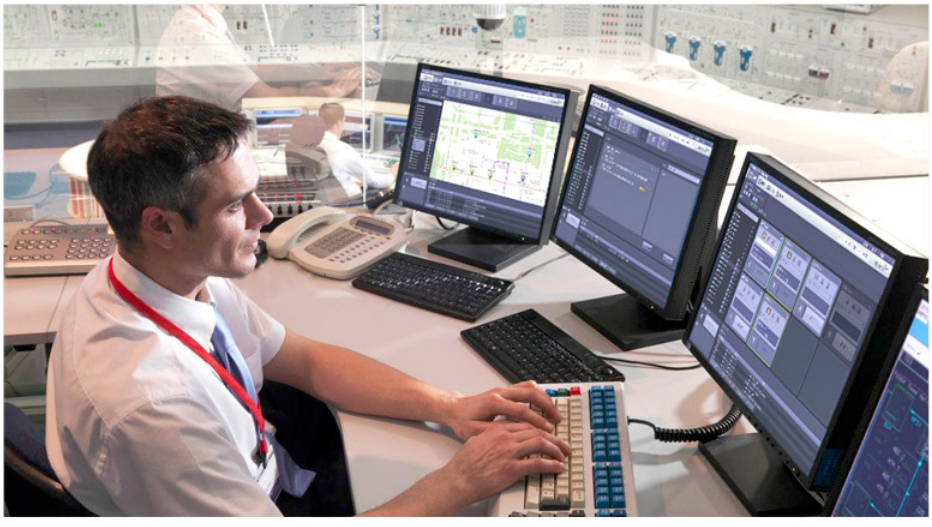
Solution for **PMR Operator**

Bring Highly Efficient and Cost Effective Services to the Operator Business

Background

With the fast development of the information society, professional users have higher expectations for communications, which puts great challenge to professional communication operators.

On one hand, they should provide reliable communication services of clearer voice and wider coverage to meet the customers' demands; on the other hand, the competition from industry peers is drawing the price down.



Customer Demands

Communication security

The modern society has much concern on personal privacy. And professional communication operators take the responsibility to guarantee the user privacy and communication confidentiality while ensure that the network and frequency resources are not stolen.

Data service

Besides voice communication, end users are expecting more for convenient data service to enhance work efficiency, such as GPS positioning for taxi drivers and data transmission for electricity companies.

Profit

With the increasing competition in the communication industry, operators are striving to enhance work efficiency and reduce operational costs for better profits. Compliant to ETSI DMR Tier III open standards, DMR trunking solution brings flexible networking, smooth migration and cost effective portfolio to operators looking for higher ROI.

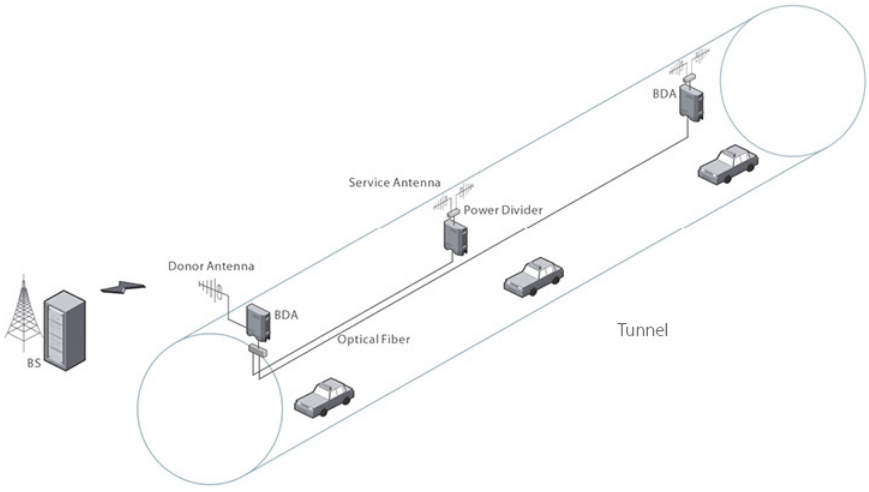
Solutions

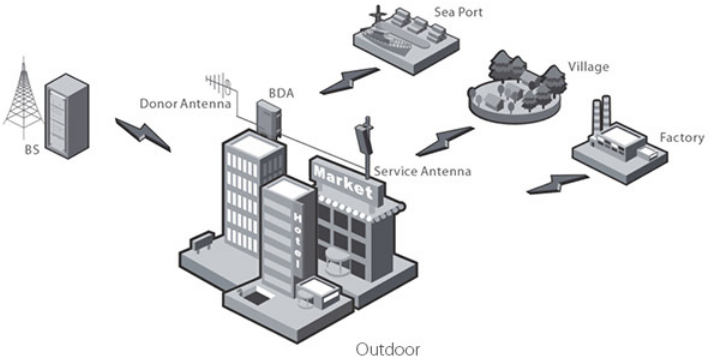
Hytera understands what's underneath the challenges of professional communication operators and offers solutions of reliable voice communication, real-time data transmission and flexible networking to meet their requirements.

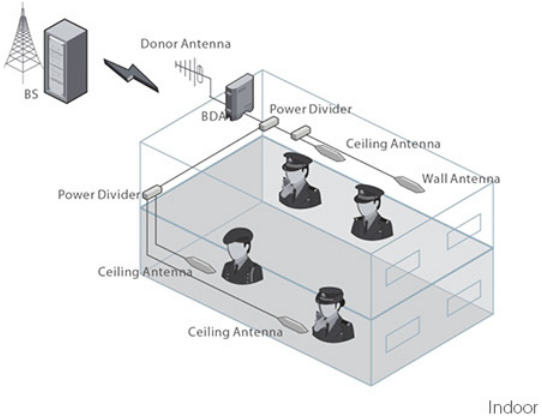
Network Architecture

• Blind area coverage solution

The solution is easy to install and use, providing good performance and eliminating the blind areas in high buildings, undergrounds and tunnels.







Transport and telemetry

Mr. Scott singles out Transurbano as making particularly full use of DMR technology – beginning with its backwards compatibility with analog trunking. "We've got more than 1500 units working on the DMR system, most of them installed in buses", he explains. "They started working analog and then finally we changed them to digital – and the difference between digital and analog was so great."

"We use telemetry, text messaging and GPS. Everything has been Hytera. We created our own application to manage our clients' needs, especially for this client itself. We do data intensive systems – for example, GPS positioning. I believe GPS works really well with DMR."

With the telemetry capability, Crelosa has been able to help with revenue protection as well as fleet management. "Remember, on the buses you have an entrance and an exit", Mr. Scott explains. "The idea is for people not to enter through the exit, because you can get a free ride easily if you enter through the exit! So the telemetry tells you two or three things: first of all, when the exit door is open, it tells you; it will tell you when the exit button is triggered. If the exit button is triggered and the door does not open, you've got a problem. And if the exit door opens and you did not hit the exit button, you've got a problem. So basically it will tell you when things are not working properly."

"The other telemetry is emergency or panic buttons. We have two panic buttons – one at the rear and one at the driver's side. You press the panic button and automatically it will show the guy at the monitoring centre that there is an emergency. This happens!"

"The guy in the monitoring centre presses a button and is able to make the microphone on the bus go live for a specific time. We have installed it for 30-second transmit, then a 10-second delay, and then he can talk to the guy. And then the system automatically goes back into transmit mode."

"In this way", he continues, "the driver can communicate with the monitoring centre, without pressing the PTT or other intervention. Crelosa has exploited DMR's telemetry capabilities at its own radio sites too." he adds.

"At every repeater site that we have, even though we have microwaves and we have video feeds and everything, we have hooked up a digital radio with telemetry so that it tells you when they open and they close the doors of the repeater site. And there's another one when they arm or disarm the alarm of the repeater site. We can see when they open the door or they close it."

And he offers an afterthought. "Remember, I'm not a factory, I'm a customer – I'm buying things and testing all the radios. We test all the radios here really good."

Fire officer in Guatemala:
encrypted DMR ensures that the fire service's communications cannot be eavesdropped

Confidential comms

"With digital, it sounds loud, it sounds good", Mr. Scott declares. "We don't have any more hisses and whistles." But DMR has brought other important benefits for customers such as the firefighters, because their radio traffic during an incident can no longer be intercepted through scanners or stolen radios.

"The firefighters changed to digital after having a lot of problems with conventional, not only because of the coverage itself but because of the intrusions", he says. "Firemen wanted to be more secret in their communications because somehow when they got there, there was someone else before them." Reporters from the tabloid press and even representatives of funeral homes often arrived suspiciously early on the scene of an incident.

"They needed a confidential system", Mr. Scott sums up. "And the cheapest and most efficient system is DMR. We sat down with them. We saw Tetra (for them it was off the market, very expensive); we saw Apco 25 (very expensive as well, because the terminal units in Apco 25 are far gone in pricing). So they decided to go with DMR."

Pseudo trunking

After testing DMR radios from a couple of manufacturers, the firefighters decided upon a Hytera system – and a major reason for this choice was the doubling of capacity made possible by Hytera's support for 'pseudo-trunking' or 'dual-slot trunking'. "If one slot is occupied, then the radio will use the next one", he explains. "It's not a very great solution because it only gives you one more timeslot – but in reality that makes a world of difference to the client."

"Normally the system works in Timeslot 1. You program all the units there, so that your units normally are figuring out if Timeslot 1 is occupied. If it is occupied, automatically they will go to Timeslot 2. And the receiving radios will continue to sample either of the timeslots."

Though the digital signal is inherently resistant to eavesdropping, a DMR feature especially welcomed by the firefighters is its digital voice encryption capability. "Hytera has one of the best encryption protocols in the market because you can have, on DMR, three scenarios: 16 bits, 128 and 256 bits", comments Mr. Scott. "We've given them the capacity to change their own keys by themselves. This way, the client himself is able to control the privacy in their communications."

From left to right:Andy Zhao of Hytera America, Stuart Scott of network operator Crelosa, and G S Kok, Hytera's Vice-president for R&D

Driver's radio in a Transurbano bus

Yenny Passanante, operations co-ordinator for the Transurbano project

Connecting with IP

Another Hytera system feature he values is the ability to interconnect repeaters using IP data links, enabling wide-area coverage to be provided simply. "Once you operate pseudo-trunking single-site, the first thing that your client wants is more coverage", he explains. "That means that you have to install repeaters."

