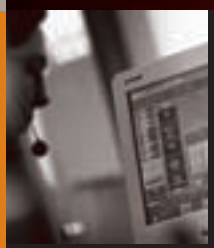
Information management for civil contingency responders

BAPCO Journal

Volume 13 Issue No 2 • february 2007 • £3.50

- a resilient and cost effective future for paging
- developing mobile data applications in force

DS2000 Integrated Communications Control system – picture courtesy of Derbyshire Constabulary



SUNGARD VIVISTA

Listen, Deliver and Inspire

Transforming Services

We are responsible for more than 150 Public Sector contracts for customers involved in Public Safety, Criminal Justice and Central and Local Government.

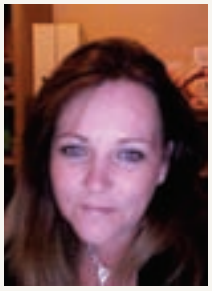
Our solutions help suspects to be booked into custody correctly, police to communicate more securely, ambulance personnel to mobilise more quickly, parking appeals to be determined impartially, criminal cases to be prepared electronically, emergency services vehicles to be located accurately, identities to be checked definitively, offenders to be assessed objectively, farm payments to be made promptly, IT projects to be delivered punctually, assets to be managed collectively and public servants to work more efficiently.

To learn more about the services we offer and the market leading products we supply visit **www.sungard.com/vivista**

SunGard Vivista Limited, Methuen Park, Bath Road, Chippenham, Wiltshire SN14 0TW
Tel: 08456 041999

Catalist
Choose with confidence
use with ease

EDITOR'S LETTER



Dawn Davison-Read

Information management and the sharing of information are all key drivers that will help our mission critical arena meet the ever growing demands placed upon it, which is why each and every issue of The BAPCO Journal strives to keep you updated and informed on all aspects of both today's and future technologies. In complete correlation of that fact, the annual BAPCO conference and exhibition has been designed to meet those very needs. And this month sees the first part of a series of features, highlighting why it makes sense to attend the event *(see page 19)*. This month we also take a closer look at the use of 3G as a data bearer. In fact, our cover story *(see page 6)* highlights how North West Ambulance Service frontline crews are using Vodafone's 3G data cards to access critical information such as details on hazardous chemicals to help enable its rapid response vehicles to co-ordinate emergency operations more effectively. Following on from this, the March issue will contain an in-depth article on current and future mobile data usage via differing bearers. To ensure you receive a copy, either register as a member of BAPCO *(application form on page 16)* or subscribe to the Journal at www.bapcojournal.com.

Information management for civil contingency responders

BAPCO Journal

Volume 13 Issue No 2 • february 2007 • £3.50

Editor
Dawn Davison-Read **Tel:** 01622 679440
Email: dawn.read@hgluk.com

Advertisment sales manager
Natasha Nel **Tel:** 020 7973 4683
Email: n.nel@hgluk.com

Group sales manager
Gary Poolman **Tel:** 020 7973 4666
Email: g.poolman@hgluk.com

Advertisement director
Emma Sabin **Tel:** 020 7973 4641
Email: e.sabin@hgluk.com

Production
Mike Hills **Tel:** 020 7973 4620
Email: production@hgluk.com

Managing director
Graham Bond **Tel:** 020 7973 6645

For subscriptions queries please contact
Tel: +44 20 7973 6694
Fax: +44 20 7233 5052
Email: customer@hgluk.com

published by **Hemming Information Services**
32 Vauxhall Bridge Road, London SW1V 2SS

a resilient future with paging

tomorrows world - BAPCO 2007

strategic mobile data pilot

NEWS

FEATURES

CASE STUDIES

REGULARS

covert mobile surveillance tool for Northern Ireland police service brings increased efficiency

The Police Service of Northern Ireland (PSNI) has gone live with a software solution designed to manage requests for accessing and analysisng an individual's communications data, as required under the Regularion of Investigatory Powers Act (RIPA) 2000.

As a result, PSNI has eliminated hand-written forms, reduced time intensive paperwork and largely automated the request approval porcedure. Already since the beginning of October 2006 when the solution was implemented, PSNI has reduced the time take to manage aspects of the process from half a day to just 20 minutes.

Under RIPA, all police forces must gain authorisation from a 'designated person' prior to accessing the mobile phone, internet and postal data of suspected offenders or other individual's of interest. This process is managed by an authorised person known as a 'single point of contact' (SPoC) who liaises with the Communications Service Provider (CSP) - which is any company in the world providing public communications.

Police forces across the UK analyse the mobile phone records of suspected offenders for a number of reasons. A mobile cell site search can help identify where a particular individual was at any given time. A subscriber check identifies the owner of a particular handset and a records search reveals numbers called - thereby identifying people a criminal may associate with. All requests from Police Forces for access to such information must comply with RIPA, which in turn is compatible with the European Human Rights Act.

Detective Inspector Kevin Geddes of the PSNI explains the benefits of using ABM's software, "Previously the process of requesting authorisation to access telecoms records was very paper intensive and would result in documents having to be physically signed. The manual administration of this could take anything up to half a day and would be particularly time consuming if a single request had to cover several mobile operators, for example the investigation of an individual and their associates on different mobile networks. Using Telecoms, the process has been dramatically speeded up and means the administration time spent by PSNI is just twenty minutes. Since documents can be authorised electronically, requests for information can be presented to the CSP more quickly and turned around faster."

Alastair Luff, ABM Group Managing Director said, "ABM software is designed to let the Police get on with their job of protecting the public and preventing crime. With a full range of compliance modules and workflow functions the PSNI can be confident that by using Telecoms it not only experiences time savings but also meets all of its legal obligations under RIPA and the European Human Rights Act."

mapping it out in Gloucestershire

Gloucestershire Police has selected Cadcorp SIS and Cadcorp SIS OS MasterMap to NTF Exporter to support its migration to OS MasterMap digital map data, while retaining the use of its exisiting digital mapping GIS facilities.

"While we had acknowledged that there are benefits to be gained from moving to OS MasterMap data for our base mapping, our existing incident management system doesn't support GML data", stated Nick Boon, GIS manager, Gloucestershire Police.

"We needed to find a way of cost-effectively and accurately converting the OS MasterMap Topography Layer data into a suitable format for our existing systems. The solution from Cadcorp was therefore the obvious choice for us because, as far as we are aware, no other vendor offers such a capability."

ambulance service steps into satellite

The Royal Berkshire Ambulance NHS Trust, the first ambulance service in the UK to install Transportable Satellite Broadband VPN (TSBV) technology has achieved another first with the purchase of STEPS (Strategic Emergency Planning Solution) from Excelerate Technology.

STEPS allows personnel from all three emergency services the ability to immediately update emergency plans in pressurised situations, utilising wireless mesh technology to deliver a solution to multi-agency response for planning and procedure.

Commenting, James Amos, Emergency Planning Officer for Royal Berkshire Ambulance NHS Trust said, "It is vital for us, as an Ambulance Trust that covers such a wide and diverse area, that we equip ourselves with technology that will aid us in our emergency management and multi-agency response procedures. This is why we have again gone to Excelerate and its solution, STEPS. Although the product seemed perfect, we requested that the solution have a few more options, they went away and came back with an improved product that will benefit us for now and others that take the system from here on in."

David Savage, Chairman and CEO for Excelerate Technology added, "One of the main attractions of the STEPS solution is its simplicity of use and its automatic update across the Excelerate wireless mesh solution in a multi-agency response.

"It will allow Royal Berkshire Ambulance NHS Trust's crew the ability to update its plans while keeping all involved parties informed. As soon as one plan of action is made, the information is relayed across the wireless mesh and updated on all the whiteboards in the relevant response units."

TETRA infrastructure for Norway

Motorola and Siemens has confirmed they will be delivering TETRA hardware, software, services and maintenance to Nodnett, Norway's national public safety network.

Based on Motorola's TETRA over IP switch solution and Motorola Diemtra IP, which offers a resilient, robust and reliable network for seamless communication.

The solution will also support the future development of the nationwide system including provision of higher data speed to support the deployment of advanced mobile data solutions.

funding for new technology

Beat Systems, has been offered a £388k SPURPLUS grant from the Scottish Executive, to pioneer mobile technology development for UK police forces and government departments.

Roy Hawes, Commercial Director of Beat Systems, explains, "The award of SPURPLUS is critical to the successful rapid development of this radical technology. With this funding the benefits that the mobile technology brings to the police forces and local authorities will increase tenfold in a shorter lead time. Vital, decisive information becomes available instantly and officers are able to make complex judgements and critical decisions based upon real-time information."

The solution is a fully integrated hand-held and vehicle mobile system capable of securely searching and updating all police central systems from a single log-on and search. This allows officers on the beat to perform live searches and interrogate multiple systems to all national and local police systems with unparalleled security. All information is seamlessly updated into all central systems without the need for manual re-keying and collated data is used to complete police forms, tickets and reports whilst out on the beat.

Hawes continues, "The Scottish Executive award will support Beat Systems in developing a mobile solution to become the first voice activated solution capable of securely accessing multiple disparate systems by police officers on the beat. The developed technology has a huge global market and will continue to take the lead in delivering secure mobile solutions to the police."

Early adopter of the technology and the first full police rollout of mobile data by a national force is the British Transport Police. Paul Robb, Assistant Chief Constable, British Transport Police said, "Mobile data has the potential to be the most significant advance since foot patrol officers were given radio communication. Fundamental to our strategy is the impressive technology that Beat Systems has developed. Over the last two years, we have been working closely with them to develop the concept into a meaningful operational tool that officers on the ground will be eager to use."

The Deputy First Minister, Nicol Stephenconcluded, "The SPURPLUS initiative supports projects that represent a significant technological advance for the UK sector or industry concerned and that have a global appeal. The Executive is working to further the development of the Scottish economy by promoting a culture of enterprise, innovation and competitiveness in Scotland."

rumours fly over potential Airwave sale

The rumour wars have already begun with who could potentially be the next owner of the O2 Airwave business, following the announcement that Telefonica S.A. was looking to dispose of the company.

Potential bidders could be Macquarie, the Australian Bank, and in a recent press report, it was stated that the bank had expressed an interest. It perhaps comes as no surprise, since the bank is already the largest shareholder with Arqiva, which provides support to the emergency services for the running of the Airwave network.

At the time of writing, we were unable to acertain of any trade bidders, however, it is likely that other specialist infrastructure funds will bid. The real question is however, what impact it will have on the safety and reliability of the network.

handheld cctv solution

A new handheld mobile CCTV solution that delivers live video such as traffic flow or incident images direct to mobile users using a handheld PDA, notebook or desktop PC has been launched by Tyco Traffic & Transportation, part of Tyco Fire & Integrated Solutions.

The system is ideal for personnel who need to access video including PTZ camera control while on the move to provide a faster response to events or emergencies. It also frees up personnel from being tied to a control room or desktop PC.

A major benefit is that the system uses existing GPRS or 3G mobile data networks which already have broad coverage so no expensive new infra-structure is required.