"The interesting part here is that the Hytera product has the automatic roaming capability installed into the system, without an extra option. When we buy from the factory, it comes in with all the bells and whistles, so it's easier for us just to program whatever we need."

"But the scenario of roaming works really well. Here's an interesting hint: there is something called beacon programming on the repeater. It means that if no one is speaking – if there's no traffic flowing through that repeater – the repeater has to have a beacon to tell any radio scanning on DMR that the repeater is on, and it's working and it's ready to receive signals. This way, the radio can actually do the roaming into that site."

"That is a big tip", he laughs. "Either you have a client who actually uses a repeater so that the radio can find it, or you do your beacon very often."

But he continues: "DMR wide-area networking has a wonderful capacity for management and administration, simply because you are able to program all the repeaters on the radio. You can even tell it that, for example, your radio can only access Repeaters 1, 2 and 3 – not 4, 5 and 6. We can do that. And if you want 1, 5, 6 – not a problem."

"If the radio gets stolen, we can turn it off or radio-kill. We can take that ID off the system, so he will not be able to get into the system and communicate.

Traffic loading

A conventional, one-slot trunking system can support up to 45 radios and three or four company fleets, Mr. Scott finds, although even that modest level of loading can lead to contention. "On pseudo-trunking, you can actually pump the system up to 75 units and have about 6–7 companies operating with almost no collisions whatsoever", he says. "But here is one of the factors that made a big difference with Hytera. Pseudo-trunking gave us an edge on loading capabilities with our clients."

"Obviously you have to be very efficient in choosing, because you cannot choose two taxi companies on the same system, because they are going to flood it! But you have to mix and match and be very comprehensive upon the type of client you are going to use with the pseudo-trunking system."

Split affections

For Crelosa, a very special feature of Hytera's DMR radios is their support for unconventional transmit/receive frequency splits. These are commonly required in Guatemala and other Central American countries, in place of the tidy 10 MHz or 5 MHz splits usual in Europe. "Specifically, for Guatemala, you'd sometimes get 1 MHz while sometimes you get 3 MHz and sometimes you get 10 MHz", Mr. Scott observes. "Well, my friend, welcome to Guatemala."

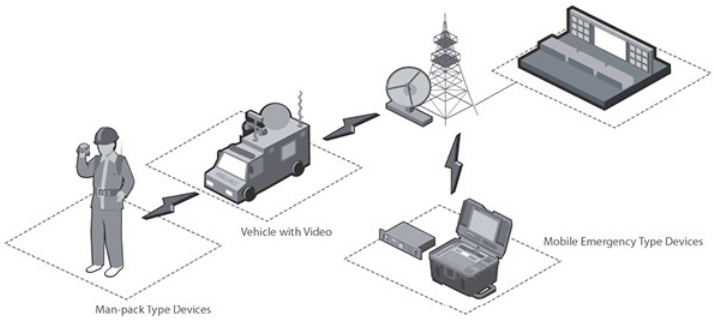
The solution to this problem, he continues, is simple enough: you approach your radio manufacturer and you ask them to change their entire programming scheme.

"Well, Hytera did it", he adds. "And Hytera, in version 2.0, will have that difficult channel split. For that, with humility, I have to thank the people at Hytera, because they have been listening to me."

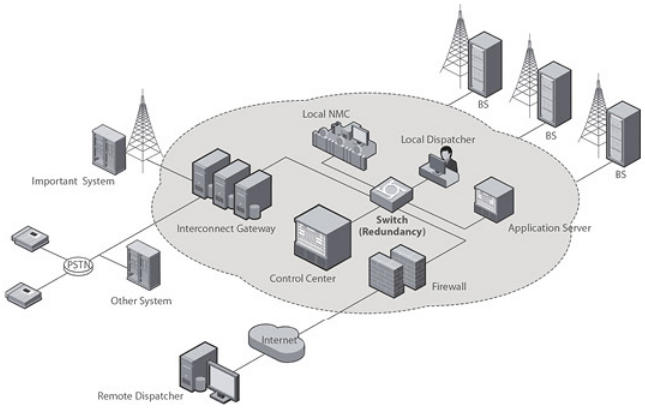
And he ends: "I have fallen in love with Hytera because of the way Hytera works – they bring you into a family. That's very difficult for me to explain, but it's a family feeling that really pushes you forward into much, much more than a business relationship. I have had G S Kok here, the head of engineering, asking personally what I would prefer to have in our next radio. And everything that Hytera has promised to me, it has come true." ■

• Mobile communication solution

Mobile communication devices can be equipped in vehicle or carried by human, which transfers voice and video communication at the same time.

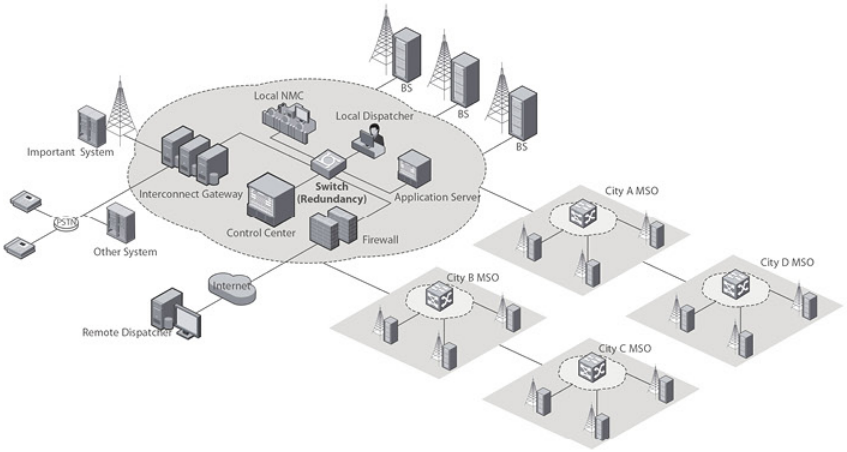


• City network solution



• Large network solution

Based on IP, the multi MSO can be connected to extend large network solution.



Benefits

- Analog-digital compatibility with multi-mode terminals and analog gateway in the systems ensures smooth system migration from analog to digital, saving infrastructure investment by reusing the existing antenna and base station equipments.
- All IP and flexible networking architecture supports smooth network expansion, scaling from single base station to nation-wide coverage, greatly helping the customer to save initial investment and meet the requirement of increasing communication capacity along with the business growth.
- Rich voice and data services fully meet the requirements of the operator, including integrated solution of voice communication, remote measurement, monitoring, remote control and alarm reporting, etc.
- Advanced technology and powerful tolerant capability secure reliable communication.
- Mature application and comprehensive network management help control the operation costs effectively.
- Versatile terminal types, open application interface and one-stop solution for convenient new service development.
- The system supports Billing System and Network Management System.

For more solutions in different industries please visit www.hytera.com

Choosing **Efficiency**

A two-way radio company in Central America has built up a history of successfully pioneering new technologies in the region. Now it has fallen in love with DMR.

Some of the first commercial DMR Tier III trunked radio networks in the world – if not the very first – can be found in the Central American republic of Guatemala where a variety of radio systems for public and private users are operated by a local company, Corporación Radio Electrónica (Crelosa). General Manager of the company is Stuart Scott, who, as a new electronic engineering graduate, began its activities in 1988 to provide communications for a family business.

Since those times, he has gathered experience of a whole spectrum of two-way radio technologies, from basic two-way radio onwards, pioneering trunked radio technology in the region and installing systems by the score. Among these have been community repeaters, proprietary trunked systems, the British developed MPT1327 standard, the US LTR and LTR-net trunking technologies, plus add-on features such as telephone interconnects. "I grew up with radios and I really love radios", he says. "It's such an amazing thing to work with radio."

Today Crelosa's operations embrace 19 DMR radio sites, on which it bases six shared subscriber networks and 14 private systems. Among their customers and users are government bodies, police, firefighters, and Transurbano, Guatemala City's integrated metropolitan transit operator.

Marcus Communications

Bringing Two-way Radio Clarity to Connecticut

Marcus Communications based in Manchester, Connecticut in the US, is the largest trunked radio network operator in the State of Connecticut. Its trunked radio communications network covers the whole state and provides services for a wide variety of end-users including police, firefighters, healthcare, enterprises and taxi companies.

Right from the start, Marcus has strived to deliver technical excellence to its customers in the field of two-way wireless radio services. Over the past 33 years, it has taken part in countless events where its technical know-how and agility were of vital importance in delivering successful outcomes. The Marcus Communications team remains dedicated to its customers and community, while continuing to make significant breakthroughs in new technology.

However, the global rise in digital communications technology prompted the company to review its services. At present, Marcus provides two-way radio leasing and network maintenance for business users, along with a full set of communication services for public safety users. But as the demand for broader and better communications increased, Marcus has gradually realized the inferiority of its analog LTR (logic trunked radio) communication and data services.

If you would like to share your own case study here, please email to marketing@hytera.com

"As demand for improved communications increased, Connecticut-based analog trunked radio network operator Marcus Communications realized it had to upgrade its existing services to business and public safety users, and so it turned to Hytera for an improved DMR Tier III digital system."

Blind spots

End-users often complained that its LTR network delivered unclear audio quality and pointed to existing blind spots in its coverage. In addition, taxi companies maintained a wait-and-see attitude towards further investment, as the network was unable to provide adequate levels of GPS service for tracking the whereabouts of taxicabs. Finally, public safety users looking for a digital option were put off leasing Project 25 (P25) equipment supplied by Marcus, because of the high rental charges. The limitations of Marcus' LTR analog radios for voice communications and data services, along with the off-putting cost of its P25 equipment, lost the company a lot of business. It needed to find a cost-effective alternative to replace its analog product, which could provide a more advanced technical solution for its range of customers. The company had to find a digital solution capable of providing trunked radio services, but one that was more cost-effective than the P25 equipment commonly used by first responders in the US. Advances in the DMR (digital mobile radio) standard over the past two years means that DMR Tier III now provides a trunked version.

Tier III trunking

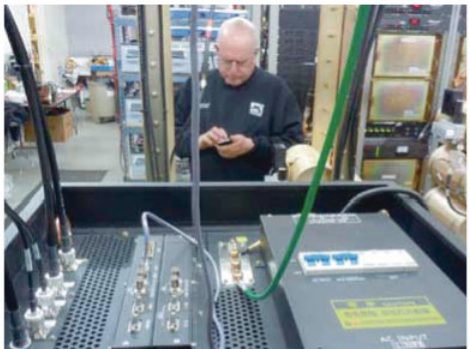
Marcus assessed the various DMR (digital mobile radio) products on the market and was particularly impressed with the high quality of Hytera's equipment. As a result, Marcus decided to replace its existing network in stages with Hytera's DMR Tier III trunking system.

Hytera ensured its DMR Tier III trunking equipment met the particular demands of its customer. In the first phase, three DMR trunked base stations were deployed in the LTR network in Box Mountain, Avon and Haddam. This provided coverage in the towns of Manchester, Hartford, Avon and Haddam. The final network rollout saw a total of 20 DMR trunked base stations located across the state to provide coverage across the whole of Connecticut.

Compared with the previous LTR analog network, the newly-built Hytera DMR network is bringing Marcus operational cost savings and higher network efficiency. As a result, the company plans to extend its successful partnership with Hytera and make more use of its products.

Hytera's DMR Tier III network has doubled the user and traffic capacity from 900 to 1, 800 using the same amount of equipment or less (three base stations with each base station having four RF units), which has reduced costs considerably.

Hytera terminals adopt advanced digital voice and channel coding technology, achieving a better audio quality when compared with the old analog radio system, which provides a better user experience for Marcus'customer base.



Better battery life

DMR technology uses TDMA two time-slot technology, which divides the 12.5kHz bandwidth into two 6.25 kHz time slots to support two simultaneous communication channels. This greatly enhances the spectrum efficiency and system capacity, while also improves the battery life of the radios.

The Hytera DMR Tier III system meets the 95% coverage demand of Marcus' network perfectly (public safety users: 95dBm downlink, business users:105dBm downlink).

Bruce Marcus, owner and CTO of Marcus Communications, said: "We are impressed with the quality of the equipment and are looking forward to a successful partnership. We talked to one of our employees on a handheld radio 35 miles from us, while we were in an indoor mall, with excellent results." The successful rollout of Hytera's equipment in Connecticut should prove a compelling springboard for further contracts in the US.

About Marcus Communications

Marcus Communication was founded by Bruce Marcus, in April 1969 in Manchester, Connecticut, US, where it currently occupies a 50,000 sq ft facility. Marcus Communications is a leader in engineering and deployment of radio networks and has the largest trunked radio network operator in Connecticut State. Its trunking radio communications network covers the whole state and the company supplies products and services including public safety, business and industrial professionals.

The company supplies a wide range of two-way radio products including handheld and in-vehicle terminals, base stations, repeaters, trunked systems, call boxes, localized paging, closed-circuit TV, web interconnection, remote alarm monitoring and short- or long-haul microwave, along with fixed links. Marcus also offers design, engineering and installation services, along with training and a 24/7 service and repairs solution.

Solution for **Oil & Gas**

Empower with Secured Communications for Oil & Gas

Background

With the rapid development of energy demands surging worldwide, the Oil & Gas industry requires higher efficiency in management and operation. Safer production, flexible dispatching, accurate monitoring, and quicker response in emergency are all depend on a secure, reliable and efficient communications solution.

The first challenge is how to achieve an effective mobile communication in all the work places, such as office, refinery factory, transportation dock, and fuel storage area, scattered across a vast region with difficult terrain.

The second challenge is security. Oil & Gas industry is regarded as risky environments which have possible existence of inflammable and combustible dust or gas. It is a must to equip people operate in such hazardous environments with intrinsically safe

Hytera, a leading designer and manufacturer of professional mobile radio communications equipments, is dedicated to delivering innovative intrinsically safe communications solutions to Oil & Gas companies across the world to protect their staff and asset in hazardous environments, while enhance productivity at the same time.

Hytera understands what's underneath the challenges of Oil & Gas professionals, and tailors solutions to address their demands.

Explore, Extraction & Production
Rugged and reliable equipments that can withstand extreme harsh environments are vital for prospecting teams working offshore, in deserts and other remote areas.

Pipelines
Pipelines always cover thousands of miles, while the maintenance personnel scatter along the track. Seamless coverage of the whole pipeline area is crucial for operators in the control center to stay in touch with maintenance personnel. It ensures efficient communications to set up an emergency handling team in unexpected situations.

Distribution
Oil tank trucks, railway vehicles and pipelines can be better monitored and coordinated via appropriate communications solutions.

Refineries
Powerful grouping and dispatching functions in communications system are essential to refineries in terms of task assigning and extensive management. Facilities and control centers with intrinsically safe architecture also challenge the wireless coverage network with blind zones.

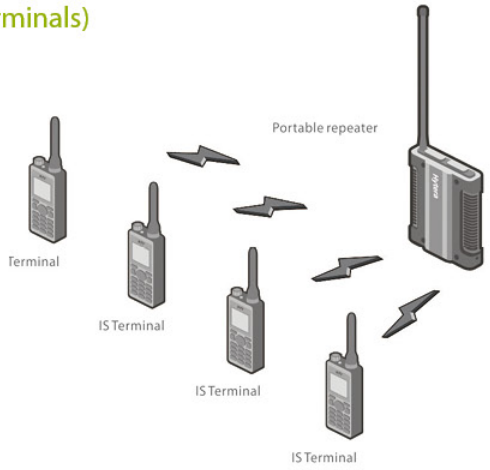
Oil Exploration and Exploitation (Portable Repeater + Intrinsically Safe Terminals)

Solutions

- Portable repeater
- Intrinsically safe terminal

Benefits

- Portable repeater is convenient to carry and deploy. All-up weight of the portable repeater (including in-built duplexer, 10Ah battery * 2, sucker antenna) is less than 8kg.
- It is highly cost-efficient for portable repeater compared to conventional product.
- High capacity in-built battery for portable repeater can support 8 hours of continuous working.
- IIC intrinsically safe terminals for secured communication in hazardous sites with explosive gas and combustible dusts.
- Both terminal and repeater with IP67 compliance to withstand extreme harsh environments.



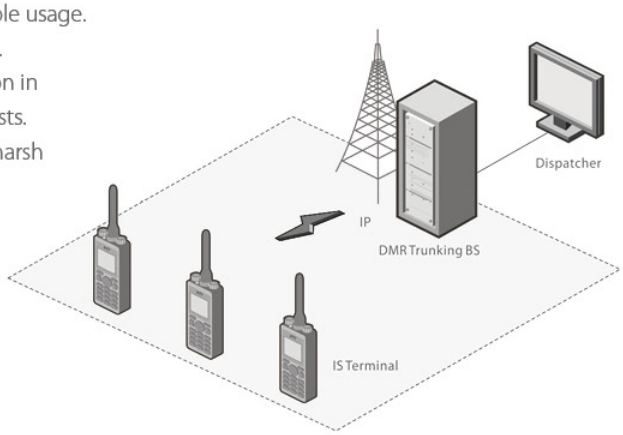
Offshore Drilling Platform (Small-scale Trunking)

Solutions

- Base station
- Dispatcher
- Intrinsically safe terminal

Benefits

- High system capacity, flexible channel allocate for flexible usage.
- Commercial design to save customer's investment cost.
- IIC intrinsically safe terminals for secured communication in hazardous sites with explosive gas and combustible dusts.
- Terminals with IP67 compliance to withstand extreme harsh environments.



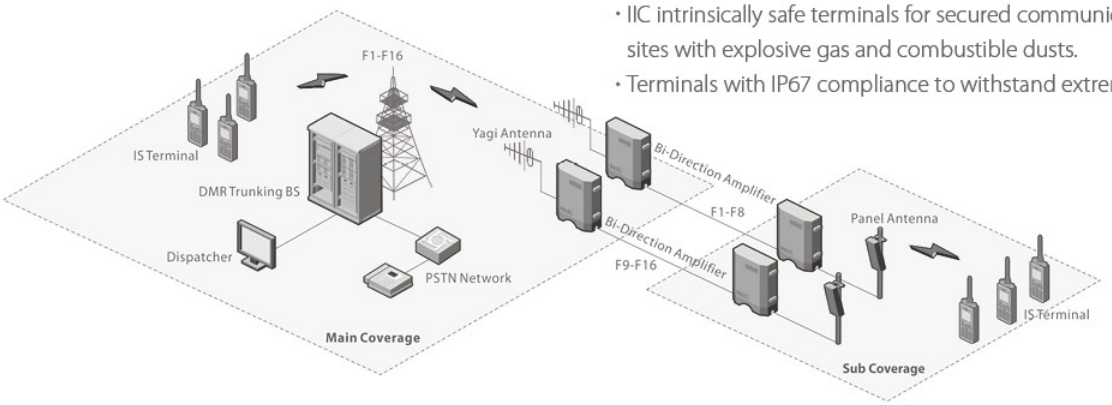
Oil Refineries

Solutions

- Base station
- Intrinsically safe terminal
- Dispatcher
- PSTN gateway

Benefits

- Large communication capacity and dynamic communication channel dispatching system.
- Fault reduction capability: the system can close down the faulty channels when there are faults automatically and reduce them into a basic trunking function.
- Wire/wireless automatic switching: connected to local switch via PSTN gateway and realize wire/wireless inter-connection.
- System has self-test and fault alarm: all the base-station control channels are hot backup and can switch at fixed time.
- IIC intrinsically safe terminals for secured communication in hazardous sites with explosive gas and combustible dusts.
- Terminals with IP67 compliance to withstand extreme harsh environments.