Users can connect from any handheld PDA, laptop or desktop PC connected to the internet via an existing radio network or via a hard-wired internet connection. Access to the images is controlled via the server with user and group authentication for security.

in the news

honour for contributors
Jacqui Brookes, the CEO of the Federation of Communication Services (FCS), was awarded an OBE in the Queens New Year honour. The award recognises her contribution to the industry by proactively representing small and medium enterprises with the Government and the telecoms regulator OFCOM. Other honour came in the form of, Rick Naylor, current President of the Police Superintendents Association being awarded the Queen's Police Medal in the New Year honour List.

terrorism programme director
Assistant Chief Constable, Margaret Wood has been appointed the first APCO Terrorism Programme Director. The newly created DCC position will see Wood co-ordinate work across the service to build capacity and capability to counter-terrorism and play a major role in the creation of Counter Terrorism Units and Regional Intelligence Cells at key locations across England and Wales.

new UK company
Northrop Grumman Corporation has created Northrop Grumman UK Limited, a new UK registered company based in London to facilitate the growth and expansion of Northrop Grumman activities in the UK defence, security, civil government and commercial sectors. Although the company has already seen great success in the UK, this demonstrates its commitment to the UK and highlights the company's desire to enhance its presence further in the market.

Symbol acquisition completed
Motorola has completed the acquisition of Symbol Technologies enhancing Motorola's vision of seamless mobility providing business critical information anytime, anywhere.

Italian public safety contract award for TETRA

Italy's Interior Ministry has given its approval to start the Italian project for creating a national mobile radio network for the Polizia di Stato (Italian State Police), the Carabinieri(Military Police), the Guardia di Finanza (Customs Police),the Polizia Penitenziaria (Penitentiary Police) and for the Corpo Forestale Italiano (Italian Forest Brigades). The program's comprehensive value, including network management and technology updates for a seven year period, amounts to circa 3 billion Euro.

The network will be deployed in segments - depending on the finances made available by the government - and completed in about six years.

The first segment of a nationwide TETRA network for the Italian Police Forces became operational in December 2005 in the area surrounding the 2006 Winter Olympics in Turin to guarantee Italian Public Safety and Security forces with the technology and support they needed to protect the event against crime, terrorist activities and for day by day operations. Once completed, the network will provide service to roughly 300.000 users and provide nationwide radio coverage.

The Italian State Police, Carabinieri, Customs Police, Penitentiary Police and Forest Brigades will be able to use share the same communication network, to manage their own communications in complete privacy, adopt customized solutions and applications, and to conduct integrated communications whenever they will deem necessary. The Interior Ministry's decision will thus contribute to improve the efficiency of Public Safety operations (war on terror, organized crime, illegal immigration, etc.) and improve their security.

The network guarantees immediate communications, even in the event of a failure, in case of an emergency and during network congestion, and has built-in security features (air-interface and end-to-end encryption, terminal authentication and security management) that ensure the security of communications without any negative impact on voice quality. The migration from current analogue networks to the new digital TETRA network will be seamless and all applications and functions present will be transferred to the new digital platform.

"This success represents the culmination of a series of investments over a ten-year-period, during which Selex Communications developed the technology, hardware and software, necessary for the realization of highly advanced and performing networks,"said Maurizio Tucci, Selex Communications CEO. "The Ministry of the Interior's decision to award us with this contract is further testament to the degree of excellence that we have been able to achieve. I am certain that the present success will be followed by others on the international marketplace and that our Group will keep on growing stronger," concluded Tucci.

expanding mobile functionality

Datastrip has introduced an optional built-in 3M pixel digital still camera to is DSVII family of mobile biometric identification terminals, equipping users with new capabilities such as user enrollment at remote sites, photo-based identity matching of criminal suspects and photo evidence gathering at crime scenes.

These abilities add to the mobile identity verification powers of the DSVII terminals, which include decoding of digital identity documents at any location without a fixed checkpoint as well as on the spot matching of live fingerprints to biometric templates.

Seamlessly integrated into the back of the unit, the camera sits flush against the housing with tips that protrude slightly from the case to protect the lens against damage when the unit is put down. It features 24-bit colour, flash illumination and preview capabilities and adds just six-tenths of a pound to the 2.1pound base weight. Captured images can be stored and processed on the terminal or wirelessly transmitted to backend servers for immediate processing.

buoyant VHF marine transceiver

A revolutionary new VHF marine handheld radio,which floats in water, has been devised by Icom.

The IC-M33 is waterproof to IPX-7 and will keep on working after it has been submerged, what's more, the IC-M33 features an 'Aquaquake' draining function to clear water away from the speaker grill.

Containing many of the features expected from Icom, the IC-M33 is also available with a handsfree waterproof speaker microphone., which will still float when attached to the radio.

Type approval is pending, but the radio should be available later this year.

arqiva

On the frontline you need information you can rely on

Information is vital
You don't care how, you just need it
Arqiva gets the information to you

Mobile Radio Networks
Telecommunications Networks
Managed Services
Mobile Data Solutions

To find out more about Arqiva's Public Safety group call 0845 650 4020, email public.safety@arqiva.com, or visit www.arqiva.com/publicsafety

A tanker has jack-knifed across the motorway. Unknown chemicals are leaking out while hundreds of vehicles create gridlock. Emergency teams arriving at the scene depend on Vodafone for on-the-spot communications.

a rapid response with 3G

We take a closer look at how Vodafone is providing a rapid response communications solution to North West Ambulance Service that can help save lives...

The North West Ambulance Service, which covers the Cumbria and Lancashire area, recognised that front-line crews need to be equipped with reliable connections to the Central Control Unit and other emergency agencies. They also recognised that a direct web-based link would greatly increase the crews' ability to access information as they needed it, without having to call back the central command centre. It would also enable rapid response vehicles to coordinate emergency operations far more effectively.

Vodafone Mobile Connect data cards will be used with laptop PCs in emergency vehicles to provide reliable wireless connections via the Vodafone network. These give access to specialist internet sites as well as back-office systems at the Central Control Unit. BlackBerry® from Vodafone devices also supply voice links and internet communications to enhance the solution.

the solution

Vodafone worked closely with the ambulance service to match technology to needs. Vodafone Mobile Connect data cards were employed with Panasonic Toughbook PCs in the Incident Support Units. This allows a direct link to the National Poisons Information Centre based in London. If there is an emergency situation involving hazardous chemicals, the relevant information can be

accessed immediately at the scene. Frank Whiteford explains, "On the side of HGV tankers there is a hazard warning, UN number or code which we can punch into the computer. The Vodafone wireless link to the Poisons Information Centre brings up information about the chemical or material we are dealing with, and what antidotes and treatment options are available."

saving valuable time

"The important factor is that all this is being done at the scene, saving valuable time," says Frank Whiteford.

"With the Vodafone solution we can identify treatments faster and that means some patients may need to go to hospital while others can be safely treated at the scene. The Vodafone Mobile Connect data card also allows crews to access weather information regarding wind speed and direction so nearby residents can get the right advice about potential health threats.

"With the technology, we are able to manage the situation at the scene and brief colleagues from the Health Protection Agency resulting in programmes being set up immediately to include GPs and local surgeries."

more effective decisions

The Vodafone wireless solution has enabled North West Ambulance Service to set up a comprehensive strategy for dealing with complex emergencies. Now information and pictures are transferred directly from the scene of an incident to the Central Control Unit, where electronic white boards chart the real-time progress of an emergency operation.

"Giving control room staff a full understanding of what is happening means they can make more effective decisions," says Frank Whiteford.

"We have a good product and a system that works. Where we have had challenges, Vodafone has met them and it has been a very good relationship. Without the Vodafone communications system we would not be able to deploy our resources as effectively.

"In the M6 chemical incident, the Vodafone technology was there to support the decision-making process which enabled us to manage the situation swiftly and effectively."

When two HGVs collided on the M6, North West's Incident Support Unit used a laptop PC with a Vodafone Mobile Connect data card to download information identifying the chemical and provide medical information to allow the scene to be managed safely.

"Vodafone technology allows us to get information to the scene of an emergency incident quickly. Furthermore, the beauty of this solution is that having the relevant information on the laptop screen and talking to a specialist at the same time enables the emergency services to formulate a solution faster than would otherwise be possible."

Frank Whiteford
Deputy Director of Accident and Emergency Operations, North West Ambulance Service

paging - is there still a requirement in public safety?

With the growing usage of SMS messaging, are paging systems likely to become obsolete in the face of mobile phone technology or will they remain a reliable and cost effective means of communication within the mission critical arena? Outlining this very point, The BAPCO Journal takes a closer look at the importance that both wide and local area paging systems play and examines how the systems are likely to develop in the future...

a resilient and effective future in paging

The unfortunate events in London on 7th July 2005 demonstrated the importance of effective communications in responding to and managing major incidents and the increasing role that mobile messaging plays in emergency and business continuity plans.

Whilst events demonstrated the growing role and acceptance of text messaging for critical messaging, it also reinforced the role paging still has to play in communicating vital information quickly. Paging's inherent broadcast capability and protection from public peak traffic loads during such emergencies, ensures that even though the paging network experienced record traffic levels on 7/7, messaging was well within capacity, and the delivery of critical messages in a timely manner was unaffected. This mirrors the findings of several reports into communications during the 9/11 disaster in New York, which highlighted the critical role paging played.

Michael Cassidy, president of the London Chamber of Commerce, reinforced this point in an article in the Times soon after the July 7th attacks in London, Cassidy commented "...firms needed to be able to communicate through a secure paging system in the event of further attacks..."

Furthermore, the frequencies used by pagers and their infrastructure are governed and have less tendencies to interfere with sensitive electronic equipment, hence the reliance of hospitals on pagers. In addition to which, since pagers can also be made intrinsically safe, for use in hazardous environments such as petrol refineries there will remain a need for such a reliable and resilient form of communication.

Discussing how pagers can remain effective with the growing usage of SMS messaging, Paul Williams, Lynxpro pointed out, "Ownership is a fundamental reason why paging will remain a major requirement within the mission critical arena, which ensures system reliability and performance.

"In the case of local area paging the entire system is owned by the user, therefore there is no dependency on a third party to provide the service. We also know from experience that in the case of emergency either the third partynetwork fails to operate because of lack of capacity of in severe situations is closed down as happens when there is a risk of a third party network being used to create the emergency, such as remote detonation of bombs etc. Whilst these instances are thankfully rare, the possibility does remove the ultimate reliability of such systems to operate when they are needed most."

Pagers were cited in the London Regional Resilience Forum Multi-Agency Debrief report, (as published on 23rd September 2006). Key elements such as: Lessons (page 7) "Responders must not rely on mobile phones for critical functions in a crisis. Emergency responders need to have a dedicated communications that will work in an emergency."

''Pagers: so long as they are sufficiently independent of other networks, consider using pagers for alerting and mobilisation, including preset pager groups, where this function is critical''

Progress since 7 July - London Ambulance Service (page 27) "LAS managers have all been given radio pagers which are resilient in a major incident"

What happened to the networks? (page 42) "Pagers: They can enable messages to get through when mobile phone networks are congested. COLP (City of London Police) successfully used its pager alert scheme on 7 July to provide key business personnel with incident progress information."

Recommendations (page 44) "Pagers: So long as they

London Regional Resilience report

''Pagers: so long as they are sufficiently independent of other networks, consider using pagers for alerting and mobilisation, including preset pager groups, where this function is critical''

are sufficiently independent of other networks consider using pagers for alerting and mobilisation"

Commenting on the report, Chris Jones, managing director, PageOne said, "PageOne welcomes the findings of the report and reiterates that paging still plays a very important role in providing real time information to many organisations today."

is SMS technology impacting on paging?

Discussing the growth of SMS technology and the impact it has had on paging, Jones stated, "SMS text messaging is playing an increasing role within business. Businesses have realised that a resilient communication strategy, uses a combination of technologies such as paging and SMS. As a disaster will inevitably exploit weaknesses in any communications strategy, which is over reliant on a single network or technology - landlines can be damaged, mobile networks can be overloaded.

"It is thus crucial that businesses ensure that they have effective plans for managing and responding to emergency, disaster or even system failure. Many organisations are indeed currently reviewing their communication plans."

Williams added, "The technology used by SMS follows the same technology as radio paging. The advances in the use of mobile telephony has greatly benefited radio paging systems, which have developed at the same pace as mobile phones. In the case of 'On-site' radio paging, such systems offer a number of advantages compared to SMS messages. For example, 'On-Site' paging systems are owned and controlled by the user who has complete control over the system. Messages are transmitted and received almost instantly. Unlike SMS systems where the volume of transmissions at any one time may delay up to several hours the receipt of the transmitted message. Further more the on-going cost of on-site paging is very little as the cost per message is zero!"

Also commenting, Peter Moss, product manager, Stanley Security Solutions' staff protection systems said, "The growth in SMS technology has clearly had an impact on paging, offering significant advantages not least by enabling people to reply to a message using the same device. The one potential downside to SMS is that network coverage may not always be as good but then the extent of wide area pager coverage was often unpredictable.

"I would argue that whilst wide area paging faces a difficult future, there are still major opportunities and benefits for on-site paging, even in the mobile phone era, for example in hospitals, prisons and secure units as well as in shopping malls, factories or any application where deaf people need to be alerted to fire alarms.

"In the hospital environment for example where both emergency and routine calls are made using pagers, one major benefit over SMS is that you have guaranteed control over the radio link frequency. Radio frequency at these sites is controlled by OFCOM and it is able to grant or refuse licence applications to ensure that pager messages are not subject to interference.

"In contrast, GSM communication is often compromised at the very time when it's needed most, because in an emergency everyone automatically reaches for their mobile phone and networks struggle to cope. The aftermath of the London tube bombs was a classic example of this," he concluded.

key drivers for paging systems

Discussing what the key drivers for paging systems are, Jones explained, "Using VHF frequencies and based on narrow band broadcast technology, paging is based on a worldwide standard, and with little to go wrong has consistently paid its way. Pagers were never subject to the WAP or MMS phenomena of being a technology before its time, or a solution looking for a problem. Paging did what it said on the box, delivered one way alphanumeric messages with an extremely high degree of coverage and probability that the message would arrive.

"Pagers are simple, use little energy, and need very few transmitters; the technology is low cost and reliable. What's more, coverage far exceeds that of mobile technology and most importantly, if your application involves receiving alphanumeric content that is critical to the task, there is no better way than paging."

In fact we are subject to paging technologies every day, but are seldom aware of it. Many modern bus stops with LCD displays showing routes and times before each bus are based on paging. Modern train timetables use paging as does the streaming technology showing stock prices or sports scores. Whilst these are the more obvious examples, there exists a huge market in both commercial and public sector projects. Any application that responds to a trigger to pump out critical information is generally a paging application. Hospitals use pagers to contact medical staff; the railway network uses pagers to inform engineering, maintenance and management about the movement of trains; water authorities use automatic measuring and trigger mechanisms to alert personnel to the changes in river and reservoir levels. Moving away

London Regional Resilience report

"Pagers: They can enable messages to get through when mobile phone networks are congested. COLP (City of London Police) successfully used its pager alert scheme on 7 July to provide key business personnel with incident progress information."

from public infrastructure projects, we find paging used in food storage and retail to alert staff of temperature changes in freezing and chilling boxes, and business continuity and disaster recovery companies rely on paging as the alternative to easily destroyed mobile networks.

Williams adds, "The key drivers behind paging systems are mainly, cost efficiency and reliability. Where a paging system is used in hospitals as a 'bleeper' system to summons attendants or where the system is used as a fire alarm paging, the messages must be transmitted and received almost instantly. Any delay could be life threatening."

the evolution of paging

Since the events of 7/7 PageOne has worked closely with both public service agencies and corporate businesses to assist them in reviewing and implementing robust business continuity broadcast messaging services. Many organisations have made a conscious decision to diversify their communications service provision such that their paging and messaging provider is independent of their mobile phone provider. And as a consequence PageOne has seen an increase in demand for both paging and SMS services that integrate together, giving enhanced resilience and flexibility for emergency and first responder solutions.

Looking at on-site paging, Moss suggests, "In terms of on-site paging, there has been a greater move over the past 12 months towards two way messaging. Many pagers now automatically send a return message confirming receipt and some also have optional reply facilities so they can indicate whether response has also been actioned.

"Other pagers are also able to transmit signals which pinpoint the precise location of their owner. Within prisons or high security units these can be particularly important enabling prison officers or security guards to alert colleagues to an incident or attack and prompt immediate response to the precise location.

"Because of the extreme accuracy of location, they can even determine whether a guard is inside or outside a cell, an important counter to, for example, prisoner bullying allegations.

"The sophistication of these pagers also provides a useful audit trail post-emergency or incident. The pager data can establish precisely when messages were sent, received and responded to, ensuring much greater accountability."

In agreement with the continual evolution of paging, Williams added, "Paging systems are continually evolving, the two drivers of this evolution are new technology as it is developed and by the users themselves in their expectancy as to exactly what they want a paging system to do.

"Smaller and more compact pagers for example, The advancement of multi-line messages shown on the pager screen. The integration of paging into existing systems such as the development of automated reminders in an office environment utilising existing infrastructure such computer networking. The instant contact of waiting customers in the hospitality sector."

and to the future...

PageOne believes that paging has a number of key benefits that ensure it will continue to play a significant role in the UK telecommunications market in years to come. These include:

Cost effectiveness: PageOne's paging services offer considerable savings over other types of messaging services for those customers that send a large number of messages per month. PageOne charges its customers a standard monthly rate for paging that includes messages costs. This represents a significant saving for many clients.

Unique broadcast ability: The unique capability of PageOne's paging network guarantees that, if a message is sent to a number of recipients, then all of those recipients will receive the message at the same time. It also guarantees the timing of the delivery of the message, with no arbitrary delays caused by its network, such as those that can occur when sending SMS messages. This can be vital in industries such as transport where rapid notification across several levels and sites is crucial when problems occur, and for organisations such as the emergency services, for whom immediate and simultaneous message transmission is key.

Independence of network: PageOne's paging network has complete independence from GSM and other public mobile phone networks. This is an extremely valuable asset and can prove crucial in disaster, accident and terrorist situations when mobile phone networks become quickly saturated with non-essential traffic, under which circumstances the paging network continues to provide customers with guaranteed reliability and access to key personnel.

Restricted environment usage: Unlike mobile phones, pagers can be used in restricted environments such as hospitals and computer rooms. This is crucial, not only to customers such as the NHS but also to customers such as the major communications companies.

For companies that select a messaging tool based on one or more of the above criteria, paging is the only option and thus it forms a key element of many companies' and public service organisations' communications strategies.

Integration: PageOne have moved beyond the simple text message and now, through its Oventus architecture, enables a mixture of paging, SMS, and email content to be delivered and managed via connectivity options such as secure VPN, IP and XML. Though the sophistication of such systems is an integration point where organisations with complex communications requirements can mix and match, the USP of paging still resides in its three core tenets: simplicity, stability and cost.

In concluding, Stanley Security Systems suggests that One of the future trends will be towards the use of Wi-Fi technology. Although this requires a certain amount of bandwidth, the type of short messages associated with paging should not require too much space provided the coverage is good enough.

Traditional on-site paging in which organisations maintain control over their own networks, fully licensed and regulated by OFCOM will, however, continue to be viable for many years yet to come.

PageOne

PageOne operates the only independent 'wide-area' paging network within the UK. Resilient and robust communications are a crucial part of any business continuity plan and when mobile phone networks were overwhelmed on 7/7, PageOne's messaging service proved itself a robust and reliable way for users to keep in touch. Many organisations who in responding to and affected by events of 7/7 successfully used PageOne paging and SMS messaging services to deliver timely instruction and information alerts, including the COLP alert scheme which has in excess of 2,000 members.

SELEX
Communications
A Finmeccanica Company

When communications are vital...
and **failure is not an option**

Puma handset

Choose the SELEX Communications TETRA solution...

- Proven technology
- AIRWAVE certified
- Enhanced capability
- Easy to use

"The SELEX Communications Puma is the only intrinsically safe, ATEX-approved TETRA terminal available in the UK"

email: profcomms.enquiries@selex-comms.com
web: www.selex-comms.co.uk

FINMECCANICA
Further on.

Everywhere in the future.

beating time with new technologies

Joe Fielder, Sales Director of intelligent monitoring & tracking experts BT redcare, explains why the police should look at the new technologies being introduced that enable them to increase presence in the community and maximise operational efficiencies, as a way to make the goal of reducing crime and the fear of crime a reality...

A real question has to be can we do it, can UK police forces positively move to make a real impact on crime statistics and also reduce the public's fear of crime? In the wake of current security fears this may seem like a tall order, especially given questions of prioritisation of already limited budgets. But it's something that society, it seems, increasingly sees as a given.

The good news is signposts to the future exist, in forces as diverse as The London Metropolitan Police, Merseyside and Sussex Constabularies. What we can see at such forces is a move to positively adopt the right technologies to provide platforms to address the key areas of better interaction with citizens and communities, the need to provide more visible policing, and the need to work more efficiently and effectively.

Information Communication Technology (ICT) based solutions play a vital part here. Tools such as secure, efficient mobile data exchange and ANPR (automatic number plate recognition) linked to CCTV networks are just some of the ways to maximum use of resources, enabling the police to concentrate on one of their prime roles of crime prevention. Ultimately however, as with all successful modern organisational structures, it must be a combination of people, processes and technology.

communications breakdown?

Of course, the recent hard-hitting report on 7/7 along with Her Majesty's Inspectorate of Constabulary (HMIC) recommendations have highlighted these issues and flagged the need to upgrade communications systems. By 'communications' we mean not just the physical transmission and reception of data (vital though that is, and in many ways still more of an issue than many of us would like). It also means communications in the sense of linking internal and external interfaces between staff, systems, the general public and other stakeholders.

Forces are readying themselves for among other things the introduction of the National Single Non-Emergency Number (SNEN), with the first wave rollout already underway, while also working to meet new performance and care standards ushered in this April, which are supplying real benchmarks for performance.

Many of the UK's police forces are using these developments to forge a new 'end to end,' citizen-focused, responsive communications strategy. They are working to understand their local citizens' needs, issues and requirements as part of a programme of real community engagement. They are using this to inform and equip their teams with appropriate ICT resources and infrastructure. And they are developing and supporting their staff to work effectively with such systems, valuing their experience and input into the improvement of the overall process.

The incredible hard work going in at so many levels has to be acknowledged. A key focus area we see time and again is enhancing the flow of information to the officer in the field. This is a recognised area for improvement: commentators ranging from Macpherson, HMIC and the Met EODB have all pointed to the need for robust and reliable mobile access to data, while ACPO research has indicated that mobile data access could save forces up to £11 million a year and increase police visibility.

This is where the power and speed of today's mobile data solutions can really start making a difference. Using such solutions can be key to reducing crimes and increasing police presence. For instance, they can provide comprehensive and accurate information on patrol locations and availability, plus enable look ups on back office systems such as the PNC to be made much faster, so enabling more checks to be carried out. In addition they are already enabling a significant increase in ANPR validations to be done while 'on the move' by using high speed mobile data links.

in-vehicle – but very much in-touch

When we say 'on the move,' we mean of course in-vehicle. To really make a difference, any mobile data system that a uniformed officer will actually find useful has to be able to transfer data quickly between the back office / station HQ and the car he's driving in. It must also be capable of updating data in real time when the vehicle is mobile, support all the relevant applications and options he may need, and, it goes without saying, do so completely securely. in addition, the system should not require the police officer to become a radio engineer , the system must be robust and easy to use.