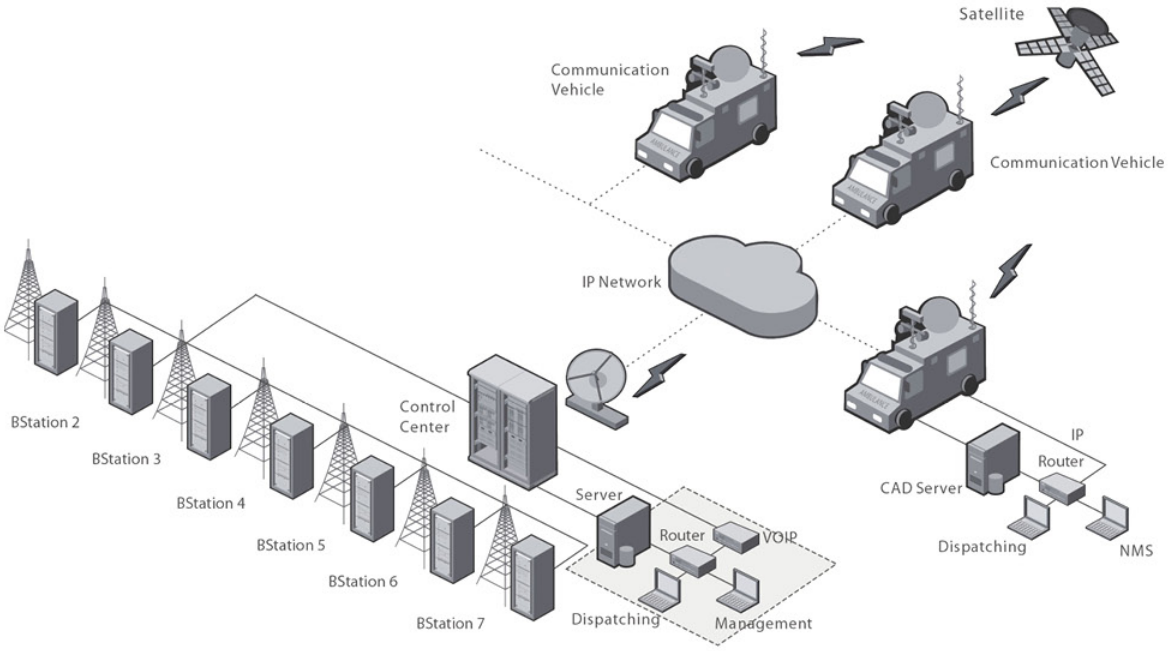
Oil & Gas Pipelines

Solutions

- Control center
- Base station
- Communication vehicle
- Intrinsically safe terminal
- PSTN gateway

Benefits

- All IP structure to achieve seamless coverage over thousands of miles, ensuring effective and efficient communications for maintenance personnel.
- Wired and wireless interconnection for quick and flexible dispatching, especially in emergencies.
- Terminals with IP67 compliance to withstand extreme harsh environments.
- IIC intrinsically safe terminals for secured communication in hazardous sites with explosive gas and combustible dusts.
- Specific data channel to ensure stable data transmission. ■



DMR Trunking Communication for CNPC

Hytera Provides DMR System for the CNPC Headquarters

User
CNPC Headquarters

Market Segment
Oil & Gas

Project time
2011

Product
PD78X Portable Radio
MD78X Mobile Radio
DS-6210 Trunking Base Station

Background

China National Petroleum Corporation (CNPC) is China's largest Oil & Gas producer and supplier, as well as one of the world's major oilfield service providers and a globally reputed contractor in engineering construction. According to the report, the current market values of CNPC reached $329.3 billion (up to March 31, 2010), with which it took a top spot in the annual FT Global 500 list, being one of the world's most valuable listed companies.

With economic development, the demands for oil & gas and related products are growing continuously. The scale of the oil & gas company continues to expand with more and more detailed division. In this point, the company demands more for the command and coordination in the work. For this reason, the conventional communication system can no longer meet the communication demands of daily work.

In 2007, CNPC and Beijing Changping District Government signed a strategic cooperation framework agreement on the construction of a leading oil & gas industry base that integrates scientific and technological innovation, product development and manufacturing. Total construction scale of the project is 1.5 million square meters. It aims at establishing CNPC into a comprehensive international energy company.

DMR
DIGITAL MOBILE RADIO ASSOCIATION

Analysis of Demands

CNPC Science and Technology Park Project is of A12 block, including 1 basement, 11 floors above ground and 3 floors for podium. 1 basement is used as the garage, equipment room and storage room and constructed in two phases. The ground floor area is of 165,398.6 square meters and underground construction area of 39081.0 square meters.

Efficient Science and Technology Park requires a high-performance communication system to support its work. For CNPC, it demands to achieve unified dispatching and individual call, group call, text message, free grouping requirements and other practical communication functionalities for all the subordinate departments of the enterprise. Under this condition, it proposes higher demands for full-featured and highly scalable communications solutions. And digital communication system is preferred for stronger dispatching and advanced grouping. Fully understanding what the customer demands, Hytera proposed a DMR digital trunking communications solution for CNPC.

Solution of Hytera

DMR digital trunking communication system is a professional wireless communication system with shared channel by multi-user and multi-sector and can dynamically manage and use these channels. The system is mainly used for command and dispatching communication and its superiority greatly lies on rapid response, easy to use and multi-level dispatching in a wide range of wireless communication.

Hytera established a digital trunking system with 4 carriers 8 channels by utilizing TDMA dual time-slot technology for CNPC Science and Technology Park. 1 DMR trunking base station, 4 digital trunking mobile terminals and 50 digital portable terminals were deployed in the system. The coverage illustration of the system is as right:

Project Output

1. Strong anti-interference capability, superior audio quality and long communication distance.
2. Doubled communication capacity realized by TDMA technology.
3. Various call types, including individual call, group call and all call, together with flexible grouping.
4. Powerful management functions as system parameter setting and user information management.
5. High channel efficiency with dynamically allocated and managed channels, and high system stability with dedicated digital signaling channels.
6. Modularized system design for powerful dispatching and excellent scalability, enabling the users to expand the system easily once the users increase in future. ■

Transmit power of the digital trunking system is 50W and its coverage radius in the city is about 15 kilometres.

Hytera DMR Solution in America Cup

The America's Cup is the oldest and most celebrated trophy of international sports. The contest for the 34th America's Cup brings two new classes of boats and new format of racing consisting of three main stages - the America's Cup World Series; the Louis Vuitton Cup (the America's Cup Challenger Selection Series) and the America's Cup Finals.

With such fierce competition on the water for the America's Cup, International live television and web broadcasts, clear and reliable communication is critical for the Race Management, International Broadcast, Race Teams and Security.

Racing is spread over 18 regattas, in 6 host countries with at least 200 days on the water, therefore all radio equipment supplied needs to be rugged and robust for shipping between events, and all handheld equipment needs to be IP67 rated for reliability in salt water environments. Due to limited on-site time pre-regatta, all radio equipment needs to be operational within 48 hours, requiring reprogramming of all repeaters and subscriber radios and retuning of the antenna combining system to a host countries specific frequency allocations.

Radio Communications are required for a variety of user groups including umpires and officials, medical support staff, security personnel, race teams, VIP, television production (Director,IFB, Commentary & Programme Audio), helicopter, boat and shore camera crews as well as technical & rigging crews.

The Hytera solution consists of 24 Hytera RD98X Repeaters (44 Logical Digital Channels, 2 Physical Analog Channels), 280 Hytera PD782X Handheld Radios and 18 Hytera MD782X Mobile Radios.

Benefits for all users will be less downtime with fewer repairs and longer duty cycles due to high efficient Li-ion battery. High Power 100% Duty Cycle Repeater is the ideal solution for constantly keyed channels used in television production.

The rugged and waterproof handheld radios will provide reliability and durability in the demanding salt water environment.

Solution Highlights include:

- Hytera DMR 2 slot functionality allowing more efficient use of spectrum and resources. This reduces physical repeater channels, saving space, antenna combining and setup time.
- Hytera Pseudo Trunking improves channel utilization.
- IP linking and multisite roaming connect a sub-set of repeater channels at a remote land-based site or on-course boat to provide seamless communication at challenging locations.
- High Power 100% Duty Cycle RD98X, suitable for constant key director to camera crew feeds used in television production.
- Digital Voice Vocoder, reduces background noise in order to provide clear communications wwof helicopter or boat crews.
- Highly Configurable RD98X Rear Connector – provides external audio and PTT inputs from television production audio panels.

Voice from customer

The IP Multisite connect and Roaming allows us to easily tailor the network coverage to suit the race course while maintaining a rapid deployment time. The robustness and reliability of the Hytera PD782X is second to none working well in rough saltwater environments. The AMBE++ vocoder enhances communication in areas with loud background noise such as ground to helicopter communications. All round the Hytera DMR system has proved itself beyond comparison.

-Race Management & Course Official

The Wireless Triathlon

Athletes using Hytera radios

When the organizers of the Kalmar Ironman competition in Sweden needed a temporary communications network they turned to Hytera's DMR solution.

The historic Swedish town of Kalmar hosted its first Ironman competition in August 2012. The event comprised a grueling 3.86km swim in the Kalmar Strait, a 180.2km bicycle race and a Marathon run of 42.195km.

Approximately 1,500 athletes took part in the Kalmar event, while visitor numbers were estimated at more than 40,000.

Naturally, the event organizers, Kalmar Triathlon AB, needed to have reliable and robust communications to ensure the competition went smoothly. The original plan was that the race would be coordinated using GSM/3G phones.

However, the organizers realized this would not provide the required quality of service. For example, it was not possible to establish communications between the race controllers and the emergency services. Plus the ESPN television team needed access to fast communication services.

The issue was brought to the attention of Stockholm-based wireless distributer Zodiac through one of its local dealers, Dialect Lemab Kalmar, which asked whether Zodiac could offer a solution.

Kalmar Triathlon had a number of key requirements that had to be met, including:

- A cost effective solution for short-term rental.
- Wide area surface coverage for handheld radios.
- Fast and reliable connectivity between operators.
- Easy operation for users with only minimal training.
- Good sound quality.
- Uptime of handheld devices during the whole duration of the event.
- Rugged devices that could withstand impact and moisture.
- The possibility of combining the wireless system with GPS positioning for use at other competitions in Sweden.