Thankfully such systems are now available, indeed, in use. For instance, the London Metropolitan Police,which has just implemented the largest mobile data project in Europe, has now rolled mobile data terminals to over

1,500 vehicle vehicles across many of its London boroughs. The effect has been dramatic, as via a combination of satellite navigation (gps) accuracy and reliable and secure bandwidth, communications data can be accessed and transmitted in real–time, right to the point where it is needed most: the officer on patrol.

Added to this 'front line' success there is also a significant 'back office' payback in terms of reduced administration. One such example is the way mobile data solutions can slash the time needed to issue notices and process details into back office systems, by allowing much of this to be done on the beat.

In the day to day police work of Merseyside, for example, uniformed staff have cut time that used to be spent on a PNC check with a call to a control room operator with instant access to the PNC database from the vehicle. So at a glance they have the information on vehicle licensing, insurance and any disqualified driver data they need to take action much more swiftly.

harnessing CCTV

A further example, linked to 7/7, is the way in which CCTV is deployed and administered. Post incident, thousands of video tapes had to be manually examined, a task that took many officers away from their vital roles in the field. But a better use of resources would be to deploy intelligent digital storage and image analysis at the control room level so that there can be more emphasis on prevention – control alerts/alarms based on intelligent video monitoring for objects left unattended, for instance, or recognised suspicious behaviour patterns. Thus when serious incidents occur again, faster retrieval of the right images and at the required image quality can be more easily achieved, leading to more effective and timely prosecutions.

Data encryption and tamper detection security on stored images mean images are virtually tamper-proof and will stand up to interrogation in court. Another advantage is that the systems can be accessed remotely from secure channels, so evidence searches can be carried out from any authorised location. This saves time in searching for and copying important material.

The advantages of these solutions from the police perspective range from technical robustness to convenience to responsiveness. Forces using these kinds of approaches are already reporting operational improvements, such as allowing control room staff to see where response vehicles are at all times, so that support and response can be directed more efficiently, accurately and faster.

Other benefits include mapping features that are allowing patrol officers to locate incidents more quickly, whilst on the management front patrol sergeants have access to the system so that they can get a better command picture of what police officers are in attendance, those potentially able to offer back-up and the range of incidents in individual boroughs requiring a response. In addition the system can log who was where, at what time, which can be critical in post incident investigations.

Essentially such systems, based on the kind of link between communications and information we said should be the ultimate aim of all citizen-focused initiatives, work well by cutting out time previously spent collecting data, allowing the team to deal more quickly with the task in hand. Because relevant information gets sent straight to the terminal in the car, officers spend less radio time requesting background information for incidents, freeing the radio for it's prime role, co-ordination and command of incidents and improving officer safety; and through direct access to the force systems and national databases officers are empowered by having real-time access to critical police information.

Since rollout of the data terminals at the Met, for instance, PNC checks have risen a third, to 2.4m vehicle checks and 1.6m name checks per month; at Merseyside, officers can now complete and log relevant information at the scene of incidents rather than radio in and risk ambiguities or inaccuracies in filing reports.

That's partly proof the approach is working at the coal face, as acceptance of these systems is half the battle. In the Met's use of the system, apart from in-vehicle staff use, checks by supervisors of the BOCU Open Incidents report have seen rises of 25%, a further indication that the system is helping to improve efficiency and effectiveness.

technology yes, but not at any price

We've talked a lot about technology. But of course what can hamper return on investment, is not spending enough time on the people side of change. A way that seems to work here is a step by step approach, working 'bottom up' to secure the buy in of staff. This avoids any sense of change being driven from above and helps more rapid acceptance of new ways of working. And it is widely accepted that an incremental approach based on clearly realisable short term wins delivers consistent project success.

beyond 7/7

The overall aim, however, should always be to use the right techniques to make more efficient use of officer and civilian time, office space and resources. Many police forces are recognising this and are beginning to make the right moves. As more examples demonstrating real, tangible, measurable, and achievable, returns on investment from mobile and security camera solutions onward come through, this shows the need to seriously investigate the use of such policing aids.

Overall let's not forget that the 7/7 events shouldn't obscure the fact that not all communications systems showed inadequacies, some services did prove resilient enough to keep running during the drastic events that day, a signal that things are on the right path. But if forces are to meet government targets, interface with other emergency services and organisations, provide more visible presence, more of a deterrent and more reassurance to the general public, as well as meet the public's security concerns over national emergencies, they need to make much more positive use of the right technology now, to assist their officers and their processes in becoming even more efficient and effective. By so doing, real and measurable ongoing success is possible.

"As the largest medical emergency contact centre in Norway, we have placed an incredibly high level priority on continuous improvement and we strive to achieve better and more efficient working practices within our contact centre,"
Asgeir M. Kvam, Emergency Centre Manager

Image courtesy of Kaagen/MorgueFile

emergency recording fit for purpose in Norway

Norway's largest medical emergency contact centre, Ullevaal, utilises NICE Systems Solutions for 100% call monitoring capabilities and to ensure high level agent training...

The largest medical emergency contact centre in Norway that supports the Oslo Ambulance Service, is using NICE's industry leading contact centre solutions to monitor and store 100% of emergency calls generated from citizens and extract Insight from Interactions to form the basis of its comprehensive agent coaching package. The project has been implemented at the central contact centre in Ullevaal, Oslo together with NICE's partner Racom, the leading provider of recording solutions for Norway.

The medical emergency contact centre covers central and rural Oslo, and its agents provide a service for over one million citizens. By using a series of sequential fixed criterion on screen every agent is able to assess the situation for severity, provide basic medical advice and counselling where possible and lastly to deploy an ambulance and a paramedic team to the scene.

continuous recall and improvement

Ullevaal require retention for over 20 years to ensure that each call record can be recalled easily should dispute or investigation arise at any point within a patient's life.

"As the largest medical emergency contact centre in Norway, we have placed an incredibly high level priority on continuous improvement and we strive to achieve better and more efficient working practices within our contact centre," comments Asgeir M. Kvam, Emergency centre Manager at the Oslo medical emergency centre. "We need to ensure that our agents are continuously trained to maintain up-to-date medical advice and to ensure that our service remains efficient and continues to help to save lives."

The Oslo medical emergency contact centre will benefit from NICE's capabilities for advanced quality monitoring of citizen interactions, by using targeted, as opposed to random, agent monitoring, thus improving internal processes and overall efficiency delivering improved levels of service and faster emergency response levels.

The Ulevaal solution consists of total voice recording for all communications systems (radio and telephony) plus the capture of all on screen interactions at each position. The NICE solution provides an enhanced package tailored specifically for this industry enabling capture of all screens detailing, mapping information, vehicle location systems, journal (CAD) and utilisation of the integrated communications system, resulting in total capture of everything that was said and done by an operator.

This coupled with the NICE storage solutions and integration capabilities delivers a solution that allows incidents to be recalled by the originating incident number instantly. This allows the whole emergency management process to be reviewed; delivering clear evidence and the justification that was used to make those decisions.

an end-to-end solution

The result is fast, complete records and supporting actions made by the centre, ultimately delivering full documentation of the whole process to use for investigations, performance evaluation and as training examples of best practices.

Global Public Safety Marketing Manager at NICE Systems, Adam Smith comments, "Our solutions encompass contact centre and emergency response requirements delivering an end-to-end solution that provides 100% capture and monitoring of interactions and advanced performance management for the emergency response centre, helping them deliver citizen focused services and total records management."

BAPCO

THE BRITISH ASSOCIATION OF PUBLIC SAFETY COMMUNICATION OFFICERS

President Remarks

Dramatic and structural changes ahead

2007 arrived and already one month has passed. For all of us 2007 will be a year when a number of major strands come together with dramatic structural changes to all three Emergency Services.

Time will tell whether these changes improve our service to the Public and lead to the efficiencies expected. My only concern when such major re-organisation takes place is that many of our successful relationships and services to the public are damaged or neglected in the process.

We in BAPCO will do our level best to ensure that within the Communications Environment we continue to deliver and respond to Public demands for assistance.

This BAPCO Journal in the new format is the 2nd issue and I believe the revamp is producing the right blend of interest with challenging and interesting articles. Please continue to give us feedback as this is the only way we can deliver the Journal to meet your requirements.

The 2007 BAPCO Exhibition and Conference is coming together very well and we are all set for another successful event. The afternoon of the final day is again laying on interesting and topical presentations which I am sure will gain the same numbers remaining with subject matter of major interest. All the signs are that delegate and day visitor numbers will be up on 2006 and establishes BAPCO as the venue all three Emergency Services should attend.

Tim O'Connor, President

CAG Remarks

New ideas, new opportunities

It's that time of the year when we commercial members start to plan towards the annual BAPCO conference and exhibition and our purse string holders say "no" far too often and about the most unfair things – of course we need new display material, plasma TVs and palm trees – why can't they see that? The exhibition is well supported again this year with a number of newcomers, I wish them well and hope that they realise benefits through their attendance. The conference is looking to break new ground in its format and intends to deliver thought leadership and points of view that will raise the Association's profile to new levels. I sincerely hope that this objective comes about since we are surely mature enough to be leading debate and shaping the future of public safety communications in the UK.

I am monitoring with great interest the growth of city centre wireless networks, it looks like the Martini solution to telecommunications is soon to be upon us. As many user groups start talking about next generation networks I wonder what part these networks or this technology may play in future emergency service communication solutions here and across Europe. Of course these networks will encourage ever greater use of non-voice traffic and while talk of mobile data has been with us for what appears to have been an eternity I get the impression from colleagues across the emergency service spectrum that it is truly coming of age and they are growing in confidence in their deployments and becoming ever more inventive with applications. I have been involved in organising a joint regional event on the subject of delivering wireless applications to field based workers and the enthusiasm and support I have received from speakers has been very encouraging, there is a real buzz around this subject at the moment. The event, details of which can be found elsewhere in the Journal, looks at the business case, technology choices and implementation challenges while also getting an update from a range of user groups as to where they are and where they are going in this field.

As I write I am anticipating some significant procurement outcomes, which may be announced by the time you read this. Particularly, I hold my breath on the FiReControl technology provider decision and the Irish mobile radio contract, both extremely important steps in determining the future shape of services in England and Ireland. I wish the lucky companies well in what is always the harder part in my opinion, delivering against the sales pitch!

Peter Prater, Chair
Commercial Advisory Group

BAPCO Central Contacts

President
Tim O'Connor
president@bapco.org.uk
☎07967 205092

Past President
Andy Norton
past.president@bapco.org.uk
☎ 01606 868850

Senior Admin Officer
Ian Lund
admin.sao@bapco.org.uk
☎ 01347 848962

CAG Chair
Peter Prater
chair.cag@bapco.org.uk
☎ 07793 883049

President Elect
Ray Trotter
president.elect@bapco.org.uk
☎ 01234 408999

Chief Executive
Ken Mott
execD@bapco.org.uk
☎ 01522 575542

BAPCO Office
admin.enquiries@bapco.org.uk
☎ 0845 3700630

CAG Secretary
Andy Fleet
info.cag@bapco.org.uk
☎ 01621 829623

Vice President
Ian Readhead
vice.president@bapco.org.uk
☎ 01962 871148

European Projects Manager
Kevin Robson
europrojects@bapco.org.uk
☎ 07834 788117

BAPCO 2007
Lucy McPhail
annual.conference@bapco.org.uk
☎ 020 7973 6635

BAPCO WEBSITE
www.bapco.org.uk

Regional Contacts

South East Region
Chair: Shaun O'Neill
chair.se@bapco.org.uk
☎07785 925450
Secretary: John Dixon
info.se@bapco.org.uk
☎020 7091 5675
Executive Member:
Tim Marjason
exec.rep.se@bapco.org.uk
☎020 7091 5345

South West & South Wales Region
Chair: Peter Prater
chair.sw@bapco.org.uk
☎07793 883049
Secretary: Tracey Quinn
info.sw@bapco.org.uk
☎07738 419652
Executive Member:
Peter Prater
exec.rep.sw@bapco.org.uk
☎07793 883049

East Midlands & Anglia Region
Chair: David Seelhof
chair.em@bapco.org.uk
☎01508 492744
Secretary: Peter Norval
info.em@bapco.org.uk
☎01522 582210
Executive Member:
David Seelhof
exec.rep.em@bapco.org.uk
☎01508 492744

West Midlands Region
Chair: Rick Abbotts
chair.wm@bapco.org.uk
☎0121 445 5894
Secretary: Abdul Rashid
info.wm@bapco.org.uk
☎01926 423231
Executive Member:
Maurice Worsell
exec.rep.wm@bapco.org.uk
☎0121 744 2639

North East Region
Chair: Terry Johnson
chair.ne@bapco.org.uk
☎07850 498501
Secretary: Gordon Ross
info.ne@bapco.org.uk
☎07774 896400
Executive Member:
Ian Thompson
exec.rep.ne@bapco.org.uk
☎07901 506180

North West & North Wales Region
Chair: Dale Allen
chair.nw@bapco.org.uk
☎01772 415909
Secretary: Jim Irving
info.nw@bapco.org.uk
☎01768 865536
Executive Member:
Susan Parke-Hatton
exec.rep.nw@bapco.org.uk
☎07867 21192

Scotland Region
Chair: Paul Sharp
chair.scotland@bapco.org.uk
☎01698 338400
Secretary: Brian Carlin
info.scotland@bapco.org.uk
☎07905 656403
Executive Member:
Paul Sharp
exec.rep.scotland@bapco.org.uk
☎01698 338400

Communicating for success

The Scottish region of BAPCO is hosting a major seminar and exhibition on February 14 at Strathclyde Fire and Rescue Service headquarters, Hamilton.

The day promises to provide an informative event, highlighting communications as a key tool in managing emergency incidents with presentations from: Emergency Planning Communications; Royal Navy; Traffic Scotland; O2 Airwave; & Scottish Ambulance. In addition to the pre-sentations, a number of companies relevant to the seminar, will be exhibiting both inside and outside of the venue, providing delegates with an opportunity to gain hands on experience of some of the new technologies on offer.

The event is open to both members and non-members of BAPCO alike.

For full details and to register please email the Scottish region direct at: info.scotland@bapco.org.uk

Mobile data seminar in March

Under a joint initiative between the SW and SE regions of BAPCO a seminar will be held on 7 March at the Intergraph Offices in Swindon.
The event will address mobile data applications and the Deputy Chief Constable of Hampshire Police, Ian Readhead will be speaking.

For full details contact Ian Lund on 01347 848962.

Workshop

BAPCO and the EPC is hosting a partnership event on 13-15 February which questions how vulnerable are your communications systems. Supported by experts the event re-visits the entire area of resilience.
For full details contact Ian Lund on 01347 848962.

NOTICE OF ANNUAL GENERAL MEETING

Notice is hereby given that the Fourteenth Annual General Meeting of BAPCO Ltd will be held at 1645 hours on Wednesday 25th April 2007 at the Business Design Centre, Islington, London. Candidates and nominations for office (which must be formally proposed, seconded and agreed by the nominee) from the Active Membership classification should be submitted in writing to:

The Chief Executive
BAPCO, P.O. Box 374, Lincoln, LN1 1FY

before 12 mid-night on 10th March 2006.

AGENDA

1. Minutes of the Thirteenth Annual General Meeting held on 26th April 2006
2. Matters Arising
3. Report of the Executive Committee for 2006/2007
4. Financial Report for Fiscal Year 2006
5. Resolution to Amend Constitution and Bye-Laws
6. Nominations for Life Membership
7. Election of Officers for 2007/2008
   (i) President Elect
   (ii) Vice President
8. Business Plan for 2007/2008
9. Budget for 2007
10. Annual Subscription rates for 2007/2008
11 .Appointment of Solicitor
12. Appointment of Accountants
13. Any other Business applicable to an Annual General Meeting

Ken Mott, Chief Executive
1st January 2007

NW provides unique opportunity

On February 6, a unique opportunity presents itself to hear about the Morecambe Bay Cockle Pickers incident.

Organised by the NW region, the presentation by Detective Superintendents Mick Gradwell and Steve Brunskill will cover the management and sub-sequent criminal investigation. Furthermore, BAPCO believes that this incident involved many organisations covered by the CCA and the presentations thus offer an opportunity to hear what actually happens when an event envisaged by the Act occurs.

During the visit to Maritime Rescue Sub Centre at Crosby, Liverpool, and in addition to their obvious involvement with incidents at sea, it is also important to remember that the Coastguard also has some responsibility on inland lakes such as Windermere and Coniston Water.

To register and for full details contract Jim Irving on 01768 865536

BAPCO

British Association of Public Safety Communications Officers

MEMBERSHIP APPLICATION

1. PERSONAL DETAILS

TITLE

FORENAME(S)

SURNAME

POSITION HELD

ORGANISATION

MAILING ADDRESS

POSTCODE

BUSINESS TELEPHONE

FAX

HOME ADDRESS
(If different from above)

POSTCODE

EMAIL

I agree to BAPCO sending information to me regarding its events, products and services. BAPCO will not pass on any information to other companies or third parties ☐

2. CATEGORY OF MEMBERSHIP APPLIED FOR

ACTIVE ☐ ASSOCIATE ☐ COMMERCIAL ☐ INTERNATIONAL ASSOCIATE ☐

OFFICIAL ORDER NO

Please send further details of Corporate Membership ☐

3. ORGANISATION TYPE

Please tick one item that best describes *your* organisation

PUBLIC SECTOR AREA SERVED		ORGANISATION TYPE		COMMERCIAL	
Parish	☐	Law Enforcement	☐	Manufacturer	☐
District	☐	Fire / Rescue	☐	Distributor	☐
County	☐	Ambulance / Medical	☐	Dealer	☐
Regional	☐	Emergency Management	☐	Maintenance	☐
National	☐	Local Authority	☐	Consultant	☐
Private	☐	Central Government	☐	Network Provider	☐
Other	☐	Public Utility	☐	Training	☐
		Other	☐	Personnel	☐
				Other	☐

APPLICATION CONTINUED OVERLEAF

BAPCO
British Association of Public Safety Communications Officers

4. POSITION RESPONSIBILITIES

Please tick the item that best describes *your* responsibilities in each area:

POLICY & PROCEDURE

- ❑ I approve/develop policies and procedures
- ❑ I oversee implementation
- ❑ I have a limited role in implementation
- ❑ I do not have a role in implementation

PURCHASING

- ❑ I approve purchases of products and services
- ❑ I select specify products and services
- ❑ I recommend products and services
- ❑ I do not have a role in purchasing

PERSONAL TRAINING

- ❑ I approve training programs
- ❑ I develop/purchase training programs
- ❑ I implement/teach training programs
- ❑ I do not have a role in training

5. MEMBERSHIP CATEGORY & FEES (Select One)

☐ **ACTIVE MEMBER**
Persons employed or contracted by a public safety agency or a department of central or local government responsible for the provision of public safety services, or are retired from such a position, who are directly responsible for, or retired from, the management, specification, design, installation, maintenance, operation and use of public safety communications and information systems, are eligible for this category of Membership
£40.00 per annum

☐ **ENGINEER/TECHNICIAN**
Non-supervisory persons responsible for the design, construction, installation, and/or maintenance of the hardware (computer, radio, etc) components of public safety communications systems. (May upgrade to Active classification after two consecutive years of membership).
£25.00

☐ **INFORMATION TECHNOLOGY SPECIALIST**
Non-supervisory persons responsible for the design, installation, and/or maintence of the software components of public safety communication systems. (May upgrade to Active classification after two consecutive years of membership).
£25.00

☐ **COMMUNICATIONS OPERATOR**
Non-supervisory persons responsible for the operation of public safety communications systems. (May upgrade to Active classification after two consecutive years of membership).
£20.00

☐ **COMMERCIAL MEMBER**
Those persons, in business or industry, who receive compensation in any form for services rendered or products sold, are eligible for this category of membership.
£40.00

☐ **ASSOCIATE MEMBER**
Those persons, who otherwise meet the requirements of Active Membership, may, at the applicant's discretion, select this category of membership, and, those persons not meeting the requirements of any other category of membership that share the Purpose and aims of the Association, are eligible for this category.
£28.00

☐ **INTERNATIONAL ASSOCIATE MEMBER**
Persons who are not citizens of the United Kingdom that share the purpose and aims of the Association are eligible for this category of membership.
£50.00

Details of Corporate Membership can be obtained from: ExecD@bapco.org.uk

6. PAYMENT INFORMATION

Total amount due £ _____

- ❑ Individual or
- ❑ Organisation is paying for Membership.
- ❑ Personal cheque enclosed.
- ❑ Official purchase order No. _____ enclosed.

7. OPTIONAL INFORMATION

How did you hear about BAPCO?

❑ Co-worker ❑ BAPCO Journal ❑ Sponsor
❑ Other _____

Gender: ❑ Male ❑ Female
Date of Birth: Day _____ Month _____ Year _____

8. APPLICANT'S STATEMENT

I hereby apply for membership in the appropriate class of **The British Association of Public-Safety Communications Officers,** and agree to abide by the Constitution and Bylaws of the Association. I understand that by joining I also become a member of the BAPCO region serving my area and that my subscriptions are payable annually, based on my first day of membership.

SIGNATURE _____ DATE _____

TEL: 01522 575542

WHEN COMPLETED PLEASE FORWARD THE WHOLE FORM (WITH APPROPRIATE ENCLOSURE) TO:
BAPCO, PO BOX 374, LINCOLN LN1 1FY

FAX: 01522 575542
(Remember to fax both sides of the form)

FOR OFFICE USE ONLY

RECIEVED
REGION
MEMBERSHIP No.
CERTIFICATE SENT
RENEWAL DATE

tomorrow's world: **managing expectations**

The requirement for highly resilient and efficiency creating information management systems has never been greater for the mission critical arena and in deed, all civil contingency responders, across both the UK and worldwide.The annual BAPCO conference and exhibition, which is only a few months away, has thus become an evermore increasingly important event. With this in mind, we highlight some of the key elements and depict what is in store for delegates and visitors alike...

The BAPCO annual conference, organised by Brintex on behalf of BAPCO (British Association of Public-Safety Communications Officers), has received international acclaim and consistently attracts delegates and visitors from across the public safety/civil protection sector in the UK and from countries elsewhere in the World. Conference delegates and exhibition visitors typically include representatives from the ambulance, police and fire services, local authorities, central and local government, health authorities, transport services, the MOD, British Red Cross, customs, immigration and border control, maritime rescue, civil contingencies and emergency/crisis management groups. The 2007 event will be no exception.