Zodiac worked with Dialect Lemab to identify the right equipment and design for a temporary wireless network, which involves using the following Hytera DMR equipment: three RD98X base stations, 36 PD78X hand-held radios, six slot chargers for all the handheld radios, and accessories such as 'secret service' style headsets.

The solution offered IP over internet roaming between base stations, while the deployment of one RD98XM in repeater mode in every base station provided wider area coverage than conventional radios. The design of the network architecture provided some overlap in the competition area for added resilience.

As well as supplying Hytera equipment, Zodiac also helped with system installation and programme files, telephone support throughout the deployment, and backup with spare radios and technical skills during the competition phase. ■

Tobias Borg, one of the managers for the Ironman event, said that the competition would not have been possible without the radio system supplied by Hytera. He added that it was simple to use and the available features exceeded requirements. Organizers have pre-booked the same system for 2013.

Göran Engström at Rescue Kalmar said that from the emergency services' point of view the communication between organizers and the authorities was quick and clear thanks to the efficient radio network.

Thomas Matsson of Lemab Kalmar said the company was very pleased with the outcome of the co-operation between Hytera, Zodiac and Lemab and that the deployment of the network was easy thanks to the instruction and support from Zodiac, despite the fact that Lemab was not entirely familiar with the DMR technology involved.

Hytera Case Study News Update

Global Application Second Collection Release

Share the stories you know and win a prize

Dear partners,

We care about the experience of our end users just as you do. It's always been our pleasure to share the inspiring stories with our partners & customers. In 2012, Hytera collected and released our second Global Application Collection with 23 worldwide cases categorized in different industries. The rich content and attractive design of the Global Application Collection has received highly praises from our partners.

You can find all Hytera case studies at www.hytera.com. Print version is also available by contacting our local marketing/sales representatives. And to help us do it better in next collection, your feedback will be highly appreciated .

Hytera Case Study Archive Plan

Many partners have worked with us in the past year since the collection of cases started, and provided us impressive case studies & photographs. Here I would like to thank you for being supportive and wish to share more successful stories with you in the future.

Hytera is continuing collecting case studies in different industries as well as on-site pictures from our global distributors and end users. Applied cases will be published on all kinds of our marketing materials together with distributor's information, and the provider will be rewarded.

For more information, please contact our local marketing/sales representatives.

Hytera DMR Radio Facilitates Construction of the Costanera Cente

Dealer's information:

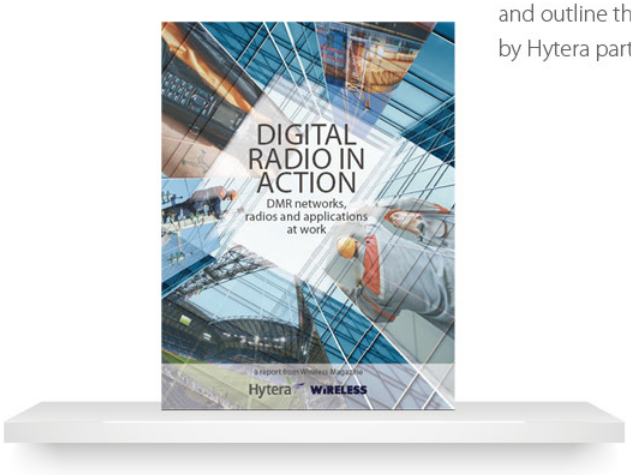
ACMETEL SERVICIOS TECNOLOGICOS LIMITADA
Malaquías Concha 034-A, Providencia.
Telephone: 665 6127 – Fax: 634 6312
info@acmetel.cl www.acmetel.cl

Magazine Supplement Release

Besides our Global Application case study catalog, Hytera also works with leading industry media to release the latest development on Hytera products, case studies and solutions.

This year, we've worked out two supplements with *Land Mobile* and *Wireless*, both focusing on DMR. The supplements tell stories of why and how customers deployed Hytera DMR solutions to add value to their business. They also house information about Tier II & Tier III Hytera solutions and products within them, and outline the applications available tailored by Hytera partners.

Digital version of both supplements can be downloaded on dmr.hytera.com. Print version is also available by contacting our local marketing/sales representatives.



Hytera DMR Solution Deployed in the Greenest Building in Sydney

COMBINED COMMUNICATIONS

Dealer's information:
www.combinedcommunications.com.au

Antwerp Diamond Museum Strengthen Security with Hytera DMR Digital Solution

J&J EURODISTRIBUTION

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www.eurodistribution.be

Hytera DMR Solutions Help River Island UK Improve Security Communication

Radio Links Communications Ltd
GROUP OF COMPANIES

Dealer information:
Radio Links Communications Ltd
Eaton House, Great North Road
Eaton Socon, St. Neots, Cambridgeshire
PE19 8EG, United Kingdom
Tel: 0500 220221 Fax: 01480 406667

News & Events

- World's First DMR Trunked Tier III Solution Provider Awarded IOP Certificates
- 2012 Windsor Award Approves the Excellent Performance of Hytera UK
- Hytera Mobilfunk Takes over German Specialist for Wireless Protocols
- Euro 2012 Stadium Adopts Hytera DMR Solution
- Bangladesh Police is Replacing Their Analog Radios with DMR Handsets
- Kazakhstan Railway Adopts Fully Digital TETRA Radio Communication System
- PD70X DMR Portable Radios, Ruggged Enough for Dallaglio Flintoff Cycle Slam
- Hytera Mobilfunk Showcases Complete Transport Solution at InnoTrans 2012
- PT580H Portable Radio Gets the Spot Light at TETRA in India 2012
- Tailored Digital Communications Solutions was Showcased at PMR Forum Russia

World's First DMR Trunked Tier III Solution Provider Awarded IOP Certificates

On 4th September 2012, the Digital Mobile Radio (DMR) Association announced the completion of the first DMR Tier III Interoperability (IOP) test by awarding Hytera with IOP Certificates. The test was fulfilled in two phases, IOP between Hytera trunked terminal (Tier III) and third party trunked infrastructure, and IOP between Hytera trunked infrastructure (Tier III) and third party trunked terminals.

Benefits to users brought by IOP

The DMR Association developed the DMR IOP Process in order to ensure users would benefit from a truly open multi-vendor market for DMR equipment. It enables customers to have the ability to select the most appropriate products for their needs and to be confident that these products are compatible with each other. Users can be sure that products awarded a DMR IOP Certificate have been rigorously tested and the functions listed in the certificate are interoperable. This allows users who select equipment from a number of suppliers to reduce the amount of system integration and testing that they need to undertake and gives them confidence that should they incorporate a second supplier in future that existing equipment will not become obsolete.

To know more about the DMR IOP Certification process, please visit dmrassociation.org.

Key milestones of DMR trunked solution

As a Category 1 member of DMR Association, Hytera has been actively involved in the DMR technology development. In May 2010, Hytera officially launched its DMR conventional (Tier II) portfolio including portable, mobile, and repeater. In March 2011, Hytera unveiled its DMR trunked (Tier III) infrastructure at IWCE 2011. Later Exit & Entry Administration of Shenzhen, China adopted Hytera DMR trunked (Tier III) solution. Hytera, therefore, became the world's first one to launch and commercially deliver DMR trunked solution. Hytera is also the first company to have an IOP compliant DMR solution with Tier II and Tier III in a single radio. The Exit & Entry Administration project is also a breakthrough for the DMR Standard itself, since it is the first installation in the public security sector. ■

To know more about Hytera DMR solution and reference cases, please visit dmr.hytera.com.

DMR IOP Certificates

2012 Windsor Award Approves the Excellent Performance of Hytera UK

Mr. Cai Hai received the Windsor Award 2012

On 17th September, Windsor Award 2012 was unveiled at the UK-China Business Conference in London, and Hytera Communications (UK) was honored with the "Windsor Award 2012 for Investment in the UK", which recognizes the success of Chinese investment into the UK.

Since entered the UK market in 2005, Hytera UK has expanded rapidly from a representative office to today's 5,000 sq. ft. new headquarters in Slough, which is acting as a sale, marketing, logistic, service, training and application software developing centre for the market. In 2010, Hytera became the first Asian company to have launched a digital products portfolio under two mainstream digital standards (TETRA and DMR) into global markets, including the UK. Its products and solutions have been adopted in many prestigious projects including the celebration of the Diamond Jubilee.

Mr. Cai Hai, Hytera General Manager of Overseas Sales, received the Award from the Lord-Lieutenant for the Royal County of Berkshire Mrs. Mary Bayliss. The Award Committee commented that "This Company's success is inspiring to many other Chinese companies that we know who are considering the UK market."

Mr. Andrew Yuan, General Manager of Hytera Communications (UK) said the company "has been enjoying the UK's excellent business environment and prestigious legal system" whilst they "have been growing tremendously in the recent 7 years" since first entering the UK market. ■

Hytera Mobilfunk Takes over German Specialist for Wireless Protocols

On 25th October, Hytera Mobilfunk GmbH, a wholly owned subsidiary of Hytera Communications Corporation Ltd., took over Fjord-e-design GmbH (FED), a company with headquarters in Flensburg, specialized in wireless protocols.

FED contributes longstanding experience in the development of TETRA and TEDS protocol stacks as well as TETRA measurement technology to the company. In addition to the Hytera centre of competence for TETRA in Bad Münder near Hannover, Flensburg now is the second important development location of Hytera Mobilfunk in Germany. The existing customers of the business fields of protocol stacks and measurement technology will continue to be managed from the Flensburg location, and the sales area for measuring technology in Germany will remain with fjord-e-design-sales.

Dr. Georg Haubs, Managing Director of Hytera Mobilfunk GmbH, sees multiple synergies for the customers of both companies, "The acquisition of FED is an important step for Hytera Mobilfunk to accelerate the further development of the TETRA portfolio towards TETRA-2/TEDS as well as LTE. In future we will be able to react to the demands of the market even faster and together we will offer the best and most innovative products, both with regard to infrastructure and with regard to radio terminals." ■

To learn more about Hytera Mobilfunk please visit www.hytera.de.

Euro 2012 Stadium Adopts Hytera DMR Solution

Municipal Stadium Poznan, one of the four venues for the 2012 UEFA European Football Championship in Poland, adopted Hytera DMR digital communications solution to facilitate the operation during the Euro 2012. The Euro 2012 kicked off on June 9, 2012, and three Group C matches were played here.