It is well documented that public safety is facing a growing number of challenges from diverse sources such as the threat of disasters from natural and man made scenarios to organisational changes that will impact the manner in which services are delivered in the future. Therefore, the effective use of technology, either current or emerging, is underpinned as the facilitator that will improve the capability to exchange the up to date and accurate information that is so vital to the process for improving public safety service delivery. With this in mind, the theme for the 2007 conference, 'Tomorrow's World: Managing Expectations', aims to address these very issues.

hands on experience

Running alongside the conference (the programme of which will be previewed in our March edition) is the BAPCO exhibition, where a high level of suppliers will be demonstrating the very latest in public safety/civil protection communications and information management systems. The 2007 event, along with the many regular exhibitors from previous years, also welcomes a number of new exhibitors to the fold, such as: Microsoft, Manx Telecom, Pennine Telecom, Xantix Systems, Radio Hardware Supplies, Red Box Recorders, and Northrop Grumman Information Technology.

keynote presentation

At the time of going to press, BAPCO confirmed that Simon Weston OBE, the renowned Falklands veteran and motivational speaker, will be delivering the Keynote Presentation at the Delegate Reception this year. Highlighting that the conference and exhibition would commence with a huge impact. The Delegate Reception will take place on Tuesday 24th April from 5.30-8.30pm at the Business Design Centre, London. This is the evening, which provides immeasurable networking opportunities, before the official opening of the BAPCO 2007 Conference and Exhibition and is free of charge, to all delegates, invited Chief Officers and exhibitors.

vital statistics

BAPCO 2007 will be held at the Business Design Centre, Islington, London from 25-26 April 2007. The exhibition is free to attend and full details on the entire event, including the conference programme, exhibitor list and delegate rates (plus how to register) can be found at: www.bapco.co.uk

a responsibility

Public safety is facing a growing number of challenges from diverse sources such as the threat of disasters from natural and man made scenarios to organisational changes that will impact the manner in which services are delivered in the future. Moreover, under the UK's Civil Contingencies Act, business continuity and information management are key Local Authority responsibilities. If you are responsible for choosing the right information management system for your organisation, then do not miss BAPCO 2007 at the BDC, London from 25-26 April 2007.

To register or for full details visit: www.bapco.co.uk

2007

BAPCO

The Public Safety Communications and IT Event

25 – 26 April 2007, Business Design Centre, Islington, London UK

Tomorrow's World:
Managing Expectations

For those responsible for public safety communications, the BAPCO Annual International Conference and Exhibition provides first hand information and understanding on how to fulfil these needs

- A unique European forum providing information, support and solutions for public safety service delivery
- The latest advice on the the use, implementation and management of communications equipment
- Find out how future technologies will help improve public safety

For exhibition and conference enquiries, please contact **Lucy McPhail** on **+44 (0) 20 7973 6635** or email **l.mcphail@hgluk.com**

Images courtesy of Sepura

www.bapco.co.uk

a new dimension for **disaster response**

AES detection investigation and monitoring vehicles are about to enter service. In covering the benefits of these vehicles, The BAPCO Journal also looks at the communication implications...

The Office of the Deputy Prime Minister (now the Department of the Communities) awarded AES with the prestigious Detection Investigation and Monitoring (DIM) contract for 18 vehicles to be supplied to the greater Fire and Rescue Service. Subsequent orders have been received from Wales and Northern Ireland. The value of the contract exceeded two million pounds. This contract is part of the New Dimension project established and funded by central government to provide a national response to a disaster.

what are the missions of the DIM vehicles?

Based on the Iveco Daily 50 C 17 5.2 Tonne extra high roof van platform the DIM vehicle enables the Detection, Identification and Monitoring Advisor to transport the suite of DIM equipment provided by the Department of Communities to an emergency and carry out a detailed analysis of the unidentified substance in a suitable environment.

The primary functions of the DIM equipment are to enhance the present FRS capability to detect, identify and monitor hazards and also to identify substances at Chemical Biological Radiological Nuclear (CBRN) or Hazardous Materials "HazMat" incidents.

Timely, well organised detection and identification of hazardous substances at the scene of a CBRN or 'HazMats' incident will not only assist in identifying appropriate cordoning of the incident and determine the necessary safe systems of work (including the required levels of personal protection) but inevitably, reduce risk to members of the public, emergency responders and the environment.

It can also significantly reduce the time taken to successfully resolve such an incident thus mitigating societal and economic impacts and assist in re-establishing or maintaining business continuity.

requirements

The vehicle layout was determined by the equipment carried. The driver cab was fitted out with specialist and resilient communication systems as well as navigation systems to facilitate deployment.

The central or laboratory area carried specially stowed analysis equipment in a climatically controlled environment, multiple battery packs and the IT infrastructure. Power is supplied to the vehicle from both on-board DC and AC sources managed by a programmable logic controlled electrical system.

The outcome specification required full analysis and development through 3D graphical modelling, stress analysis and prototyping.

The significant risk identified early in the process was the Human Factors element due to the operational environment and physical properties of the personnel decontamination equipment being deployed.

A formal process of user trials based on the prototype vehicle identified the steps taken by the users in completing their assignment; these individual tasks were assessed to identify hazards. Having established these protocols the risks were assessed and engineering solutions developed to mitigate them.

Upon completion the vehicles are sent to strategic FRS locations to guarantee quick deployment ensuring the best possible response and intervention at major centres of population. The vehicles also have to provide sufficient IT provision to enable the DIM to analyse their findings and email the results for further clarification from an international company when appropriate.

communication

The Department of the Communities required an end-to-end communication system managed service, from design through to in-service logistical support. The Department of the Communities by working with AES have also the advantage of a full mobile data system installation and integration with back office IT systems and wireless applications.

the intelligent IDR from M~Flow

The Department of the Communities have procured as part of the contract a full M~Flow back office system receiving vehicle management and location information from the M~Flow FMS 500 data recorder. With this system the users can track and analyse the health of the vehicle continuously working to improve their use, availability and care.

The driver cab was fitted out with specialist and resilient communication systems as well as navigation systems to facilitate deployment. The central or laboratory area carried specially stowed analysis equipment in a climatically controlled environment, multiple battery packs and the IT infrastructure.

empowering local **communities**

John Low, business development director of Memex Technology, discusses Neighbourhood Policing and the Partnership Intelligence concept...

This article looks at the requirements of neighbourhood policing in the UK, the fundamental importance of information sharing, and IT requirements for the Partnership Intelligence concept.

The Neighbourhood Policing model, currently being rolled out nationally by all police forces in the UK, is a tried and tested model for community policing that has been operating successfully in the US for many years. It has introduced a method of working which brings the police, the community and partners (such as social services, street wardens and community support officers) together to collectively solve local problems of crime, disorder and anti social behaviour. It also acts to empower local people and local service providers and integrate them into National Intelligence Model (NIM) disciplines of working.

'Partnership Intelligence' is a proposed concept to provide the mechanism behind neighbourhood policing, allowing for the most effective multi-agency response to community crime and bringing together all known information about problems and people. While the concept is not new, the difficulty Westminster and police forces have faced in developing a working model is how to bring all the information together into one system. A system that will provide a secure and easily searchable partnership intelligence structure, with the capability to service the growing demands of neighbourhood policing and partnership tasking.

what does neighbourhood policing require?

Fundamentally, neighbourhood policing allows the police service to work directly with local communities in identifying the problems that are most important to them. It establishes a structure for working with other agencies and the public to solve problems of crime, whilst fostering understanding and education to tackle community safety issues.

This requires dedicated police staff for each neighbourhood, an agreed community engagement model for generating priorities and approving choices, and the selection and development of community teams with the necessary skills to instil public confidence.

Local systems need to be in place to provide protocols for the exchange of information and for joint operating procedures, and local intelligence cells, within the discipline of NIM, must maintain 'problem profiles' and provide analytical support.

In tackling community problems, a methodology applied to neighbourhood policing in the US called Problem Oriented Policing (POP) is also being adopted in the UK. Rather than simply responding to individual incidents, it is about identifying and solving underlying problems within communities. Many police forces and other organisations have adopted a systematic way of managing crime in this way with a process called SARA:

Scanning – identifying problems using local knowledge, data and electronic maps
Analysis – using information technology and intuitive enquiry to dig deeper into problems' characteristics and identify underlying causes
Response – working with the community and partners to develop a local solution
Assessment – checking to see if the solution worked and what can be learned

information sharing

While a great deal of progress is being made with the implementation of neighbourhood policing across the UK, very few forces have the mechanisms in place for effective information sharing between key partners.

Some areas have developed systems for de-personalised information sharing where partner agencies overlay a variety of information and generate maps to provide geographic profiles. However, these systems serve more as medium to long term planning tools and not something that can help with current problems the police and partner agencies are trying to solve.

Personal data is vital in enabling intelligence analysts to conduct accurate and effective interpretation of events. Yet the sharing of personal information has always been a sensitive issue, the legalities and protocols of which still seem to be unclear. Much of the concern has been about the accuracy of data and the security of the information being shared, and while there are many examples of information sharing protocols and available guidelines, each partnership is responsible for developing its own protocol.

Problem solving relies heavily on information sharing and the detailed analysis of accurate data. Westminster has operated a system of collocated intelligence operatives for a number of years, and Nottinghamshire and the SHERWOOD project have had a similar facility with a multi-agency intelligence function. However, neither has been able to bring all the information together into one system.

proposed IT solution

The difficulty is the huge amount of work, processes and teams involved in neighbourhood policing and the resulting mass of information. It is also very costly to implement a brand new centralised IT system spanning each partner as this involves a massive data transfer process from legacy systems. So what's the solution?

Memex has developed an extremely powerful free text search tool with the in-built security and audit function of an intelligence system. This can now provide the means to join

together partnership data in a way that will provide a secure and easily searchable partnership intelligence structure.

Intelligence Analyst is a desktop application designed to allow users to retrieve data simultaneously from a variety of databases through a single query interface, analyse the information as a single set of data, and easily collect information of interest to cases. Its uniqueness lies in its ability to integrate with existing environments and utilise existing databases, which benefits users by giving them a unified view of intelligence.

The advantages of this type of solution are enormous:

The format of the originating database is not important; Memex can handle any form of electronic data; The location of the database is irrelevant; All data sources can be searched simultaneously from the one view; Logical query capabilities enable analysts to create effective search queries without the need to learn complex query languages; Intelligence Analyst provides a suite of data mining tools and the ability to export data into a wide range of reporting and analytical tools.

Intelligence Analyst also offers enhanced search features when utilising another core component called the Intelligence Engine, which handles data in its natural format without having to force-fit data into prescribed structures. Virtually any information can be searched upon, including: scanned information such as accident reports and witness statements, information from legacy databases, electronic data and textual information such as email. For the user, information becomes available faster, saving a great amount of time and energy and producing more effective intelligence.

the future for Partnership Intelligence

Partnership Intelligence can provide the mechanism required to connect partners and allow neighbourhood policing to effectively challenge local crime and disorder, but we need an equally effective IT structure to make this happen.

The Government is serious about bringing in systems to minimise the risk of poor information sharing to prevent tragedies like the Soham murders with the IMPACT programme. A joined up approach is also vital in solving neighbourhood crimes. Neighbourhood policing is high on the agenda for many police forces and in fact West London Council recently announced plans to fund round the clock neighbourhood policing for residents in a high crime community.

Residents want a more visible, local uniformed presence 24-hours, 365 days a year just like in the US. Criminals don't work in shift patterns like current neighbourhood policing teams. West London's pilot approach is genuinely groundbreaking in the UK but this further highlights the need to get the IT structure in place that will help neighbourhood teams solve crime.

Fundamentally, neighbourhood policing allows the police service to work directly with local communities in identifying the problems that are most important to them. It establishes a structure for working with other agencies and the public to solve problems of crime, whilst fostering understanding and education to tackle community safety issues.

mobile data pilot helps force plan own strategy

Ian Steel, project manager, mobile information at Avon and Somerset Constabulary and Peter Harris, mobile data product manager, Arquiva speak exclusively to the BAPCO Journal about how the force is developing its own mobile data strategy and set of requirements...

"The business driver behind this pilot is to increase the visibility of our officers out in the field and we are closely observing how mobile data can help us achieve this. Figures have suggested that officers spend 40% of their time at the station and if the use of mobile data can reduce this amount, we can then realise the full benefits of the technology, and implement further applications"

Ian Steel, project manager mobile information, Avon and Somerset Constabulary

Avon and Somerset Constabulary was formed in April 1974 through the amalgamation of the former Bristol Constabulary, Somerset and Bath Constabulary and the Staple Hill division of Gloucestershire Constabulary.

One of the largest forces in England and Wales, Avon and Somerset polices a population of almost 1.5 million people and 1,855 square miles that take in virtually every kind of landscape: city centres, wild moors, dense forests, busy holiday resorts and vast commercial and industrial complexes.

Continually assessing how it can improve the services it provides the force began a live trial of Mobile Data in connection with Arquiva in December 2006. The trial, which currently encompasses 14 Microbus MDTs in patrol cars has been based on Avon & Somerset developing its own strategy and set of requirements.

the trial

Utilising Airwave as the primary bearer, the mobile data trial has been designed to seamlessley switch to GPRS if and when required. Ian Steel, Avon and Somerset Constabulary pointed out that prior to the trial commencing, 70 officers (mainly frontline) were trained in the use of MDTs on desktop computers. Such as PNC checks, mapping etc. "We worked with Arquiva on the training prior to commencing the trial as we felt this was integral to the success of the project."

The trial will initially run for three months utilising vehicle MDTs, however, the force does plan to add PDAs and is currently developing software in conjunction with Arquiva that will look and feel the same as the MDTs.

"We hope to add this element later this month (February), and further applications such as the ability to send briefing documents to officers."

Steel was quick to point out however, that there has been a tendency with mobile data trials to over complicate passwords, and since the patrol cars are shared, the password access has been simplified. "We are encouraging feedback from our officers since sharing of MDTs is a pre-requisite when sharing cars."

an initial reaction

"Without doubt, the trial so far has whetted the appetites of our officers and although Airwave is a voice based network the data transfer rates, so far have held up well. In fact, many of our officers perceived this to be an issue prior to using the system, but the trial is allowing us to realise how we can maximise the use of data rates."

"Whilst it is also too early to quantify the officer feedback, to date it has been very positive and many have felt the use of mobile data in force was long overdue, we have recognised the value of our officer input and we are keen to maintain this," Steel added.

Avon and Somerset also closely observed the Lothian & Borders, and West Yorkshire Police trials, and whilst the force has yet to see the business analysis of deployments, it is also paying close attention to the PITO trial to ensure that it gains the maximum benefits from them.

a joined up approach

Peter Harris, product manager, Arquiva, explained that the force also uses other products such as its suite of intelligence and crime applications. And, whilst it is too early to view on mobile data, plans are afoot for the force to be able to access these later in the year. Arquiva is also looking at joining up the systems so that Avon and Somerset can share information across crime and intelligence systems not just force wide but with other services too.

Concluding Steel said, "Our officers can see the commitment we are making to this type of development and technology to help improve the efficiency of our service. Although it is too early to say where the benefits really lay, the feedback to date is extremely positive.

"In addition to which, developing the applications together with Arquiva, without having a pre-determined set of expectations is working very well and we are very pleased with the relationship we have with Arquiva."

cctv connectivity reduces traffic jams

Elwers has provided Halton Metropolitan Borough Council with an innovative CCTV connectivity solution...

Halton Metropolitan Borough Council has responsibilities on both sides of the River Mersey in the North West. It is made up of the twin towns of Widnes and Runcorn together with many villages.Halton is an urban, industrial area, which is home to major chemical and manufacturing businesses.

The Government recognised the affect of congestion on commuters and businesses. The Traffic Management Act was introduced to address this issue demanding that local authorities provide information on traffic build-up to the public. To comply with the Act, Halton Borough Council investigated a solution that would allow them to publish real time images to their web site from one of the North West's congestion hotspots – Silver Jubilee Bridge.

This is the primary route for commuters between Liverpool and Cheshire with over 90,000 vehicles crossing the bridge everyday – and is notorious for major hold-ups in both directions. However, transmission of images from cameras was a barrier. The Bridge had no communications infrastructure that could be utilised, with only power for lighting within its structure (steel and highway).

Specifically, the Council required a solution to: enable video images to be 'reliably' captured from both directions; provide private bandwidth for high-resolution images to be distributed back to the Council, not cause any disruption during installation; be fully operational for use within 4 weeks.

The Council now enjoys a very cost effective solution that they own. This network is expandable as the connectivity provided has the potential to transmit images from more cameras if required – with no degradation to the quality.

the solution

Elwers has worked with the Council for a number of years and was very familiar with connectivity for outdoor video - not just voice and data. The location of the cameras was crucial. It was essential that these were positioned to relay the most valuable images – yet still provide cost-effective connectivity and zero disruption during implementation.

It was important to explore the full range of possibilities and a short-list of Private Fibre and Microwave Radio was subsequently compiled. Fibre was discounted as it would have been disruptive requiring civils work. The radio options included point-to-point and point-tomultipoint unlicensed 5.8GHz and the higher bandwidth licensed microwave radio technologies. The bandwidth requirements did not justify the increase in cost of the higher bandwidth licensed radios – similar to those deployed by Elwers for Emergency Services and Health organisations.

After objectively considering the various options with the customer, it was agreed to formalise a design. Elwers' design utilised two separate point-to-point 5.8GHZ 28Mbps licence-free radios at each end of the bridge. These both had two I/P Mpeg4 cameras focussing in opposite directions. The two Axis cameras at each end are connected via two separate Alvarion B-Links.By using two separate links at opposite ends of the bridge the Council now has resilience as well as cost effective bandwidth for 'multiple', excellent quality, moving images. The installation was carried out off-peak and close liaison with the Council ensured features of the Bridge could be utilised with Safe Working practices remaining the priority.

the benefits

Elwers designed an innovative and considered solution. This has enabled Halton MBC to enjoy a very cost effective solution that exceeded their expectations in terms of performance, reliability and scalability.

The complete installation was project managed to ensure the need for co-ordination with Council resources and compliance with Council procedures were seamless. The completion deadline was never in question and this has allowed the Council to meet obligations under the Traffic Management Act.

The Council now enjoys a very cost effective solution that they own. This network is expandable as the connectivity provided has the potential to transmit images from more cameras if required – with no degradation to the quality.

OMMUNICATION

something?

The **BAPCO Journal** is delivered 12 times a year **FREE of CHARGE** to all **BAPCO Members.**

If you are a member and would like to receive a copy of the journal please complete the form below

Non-Members wishing to receive a regular copy of the Journal should complete the attached subscription form.

☐ **I am a BAPCO Member** and wish to register for my free subscription to the **BAPCO Journal**
BAPCO Registration Number _

☐ **I am not a BAPCO Member** & would like to subscribe to the **BAPCO Journal**

Payment

UK Payment	1 year	£28	2 Years	£50
Overseas Payment	1 year	£35	2 Years	£62

☐ Please invoice me

☐ I enclose a cheque made payable to Hemming Group Ltd.
(Cheques must be drawn against a sterling account)

☐ I enclose a purchase order. No. _____

☐ Please charge our credit card: ☐ VISA ☐ MasterCard ☐ Maestro/Solo

Card No. _____

Expiry. _____ Issue No. Maestro/Solo _____

Your Details

FIRST NAME: _____

SURNAME: _____

JOB TITLE: _____

ORGANISATION _____

E-MAIL: _____

ADDRESS: _____

_____ POSTCODE _____

TEL: _____

FAX: _____

SIGNED: _____ DATE: _____
(Order is not valid unless signed)

32 Vauxhall Bridge Road, London, SW1V 2SS

+44 (0) 20 7233 5052

+44 (0) 20 7973 6694

customer@hgluk.com

Is 3G a viable solution for the emergency services?

This month we take a closer look at the technology benefits of 3G and speak to Craig Wellman, head of government sector, Vodafone UK about 3G technology, asking if 3G is a vaible alternative to radio communications...

Without doubt 2006 was a significant year for 3G, with the introduction of 3G broadband. This evolution enables users to download data at speeds four times faster than previous 3G data rates. And, as the name suggest, the experience is the equivalent to a fixed broadband connection, which has tremendous benefits both in terms of productivity and the kind of enterprise level applications that it can support.

In discussing how 3G have evolved over the last 12 months, Craig Wellman, head of government sector, Vodafone UK said, "Connectivity is becoming increasingly simple to manage and available to more people. In addition to the popular Mobile Connect data cards, our 3G broadband capability is now built into laptops from a wide range of leading PC manufacturers including Dell, Acer, HP and Lenovo. At the end of the year we also introduced a USB modem that installs the 3G broadband capability on the desktop automatically, without the need for additional software. The modem is ideal for Macs and the new breed of laptops that don't feature PCMCIA slots."

helping to drive efficiency

As awareness of the speed and robustness of 3G grows we are seeing increasing creativity in the development of applications that help to drive efficiency in a wide variety of environments. One excellent example is the North West Ambulance Service (Cumbria and Lancashire Area), which is providing Vodafone Mobile Connect 3G data cards to its Incident Support Units in order to provide a direct mobile web link to National Poisons Information Centre in London. This means that if there is an emergency situation involving hazardous chemicals, say from a road collision involving an HGV, the crews are able to type the hazard warning code on the side of the tanker into their laptops and gain instant access to the Poisons Information Centre over the 3G network for information about the chemical or material they are dealing with.

The important factor is that this is all done at the scene, saving valuable time and speeding up decisions on treatments. The crews are then also able to access weather information about wind speed and direction to advise the local Health Protection Agency about potential threats, resulting in programmes being set up immediately to include GPs and local surgeries.

a viable alternative?

So is 3G a viable alternative to radio comms? (Not necessarily voice but data transmission, picture messaging etc) Considering it is a public network, and network traffic implications, we asked how can CCA responders safely utilise the technology?

Commenting, Wellman said, "3G is a complement rather an alternative to radio paging, which is a fail-safe alternative for sending important messages at speed where other radio-based equipment won't always work, or even GPRS, which is highly reliable for lower bandwidth data applications like email across 99% of the population.

"3G has many more possibilities than either of those technologies in terms of supporting high-bandwidth applications. It really comes into its own as a value-added service that supports innovative applications, like those used by the North West Ambulance Service, which can make a real difference to the drive for efficiency."

3G is a viable option

3G is a complement rather than an alternative to radio paging.
It also has many more possibilities than in terms of supporting high bandwidth applications.

driving through changes

with automatic vehicle location

Suffolk Constabulary is utilising APD's Inca Automatic Vehicle Location System (AVLS) to make the most of its despatching procedures...

"APD's solution is essential in our despatch process and also for accountability of the force. Eight times out of ten, data from the APD tracking facility protects the officers in cases of collision or accident."
Bob Reed, Airwave Service Manager

Suffolk is a large county, mainly rural with a population of approximately 0.6 million inhabitants. Suffolk Constabulary employs 1700 police officers, special constables, police community support officers (PCSOs) and police staff, handling over 150,000 incidents annually.

The national implementation of Airwave and subsequent organisational changes meant that Forces had the opportunity of reviewing many of their standard procedures. Suffolk Constabulary looked into assessing despatch procedures, in particular the possibility of improving response times to emergency calls and increasing the safety of their officers through location technology. The Airwave network was initially deployed for voice. However, Suffolk saw an opportunity to make the most of the digital network and decided to use it for data communications as well.