Originally built in 1968, the Municipal Stadium Poznan is the home ground of Lech Poznan and Warta Poznan, two Polish football clubs. From 2003 to 2010, the Stadium had undergone a thorough reconstruction to prepare for Euro 2012 and reopened on September 20, 2010. Hosting 43,000 audiences, the efficient communication and coordination among stadium staff is critical to the stadium management for smooth operation. To ensure that the three matches of Euro 2012 run smoothly, the operator of Municipal Stadium Poznan decided to upgrade their communication system early in 2012, and chose Hytera DMR solution for its reliability and versatile functions.

Alfa Radio, Hytera dealer in Poland, delivered 132 PD70X and 10 PD78X DMR handheld radios, 2 RD98X DMR repeaters together with 1 SmartDispatch system to upgrade the system, realizing full coverage for effective communication taking into account the complex steel and concrete architecture of the Stadium. Voice dispatching is available for operator directors in the control center to all the staff via the SmartDispatch system. Moreover, with the flexible grouping function, staff of different working groups can realize group communication with no interference to other groups. More powerful security functions like Man Down further enhance the emergency handling capability for operator. The Stadium is completely covered with a roof, which increases the echoes from the cheers of fans during the matches. For this, Hytera offered specified earpieces with microphone to the staff, enabling them to have clear communication among the surging cheers.

After the Euro 2012, the DMR communications system will continue to serve the Stadium in both daily operation and other events held in Municipal Stadium Poznan. ■

Bangladesh Police is Replacing Their Analog Radios with DMR Handsets

This September, Dhaka police of Bangladesh has completed the initial phase of upgrading the analog communications system to digital one by adopting Digital Mobile Radio (DMR) solution provided by Hytera. It is part of Bangladesh Police's effort to bring all the police stations across the country into the network to ensure safe and efficient communication.

With the DMR system, the police can now enjoy clearer voice communication along with longer communication distance. Versatile call types including individual call, group call & all call, and text message are available for the police in daily communication without further expense. In addition, the IP57 protection of Hytera DMR terminals further ensures reliable operation in harsh environments.

In the first phase, all the superintendents of police and inspectors under the districts have been provided with Hytera DMR handsets to make communication among them. On-duty police officers of each police station have also been equipped with the handsets to replace the analog radios. Up to now, over 2300 Hytera DMR units, including portable, mobile and repeater, have been delivered to introduce the system in 15 districts of Dhaka range.

"As pilot project, we have already brought 15 districts among 17 of Dhaka range under the DMR system replacing analog one to maintain secrecy and clear communication among us," said Superintendent of Police Rofiqul Hassan Ghani of Telecom, "After successful completion of the pilot project, all the police stations across the country in phases will be brought under the DMR system. The system has already been set up in 15 districts except Dhaka and Shariatpur and it works beyond our expectations. ■

Kazakhstan Railway Adopts Fully Digital TETRA Radio Communication System

In July 2012, ASK NT Ltd., a Kazakhstan based company specialized in secure communication, awarded a contract to Hytera Mobilfunk GmbH to supply a fully digital TETRA radio communication system for the Kazakhstan Temir Zholy (KTZ, Kazakstan State Railway organisation).

The ACCESSNET®-T IP TETRA radio system will be used for the Kandyagash – Nikaltau railway line in the north of the province of Aktobe (Oblast Aktjubinskaja) alongside the rail track of 150 km length to replace an existing analogue radio system. The new system will be used for voice communications and data applications for train signalling and telemetry data of trains. The TETRA infrastructure from Hytera Mobilfunk GmbH

includes 8 base stations, 1 centralized IP Node for switching and connection to applications, the application interface A-CAPI, and the comprehensive Network Management System (NMS) from Hytera.

The project rollout is planned to be at the end of 2012. ■

PD70X DMR Portable Radios, Ruggged Enough for Dallaglio Flintoff Cycle Slam

From 23rd April to 18th May, 2012, England rugby legend Lawrence Dallaglio and his cricketing counterpart Andrew'Freddie' Flintoff were leading a team of over 250 riders in the Dallaglio Flintoff Cycle Slam 2012, a 2, 872 km charity ride across Europe from the birthplace of the ancient Olympic Games Olympia to the 2012 Olympic Stadium in London. Through our partner Zycomm and Delcom, Hytera is proud to support the ride with rugged radios.

Hytera PD70X on hire was completely submersed

All the cyclists were equipped with Hytera rugged radios

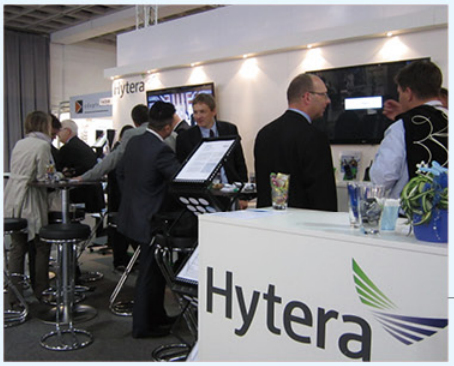
Hytera PD70X DMR portable radios were used by the riders to keep in constant contact with the support staff on both cycle and water sections. Instant clear communication together with robust and environmentally protected equipment were required as the radios were subject to rain and being used on canoes on Lake Garda. The radios' durability was put to the test when one of the Hytera PD70X on hire was completely submersed in Lake Garda, Italy for a long period of time. After the canoe was recovered the radio was found to be in full working order, suffering no ill effects.

The Dallaglio Flintoff Cycle Slam 2012 is also featured on the Discovery Channel and has so far raised over 2 million pounds. ■

Hytera Mobilfunk Showcases Complete Transport Solution at InnoTrans 2012

In September, Hytera Mobilfunk was participated in InnoTrans 2012 for the first time and showcased complete communications solution to the transportation industry. The event in Berlin is an international trade fair for transportation technology, innovative components, vehicles and systems.

In Berlin, the center for traffic engineering of German with over 220 resident traffic engineering companies, InnoTrans is the globally-established platform for national and international suppliers and customers in the field of passenger and cargo traffic. Hytera Mobilfunk presented at this year's event with complete solutions and products in the context of the traffic engineering industry and the transport services. Apart from the system elements of the proven ACCESSNET®-T IP TETRA system, Hytera Mobilfunk showcased the high-grade TETRA radio sets PT580H and MT680 as well as the DMR system solutions and mobile stations such as MD78X/MD78XG and PD78X/PD78XG of the parent company Hytera Communications.



Hytera Mobilfunk at InnoTrans 2012

Hytera Mobilfunk, formerly known as Rohde & Schwarz Professional Mobile Radio GmbH, has been an established partner of the traffic engineering industry since 2001 with its TETRA systems and comprehensive radio-based solutions for the entire range of public metropolitan and suburban commuter railway systems, intercity rail traffic and rail-bound freight service partnering Siemens Transportation, Thales and Bombardier as well as numerous transport services in Germany, Europe, the CIS and Asia. In the course of the trade fair, the company emphasized its leading position on the global market as a supplier of the traffic engineering industry and transport services. ■

Tailored Digital Communications Solutions was Showcased at PMR Forum Russia

Mr. Ivanov, Head of sales department moscow office, delivered a speech on Hytera DMR digital solutions tailored for Russian market

Moscow, Russia, October 2012—From 4th to 5th October, the 5th International Forum and Exhibition "Professional Mobile Radio Communications" (PMR Forum) was held in Moscow, Russia. As one of the key PMR suppliers in the world, Hytera was present at the PMR Forum, participating in both the forum and exhibition sessions, and showcased tailored digital communications solutions for Russia.

As the digital migration is making inroads and the Sochi 2014 Winter Olympics is approaching, this year's PMR Forum attracted a large number of government and industry users. During the event, Mr. Ivanov, Head of sales department moscow office, delivered a speech on Hytera DMR digital solutions tailored for Russian market, focusing on the customized features such as GLONASS support, UI, encryption and API. "The communication demands in Russian market are largely diverse and require more tailored solutions. Hytera DMR solutions, distinct by its analog-digital dual-mode operation, open protocol and higher cost efficiency, meets more varied requirements of end-users from different sectors." added Mr. Evginiy. ■

PT580H Portable Radio Gets the Spot Light at TETRA in India 2012

One of the series events organized by TCCA (TETRA + Critical Communications Association) to promote TETRA technology, TETRA in India conference & exhibition was held in Mumbai, India On November 1st, which provided a great platform for suppliers and users in India to exchange their ideas.

As a familiar figure in TETRA events worldwide, Hytera was present at this event and showcased complete TETRA products and solutions during the exhibition session, including TETRA systems, portable radios, mobile radios, and data modems. Hytera PT580H portable radio was highlighted in the exhibition for its 3W output power, versatile functions and excellent performance like IP67 water & dust proof, which was considered by the visitors as a more competitive edge over similar products. In the conference session, Mr. Sharma, Hytera Sales Manager in India, delivered a speech on Hytera ACCESSNET®-T IP Digital Trunked Radio System for India market.

As a core member of TCCA, Hytera is dedicated to developing and delivering of TETRA products and solutions. The acquisition of Rohde & Schwarz Professional Mobile Radio GmbH (now Hytera Mobilfunk) and fjord-e-design GmbH further enhances our competencies in system infrastructure and software application. ■

Visitors at Hytera booth

To learn more about Hytera news and events, please visit www.hytera.com.

Hytera in the News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08 Aug 2012 03:32 PM

Hytera DMR radios in action for Queen's Thames pageant

Hytera and its UK partner Roadphone NRB supplied terminals and infrastructure for the Diamond Jubilee river celebration of the Queen's 60 year reign

Add Your Comment...

Over 1,800 Hytera DMR hand portables PD70X/PD78X were deployed to support the Thames Diamond Jubilee Pageant event on 3 June 2012. The Pageant saw over one thousand boats mustered on the River Thames in London as part of the Queen's Diamond Jubilee celebrations.

Roadphone NRB, a Hytera partner in the UK, supplied the terminals along with base station repeaters and accessories. During the event, the radios performed excellently in the very wet conditions due to their IP67 rating.

The event produced one of the largest flotillas ever assembled on the river. The flotilla was bolstered with passenger boats carrying members of the public placed in a floating celebration of the Queen's 60 year reign.

Besides the Thames Diamond Jubilee Pageant, Hytera products and solutions have also supported other large events this year including Euro 2012, China-Thailand joint military training, and Sri Lanka Esala Full Moon Poya Day.

Hytera DMR Radios in Action for Queen's Thames Pageant

Wireless, the leading UK magazine for wireless communications professionals, reports on Hytera DMR solution for Her Majesty the Queen's Thames Diamond Jubilee Pageant. Over 1, 800 Hytera DMR hand portables PD70X/PD78X were deployed to support the Thames Pageant event on 3 June 2012.


Digital

Radio on top of the tower

Certifying DMR Tier III

Migrating to digital

Promoting DMR

Radio on Top of the Tower
Land Mobile, July Issue 2012

The leading UK magazine for wireless communications professionals looks into the case of Hytera DMR digital solution for the construction of Costanera Center, the tallest building in Latin America. It also reports on the launch of Hytera new DMR micro site to promote the technology.


RadioResource Media Group

KEYWORDS SEARCH

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Hytera Mobilfunk Buys Fjord-E-Design for TETRA, TEDS Protocols (11/9/12)

Hytera Mobilfunk acquired fjord-e-design (FED), a company with headquarters in Flensburg, Germany, that specializes in wireless protocols. FED has experience in the development of TETRA and TETRA Enhanced Data Service (TEDS) protocol stacks, as well as TETRA measurement technology. The value of the deal was not disclosed.

In addition to the Hytera center of competence for TETRA in Bad Münder near Hannover, Flensburg now is the second development location of Hytera Mobilfunk in Germany. The existing customers of the business fields of protocol stacks and measurement technology will continue to be managed from the Flensburg location, and the sales area for measuring technology in Germany will remain with fjord-e-design-sales.

" The acquisition of FED is an important step for Hytera Mobilfunk to accelerate the further development of the TETRA portfolio toward TETRA-2/TEDS as well as Long Term Evolution (LTE)," said Dr. Georg Haubs, managing director of Hytera Mobilfunk. "In the future, we will be able to react to the demands of the market even faster, and together we will offer

Hytera Mobilfunk Buys Fjord-E-Design for TETRA, TEDS Protocols

RadioResource, the leading US magazine delivers wireless voice and data solutions for mobile and mission-critical operations, reports on Hytera Mobilfunk's acquisition of fjord-E-Design, a company with headquartered in Flensburg, Germany that specializes in wireless protocols.


VERBINDING

INTERVIEW

Megaproject Galileo:

Interview:
"Made in China" is niet slecht

GALILEO IOV-1

Arianespace

Thema:
Satellietcommunicatie

"We hebben prijzen in de wacht gesleept vanwege onze uitstekende borging. Wat moeten we nog meer bewijzen?"

Hytera: "Made in China" is niet slecht
Verbinding, August Issue 2012

The top telecommunications publication in the Netherlands has an exclusive interview with Hytera Sales Director of Europe Area Mr. YT Kok. The report shares Hytera's aspiration to leadership in Europe.

Find it interesting and want to read more Hytera news from media? Visit www.hytera.com and find Hytera in the News at About us.

Hytera Mobilfunk Wins TETRA Contract in Kazakhstan

RadioResource, the leading US magazine delivers wireless voice and data solutions for mobile and mission-critical operations, reports on Hytera TETRA solution for Kazakhstan Railway. The new TETRA system supplied by Hytera Mobilfunk will replace an existing analog system of the Kandyagash – Nikaltau railway line.

Hytera Upgrades Dhaka Police Analogue Radios with DMR System

Wireless, the leading UK magazine for wireless communications professionals, gives detail account on Hytera DMR solution to Dhaka Police in Bangladesh for its digital upgrade. Over 2,300 Hytera DMR units have been deployed in 15 districts of Dhaka for the first phase of upgrading.

Private Companies Fly the Flag on Distant Shores

China Daily, the English-language newspaper of largest circulation in China, gives an in-depth report on the growth of Chinese businesses in the UK. Taking Hytera as a successful story, the report elaborates on Hytera's development in the UK by an interview with Mr. Andrew Yuan, Managing Director of Hytera UK.

Trolley Buses Run Smoothly with Hytera Radios

Radiocomms, the leading Oceanian magazine provides busy two-way radio professionals with an easy-to-use, readily available source of information and insight, reports on how Hytera DMR solution helps ILPAL, a major trolley bus operator in Greece, improve mobile communication.

New Products

X1p

Hytera has recently released a new member to Hytera DMR portfolio, X1p.
X1p is an ultra-thin full power digital portable radio, with full keypad, 65536 colors screen and high audio quality. However, it remains a slim figure with a surprisingly small size: 21mm thin.

Designed for professional users in various working environment, X1p can be trusted with its high RF power, versatile functionalities, and refined design. It provides highly secured voice encryption, GPS locating and IP67 water-proof features, and could work with portable repeater RD96X and SmartDispatch dispatching system to accomplish efficient on-site mobile communication network.

- Ultra-thin & small size: 21mm (1100mAh Li-ion battery) thin
- Full keypad & 65536 colors LCD
- High RF Power for professional radio users
- IP67 & MIL-STD C/D/E/F/G Certificate
- Digital voice & data application

PD79X Ex

Hytera PD79X Ex is designed for professional users working in hazardous areas. It is fully compliant with IIC Intrinsically Safe Standard and ETSI DMR standard, and combines the safe features with advanced digital voice & data applications. PD79X Ex ensures user safety in hazardous areas with plastic-encapsulated technology and double-level error-prevention design. By accessing the SmartDispatch DMR dispatching system and reporting the location & status of the radio to control center in real-time, PD79X Ex can remarkably enhance the safety and communication efficiency of the radio users.

- Plastic-encapsulated technology
- Error-protection design
- Anti-static shell
- High strength LCD protection
- IP67 & IIC Intrinsically Safe certificate
- Digital voice & data application

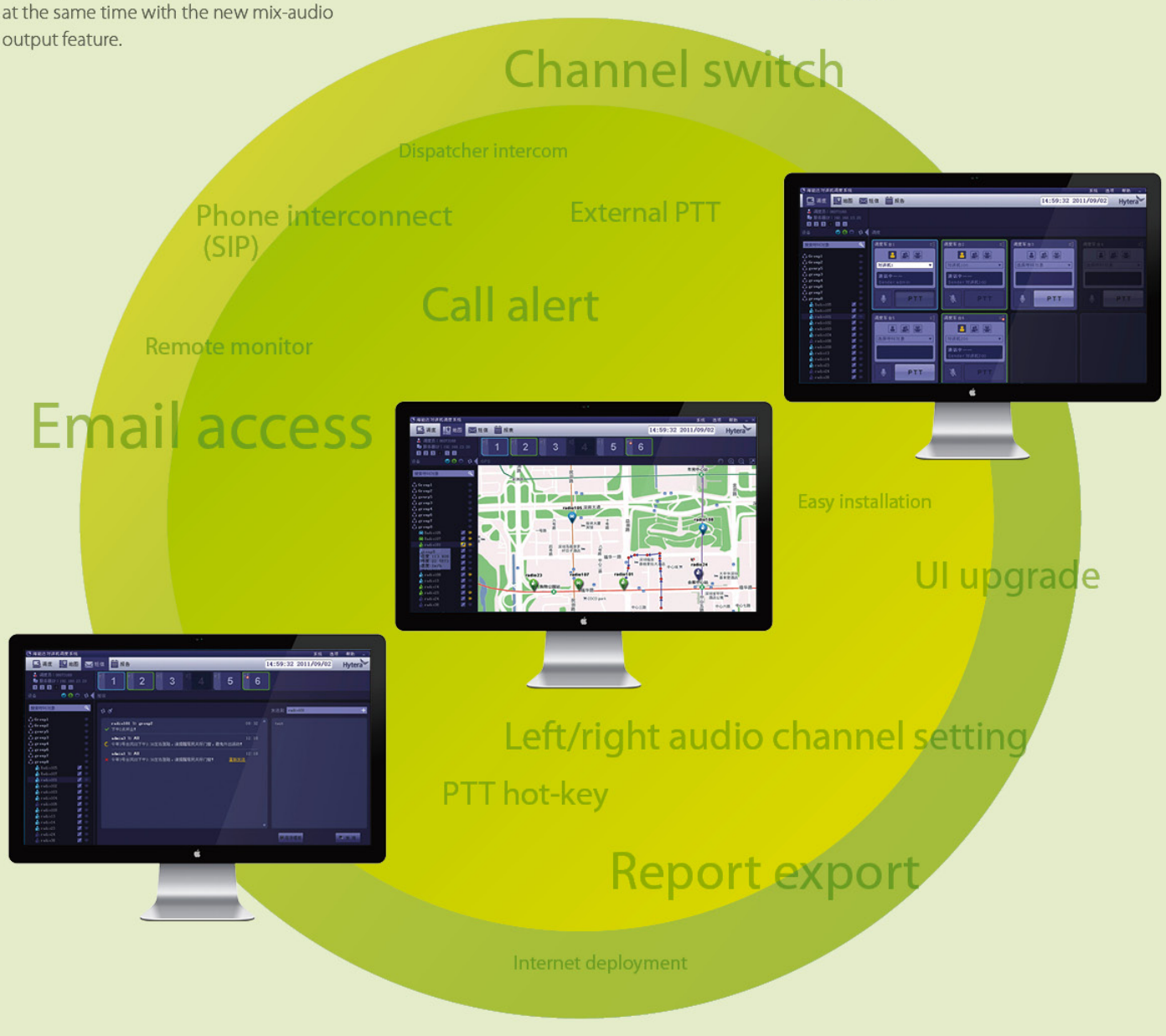
Since its introduction in 2011, SmartDispatch has been embraced by Public Utility sectors like Kinmen Tunnel, Taiwan and New Zealand Townhall, and Security Company in Angora. Yet, we never cease our innovation. With continuous improvement on the system, here we're delighted to introduce you the Version 3.5 SmartDispatch with enhanced features.