Vehicle location was selected as a useful additional tool for the force, helping not only identify the most appropriate officer near an incident, but also to know at all times where officers were.

In order to achieve maximum benefit from the tracking capabilities, the mapping element of the system needed to be integrated to the Computer Aided Despatch (CAD) system from Intergraph, which was already being used by control room operators. This would allow operators to see the exact location of an incident on their screens as well as the location of nearby resources.

the solution

Based on its mobile data expertise, APD's INCA™ Automatic Vehicle Location System (AVLS) was selected by Suffolk Constabulary. The force equipped its fleet of 200 patrol vehicles, including cars and motorbikes, with Motorola Airwave Radios and INCAs.

Working in four shifts, 50 operators ensure continuous coverage in the Ipswich control room, handling on average 500 incidents each day. When a call comes in, the operator views a single screen displaying the incident, the location of available officers and the status of those officers. Using the integrated AVL and CAD system, operators can now easily identify the nearest available patrol vehicle and despatch it to the location of the incident. Not only are officers despatched to incidents more promptly than before, but operators are able to focus on monitoring incident status and other tasks instead of spending time contacting officers via the radio.

Operators have also found the tracking solution to have uses that were not originally anticipated. New recruits who do not have local knowledge of all areas of Suffolk are now directed by the despatchers a real-time on a street by street basis, providing very effective navigation functionality! This has also proved to be useful when officers are involved in pursuits.

All the information on location, speed and direction of travel is stored in a database. Should there be an enquiry as a result of a collision or complaint from the public, this information can be used to provide evidence on driver behaviour at the time of the incident.

the benefits

Improved service to the public: Incident despatch time has been improved, with faster response times and more efficient use of available resources.

Accurate accountability: Collision Investigators and Supervisors have made use of the reporting functionality, replaying journeys when officers are involved in collisions or accidents. The location system has made police staff more accountable and in several cases has protected the officers involved from false claims from the public.

Improved communication: The system has reduced demand on the busy control room by decreasing the number of unnecessary voice communications, such as 'Where are you?' and 'Are you available to go to this incident?'

Officer safety: Officers feel safer in the knowledge that operators know where they are in case of danger or patrolling in an unsafe area.

Shortly after the INCA solution was implemented, an officer went missing for nearly 2 hours as he had lost radio coverage. Operators were able to establish his last known position using data retrieved from INCA and were able to send help to ensure that he was safe. By involving the Police Federation and Staff Associations and explaining the benefits of using such system (in particular the officer safety element) the force got buy-in from all stakeholders. This was a key stage in the successful implementation process.

the future

Future plans of the Force are to explore more data applications using the Motorola GPS-enabled TETRA terminals, in particular to provide Automatic Personal Location. The INCA functionality will also be extended by linking other sensors such as bluelights, indicators and brake lights, to provide additional telemetry features.

TETRA World Congress 2007

11th - 14th June 2007 • IFEMA Madrid, Spain

TETRA TODAY AND TOMORROW

Don't miss this year's meeting of the international TETRA community

- New venue and new time of year – join users, operators, vendors and application developers in Madrid in the summer
- Largest ever TETRA exhibition – get your hands on the latest applications, devices and network equipment
- Learn from the experiences of over 150 expert presentations and user case studies
- 40% price cut for end-users PLUS a 10% discount for TETRA Association members!

www.tetraworldcongress.com

Platinum Sponsor:

sepura

Researched & Produced by: IIR Telecoms & Technology www.iir-telecoms.com

In association with: TETRA MoU Association / TETRA

Gold Sponsors:

EADS Defence & Security

Motorola

O2 Airwave service

Rohde & Schwarz

Rohill

Selex Communications

Siemens

teltronic

tyco Electronics

M/A-COM

Silver Sponsor:

SUNGARD VIVISTA

Associate Sponsors:

abertis telecom

Aeroflex

ARTEVEA digital

DAMM

ACCESSORIES

ANTENNA

ANTENNA

CALL RECORDING

COMMUNICATIONS SOLUTIONS

COMMUNICATIONS SYSTEMS

COMMUNICATION SOLUTIONS (RADIO & PAGING)

THE PRODUCT DIRECTORY PRODUCES RESULTS!!

CONSULTANTS

CONSULTANTS

FIREFIGHTER ALERTERS

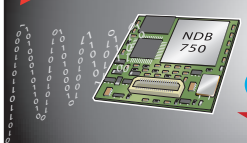
GPS COMPONENTS & ACCESSORIES

HEADSETS

MOBILE DATA

MOBILE INSTALLATIONS

RADIO



are your endpoints compromising compliance?

Ari Tammam, VP Channels at Promisec looks at the legal requirements of compliance with a number of regulatory acts and how this impacts on the entire IT infrastructure...

Regulatory compliance has an influential impact on the entire IT infrastructure, including the endpoints therein. In fact a recent Computer Crime and Security survey by the Computer Security Institute (CSI) found that 50% of companies have increased their level of interest in Information Security because of Acts like Sarbanes-Oxley.

Compliance with various government regulatory acts such as Sarbanes Oxley, HIPAA, BASEL II etc. has now become a legal requirement in many countries and is here to stay. As such companies have been spending more and more of their time and budgets to meet these requirements and maintain their integrity and reputation. Failure to do so has already resulted in fines being levied on the executives of some companies; these may be accompanied by severe prison terms of up to 20 years. Another new standard emerging is SAS 70 (Statement on Auditing Standards No. 70, Service Organisations) which is designed to audit the internal controls of an organisation. Unlike regulatory bodies SAS 70 provides an audit report on whether internal controls in place actually work or not.

In addition to logging events and securing critical systems many regulatory bodies require independent internal controls that are able to monitor activity so that any change or transaction affecting the status quo of a company's IT systems is identified. Activity that results in a breach of compliance may be caused by a user's action such as the introduction of malware into the network, disabling a security client or even leaving a workstation unlocked when the user is away from their desk. It is therefore essential to provide a vigilant system in controlling user activity and enforcing the internal controls upon them.

Out of all the respondents to the 2006 CSI/FBI Computer Crime and Security Survey, 63% cited Policy and Regulatory Compliance as the most critical computer security issue after data protection. Identity theft and information leakage came third with viruses and worms coming in fourth.

addressing the problem

A practical solution to address this problem needs to provide full visibility to user activity and incorrect configurations that may introduce potential threats into an organisations network.

The drivers to budget for a solution like this include:

Endpoints within the corporate network are not normally monitored for activity beyond their initial access to the network.

Users are able to install and use unauthorised applications, more specifically potentially dangerous peer-2-peer applications, devices and services that are forbidden.

Increased number of security breaches originating from within the corporate network

Users have more freedom inside their networks with access to business critical systems

Any one of these issues has the potential to cause a major security breach. Many senior company figures minimise the importance of these threats citing the probability of such a security breach being unlikely. However, the issue today is not just if a security breach will occur but also whether any of these threats will render a company's information systems non-compliant with regulatory bodies.

identifying a comprehensive solution

There are many solutions available today that claim to address regulatory compliance in one form or another, however, when it comes to the endpoints within a corporate network, the functionality offered needs to be comprehensive. For a solution to be considered comprehensive in the endpoint compliancy space it has to cover all aspects of activity that may run on those endpoints and be able to remediate problems found.

This should include:

Attachable memory devices;
Modems;
Activated wireless cards or secondary Network Interface Cards (NICs);
Applications;
Processes;
Start-up commands;
Services and even browser toolbars that have the ability to install small pieces of code onto an endpoint.

Without addressing all of these categories, holes will still remain in the endpoint security infrastructure making it easy for an endpoint to fall out of compliance.

Further to the type of threats that the solution needs to identify and eliminate, it needs to be easy to use and by many regulatory standards completely independent to existing security systems. The reason for independence is to eliminate any influence or reliance on other resources for the product to work so that even if other security systems go down this product will still provide information and identify the systems that are unavailable. This should include the availability of security agents deployed on the workstations inspected as well.

A comprehensive solution means that if an anti-virus client, or any other security agent, is disabled the problem can be identified and repaired quickly to minimise the non-compliance of a particular endpoint. Being able to address all of the afore mentioned issues in a timely manner gives a company a much needed endpoint risk management solution to keep its internal network from falling out of compliance. Readers should bear in mind that this type of solution should complement the existing security infrastructure and not necessarily replace or interfere with the operational status quo.

Providing this in depth visibility of user activity to security administrators dramatically increases the level of protection they can provide to their organisations maintaining regulatory compliance across the entire company.

Promisec is exhibiting at Infosecurity Europe 2007. Held on the 24th – 26th April 2007 in the Grand Hall, Olympia. www.infosec.co.uk

Get the edge with advanced in-vehicle mobile data solutions

Securely fixed In-vehicle computers guard against theft, loss and accidental damage, and can be connected reliably to other permanent fixed equipment such as cameras, modems, light bars, fingerprint readers, printers and access-controlling security devices.
Microbus's M-PC2 has achieved a Class One Pass at A&ES Specification 5 - Issue 9. This prevents conflict with Police radios including Airwave.

- Purpose designed in-vehicle computers
- Proven reliable in emergency services use
- eMark and AES5 certification
- Range of high brightness colour touchscreens
- Wireless Wide Area Networking - bearer independent and proven with TETRA, TETRAPOL, PMR, Mobitex, GPRS and GSM
- Temperature, shock and vibration management - ensures high availability
- Range of accessories and flexible fitting options

For advanced in-vehicle mobile data solutions visit www.mobile-data.com

+44 (0)1628 537333
email: mobilesales@microbus.com

Microbus
Driving vehicle PC technology forward

Reliable and secure communications

The unfortunate events in London on 7th July 2005 demonstrated the importance of effective communications in responding to and managing major incidents and the increasing role that mobile messaging plays in emergency and business continuity plans.

Public sector organisations responding to the 7th July terrorist attacks in London swiftly discovered that no single technology should be relied on for communicating after a disaster – landlines can be damaged, and mobile networks overloaded.

PageOne services played a part in the operational communications of many organisations directly involved in responding to these events.

Despite record traffic levels across both its paging and SMS networks, all PageOne services remained fully operational throughout the period with nearly a quarter of a million messages distributed.

PageOne Connect users include the North East London Strategic Health Authority, responsible for seven Primary Care Trusts, five Acute Hospital Trusts and Health Emergency Planning Advisors.

Senior Manager for Emergency Preparedness Chris Drew said: "The system was effective on 7th July at a time when both cellular and land-line phones were unavailable.

"We were also able to use the system to cascade short 'headline' briefings to organisations throughout the day. In all, a very effective and useful system."

With 20 years of service to the public sector, PageOne products have been awarded supplier status for every national contract awarded by the public sector in the last 10 years.

This has culminated in the Office of Government Commerce selecting PageOne as an approved national provider of paging and SMS messaging services under the national Government Telephony Mobile Contract.

Existing clients from the emergency services, the NHS and the MOD testify to PageOne's experience in providing a secure and reliable system for keeping in touch.

While events demonstrated the growing role and acceptance of text messaging for critical messaging, it also reinforced the role paging still has to play in communicating vital information quickly.

Paging's inherent broadcast capability, and protection from public peak traffic loads during such emergencies, ensures that even though the paging network experienced record traffic levels on 7/7, messaging was well within capacity, and the delivery of critical messages in a timely manner was unaffected.

For more information or to discuss your requirements with one of PageOne's Public Sector account managers, please call **08700 555 303** or email **marketing@pageone.co.uk**

No1 in messaging

PageOne