SmartDispatch 3.5

Direct IP Connect to Repeaters

The version 3.5 SmartDispatch Enterprise is able to operate with Hytera repeaters directly over IP. Dispatching Radios are no longer required.

- **Audio link**
  The dispatcher can dynamically combine groups into a big group for temporary communication purpose and create a shortcut button for quick call.
- **Multi-channel monitor**
  The dispatcher can monitor multi-channel at the same time with the new mix-audio output feature.
- **Data synchronization**
  After the dispatcher modifies the data of the radio, dispatch station or group, the SmartDispatch Server will synchronize with the new data without system reboot.
- **Flexible radio deployment**
  One radio can be affiliated with several dispatch stations. And multi-servers could be deployed in a network.
- **Pseudo Trunking**
  Support Pseudo Trunking to increase channel utilization.



Online Marketing

In order to help our partners gain more exposure and obtain potential sales leads through online channels, Hytera offers professional and customized Online Marketing supports.

You can receive assistance from our online marketing experts. Should you have any idea on Online Marketing, please contact roger.bai@hytera.com for further support. Below is a brief intro of the Online Marketing supports we provide.

Website Design

Our professional Online Marketing experts can customize a corporate website for you according to your requirements. What you need to do is provide us your company and product information, and then you can receive the whole website package within 2 weeks.

You can also use our latest website polishing package to update your website.

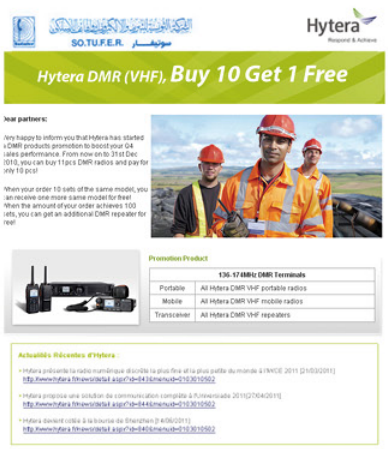
Download all the website resources via: http://file.hytera.com/public/8.online marketing, please contact our regional marketing manager or Online Marketing executive to get the authorization access.

E-mail Marketing

We'd like to work with our partners to customize their EDM solution.

Tell us your content requirements and the contacts you want to reach, we'll design and send out the EDM. The EDM report is also available for those that sent via our EDM platform.

Here are some cases and reports for your reference.



Search Engine Marketing

Our SEM (SEO & PPC) experts of nearly 10 years' experience can offer you professional suggestions for your website promotion.

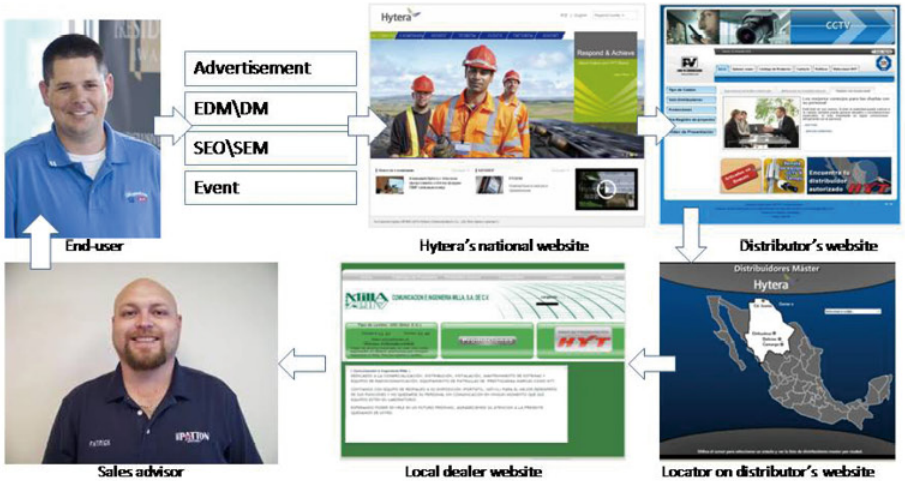
Marketing

Google altavista Ask Jeeves dogpile Яндекс overture bing

Online Leads Transfer

Hytera attracts valuable sales leads through our official online channels. We are happy to transfer those potential leads to our partners and help them achieve greater sales.

We have transferred sales leads of nearly $2.4 million to our dealers and closed $50,000 deals in 2011.



Good Customer Service and Quality are Worth Their Weight in Gold

Burkina Faso, a West African country near to Sahara, is lack of natural resources and is regarded as one of the most underdeveloped countries. However, its gold production has increased 32% in 2011 at six gold mine sites, making it the fourth largest gold producer in Africa, after South Africa, Mali and Ghana. The husband and wife team, Guy and Ann Louise-Julie, owners of Ameritel International Wireless, have been directly involved in helping to solve some of the challenges faced by Nantou zinc mine in Burkina Faso for Glencore International AG of Switzerland, owner of several mines around the world. In November, CONNECT talked to Guy about their business and stories in Burkina Faso.

Guy, owner of Ameritel International Wireless, is testing the system

CONNECT: How's the life in Burkina Faso?
Guy: Not easy. In Burkina Faso, we have armed security officers who watch out for us. And more recently, there are Al-Qaeda kidnappings of expatriates. Although I believe that every company faces some sort of challenge, but few will likely experience the obstacles faced by us and our clients on a daily basis in Burkina Faso. The task of assisting mining operations as they build and maintain a successful mine under these circumstances is a struggle that most entrepreneurs would hesitate to undertake.

CONNECT: How long have you been doing your business in mining?
Guy: Six years. We focused on government projects about six years ago. Then we minimized our focus on it and instead, began to pursue the opportunities that were appearing in the gold and zinc mines in Burkina Faso.

Digital radio network install - Nantoou Perkoa

CONNECT: What are the challenges you met in Burkina Faso?
Guy: The first challenge is, as I said before, the insecure social environment. Three gold mines owned by Avocet Mining of London, UK, IAMGOLD of Toronto, Canada and High River Gold of Toronto, Canada are located in the north of Burkina Faso where the greatest threat to normalcy is safety. In this zone of danger, Al-Qaeda continues to kidnap foreigners. That's why the security forces needed a communication system they could rely on to protect the international travelers visiting or working on the mine sites.

CONNECT: It's also the concern of Nantou?
Guy: Exactly. In order to increase security and a more reliable communication network, Nantou decided to invest in a Hytera DMR system, using the existing analog equipment by other manufacturers, which they already owned. Besides, we also had geographical challenges. Burkina Faso borders in the north with the Sahara where it is very dry, but that it is where minerals are to be found. Additionally, the mines are underground so several geological studies are required as part of the process to ensure good communications.

CONNECT: How did you help them solve problems?
Guy: The Nantou mine was built in a curved line, much like an 'S', and at each bend, an enclave had to be built to allow bulldozers to return. Since they were built using gigantic caverns, these bends created blind spots and, consequently, further difficulties related to the project. Hytera repeaters were enhanced with switches to lengthen the signal range.

Phase One began in December 2011 when eight UHF RD98X repeaters were installed but this project is ongoing and will consist of thirty-two repeaters when completed. Guided by Hytera engineers, Ameritel technicians enhanced and strengthened the reach of the signal, regenerating it with switches. The system also includes twenty PD70X and the existing analog radios and repeaters previously owned by Nantou.

Now workers in the tunnel, cranes, bulldozers, dumpers and in the fields feel more secure with the application of efficient Hytera system. It's inspiring that all seven mines operating in Burkina Faso are now using Hytera and HYT radio equipment in the efforts of our team.

CONNECT: You have done a pretty good job in bringing new technology to customers.
Guy: Thank you. Yes, the digital solution is gaining ground among my customers. We picked up the DMR solution, and we believe it's what they want. I still remember the first radio communications system we sold. The network was customized for the Secret Service of Burkina Faso and they used analog radios with repeaters installed every 40 kilometers. We sold TC500 and TC700Ex to the first mine in 2006, and now we have sold a DMR system that fulfills the needs of a new customer, Nantou Mining in Perkoa.

CONNECT: What do you think is the key that wins business in mining for you?
Guy: These accomplishments are due in part to word-of-mouth recommendations from satisfied customers who had experienced the quality of Hytera products and the parallel dependable support provided by Ameritel International Wireless. Twenty years in the radio communications business have taught us that continuous growth necessitates state-of-the-art solutions and reliable, professional customer support—just what Nantou Mining and our other clients needed, and that's the key, I think.

Testimonial

NANTOU
Mining Burkina Faso S.A.

TO WHOM IT MAY CONCERN:

Nantou Mining is a zinc mining company based in Burkina Faso, West Africa. In order to provide two-way radio coverage between the surface and our underground mining facility, we wanted to establish a 4-channel radio communication system. Specifically, we wanted to provide a solid radio signal from the surface of the mine site (approximately 15 Km radius) to the end of the tunnel so that our operators, engineers and mining experts could communicate with the various services on the ground.

Ameritel International Wireless recommended and installed a 4-channel digital radio system (DMR) manufactured by Hytera, Inc., linking two UHF RD98X repeaters (4 channels) from the surface via a wireless data system to six other UHF RD98X digital repeaters inside the tunnel. This allowed us to obtain very clear seamless communications to 300 meters inside the tunnel.

In order to avoid signal loss, Ameritel installed switches every 100 meters for signal regeneration, assuring uninterrupted communications between the site surface and all parts of the tunnel.

This system is being used with twenty PD70X portable digital radios and the end users are very happy with the overall performance of the system. Further expansion of the system is planned in the future.

Rob Smith
Perkoa Project Manager
Nantou Mining Burkina Faso SA

Event Calendar

Hope to see you at those events!

To catch up with our latest events planning please visit hytera.com and find Event Calendar at Marketing

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Feedback

Dear readers,

Welcome to the second issue of CONNECT Magazine and hope you'd enjoyed it.

We welcome all kinds of feedbacks. Whether you have any interesting topics or stories to share, or you would like to make contribution to our next issue, please do not hesitate to email us at marketing@hytera.com.

Thank you for your continuous support to CONNECT Magazine, and hope you will keep on telling us how to make it a more useful magazine for you.

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Hytera

Respond & Achieve

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