TRANSFORMING PUBLIC SAFETY COMMUNICATIONS IN EUROPE AND AFRICA: 4 KEY FACTORS

2015 PUBLIC SAFETY SURVEY – EUROPE & AFRICA

OVERVIEW

Public Safety communications are being transformed. By real-time data access, community engagement and interaction, the migration to broadband data networks, and the challenge of introducing and managing new tools and technologies.

This survey reveals how these four key factors are influencing agencies of all sizes. And how the change is being driven by high speed data and a need for communications across multiple networks and devices including radios, smartphones and tablets.
FACTOR 1  HIGH SPEED REAL-TIME DATA

Being able to access data in real-time is vital and one of the most important factors identified in the survey. An overwhelming 77% of participants said having instant, reliable information at their fingertips is ‘critical’ or ‘very important’ while working in the field.

77% OF RESPONDERS SAY REAL-TIME DATA IS CRITICAL OR VERY IMPORTANT

With an increasing amount of data flooding into command and control centres, the key challenge is to identify what’s relevant and turn it into actionable intelligence. Over 60% expect targeted real-time data to be available during an incident to help plan and carry out an efficient, safe response.

60% OF RESPONDERS EXPECT REAL-TIME DATA TO BE AVAILABLE DURING AN INCIDENT

Why is high speed real-time data so important? Because it allows responders to quickly get the data they need and share intelligence with colleagues and local agencies in the vicinity. The survey highlighted how vital it is to be able to communicate across different networks and devices, from radios and laptops to mobile phones and modems.

76% NEED HIGH SPEED DATA ACCESS IN THE FIELD TO QUICKLY GET THE INTELLIGENCE THEY NEED
72% NEED TO EASILY COMMUNICATE WITH LOCAL AGENCIES

81% NEED TO COMMUNICATE FREELY ACROSS DIFFERENT NETWORKS AND DEVICES

When data flows in real-time, everything is streamlined for the best possible outcome. Greater collaboration and shared connectivity is more critical than ever to ensure different personnel from diverse public safety agencies with disparate devices can interoperate and coordinate together.

FACTOR 2 COMMUNITY ENGAGEMENT & INTERACTION

The widespread adoption of social media in everyday life opens up worlds of opportunity for public safety. Increasingly, witnesses are capturing incidents using their mobile devices and sharing them on social media sites such as Facebook and Twitter. This creates an invaluable record of events that agencies can use to prevent and resolve crimes or issues.

Survey results show social media is well established in public safety. Almost three quarters of participants use it for outbound communications and over half use it to receive information and monitor events as they unfold.
Social media has become an essential platform for building community engagement and interaction. It encourages open conversation with the public and helps ensure incidents are reported correctly. The survey shows how almost half of emergency call centres can now accept text, photos and social media data in some form from the public, while a third can accept video footage. This is positive but clearly highlights the opportunity call centres have in widening the ways they receive data from the public.

- **49%** of emergency call centres can receive text messages from the public.
- **46%** of emergency call centres can receive social media posts from the public.
- **42%** of emergency call centres can receive photos from the public.
- **32%** of emergency call centres can receive video footage from the public.

**Factor 3: The Growth of Digital Radio and Broadband**

Public safety responders rely on communications and the move to broadband is seen as a key objective. The survey shows that over 60% of participants are either already on a digital LMR network (TETRA, P25, DMR) or considering a move to digital within the next three years.

- **33%** of responders are already on a digital network.
- **28%** of responders are considering migrating within 3 years.
Some agencies are making the transition from analogue radio systems to digital land mobile systems such as TETRA and are introducing broadband systems like LTE. The majority are using a combination of both, installing parallel LTE systems that work alongside existing, new or refreshed LMR solutions.

To best utilise the rich digital information that is increasingly available, some public safety agencies will choose to run multiple networks. The survey shows how investment in LMR is continuing, often in conjunction with planning for LTE. Only a small number of organisations have stopped or reduced investment in LMR.

This makes sense. LMR networks are an ‘always available’ standard for mission critical voice communications and essential data applications. LTE complements these networks, adding the ability to quickly access and transmit high bandwidth data. Organisations are already planning ahead to ensure these technologies work together to boost operational efficiency and safety.

Of course, there are challenges which need to be overcome when moving to public safety broadband. Almost a third of participants are constrained by budgets, 27% worry about perceived reliability or network availability, 18% fear poor regional coverage and 16% a lack of common standards.
While public safety agencies are taking on the challenge of managing new tools and technologies, they don’t currently have all the answers. The survey shows how the widespread use of smartphones, continuing barriers to video adoption and a lack of understanding of cybersecurity threatens to hamper the effectiveness of new technology solutions.

The smartphone effect is an ongoing issue. Public Safety users expect the same functionality from the tools they use at work as they do when at home. Over 40% of responders are using their own smartphones while on duty with only 26% of agencies reimbursing them. Many agencies continue to provide staff with smartphones despite the potential security risks, durability issues or lack of dedicated safety features.

Video is another missed opportunity. It tracks sequences of events, helps resolve incidents and protects responders from false accusations. Less than half of those surveyed use video solutions, mainly fixed surveillance systems and in-vehicle cameras. Even more surprisingly, only 15% of agencies use video analytics software suggesting that manual analysis is common. Budgetary constraints seem to be the biggest barrier to video adoption with 44% of respondents citing the administrative overhead and cost of managing large amounts of data as a major reason not to install systems.

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<th>Percentage</th>
<th>Description</th>
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<tbody>
<tr>
<td>41%</td>
<td>Of responders use their own smartphone</td>
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<tr>
<td>30%</td>
<td>Of public safety agencies provide smartphones to command staff and some responders</td>
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<tr>
<td>11%</td>
<td>Of public safety agencies provide smartphones to all responders</td>
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<tr>
<th>Percentage</th>
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<tbody>
<tr>
<td>37%</td>
<td>Of public safety agencies use a fixed video surveillance system</td>
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<tr>
<td>25%</td>
<td>Of public safety agencies use in-vehicle video cameras</td>
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<td>18%</td>
<td>Of public safety agencies use body or helmet worn video cameras</td>
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The survey shows agencies are using a range of tools to combat cybersecurity threats to their networks and devices. Virus & malware scanners and firewalls are the most popular tools, being used by 77% and 72% of participants respectively. But a surprising 22% either didn’t know what tools they were using or were using no tools at all.

It’s clear that new tools and technologies require management. Transition to newer digital systems demands more advanced IT skills that can deal with complex networks and ever-present cybersecurity threats. The survey identified three key areas where help is required.

In addition, over 31% of participants identified the need for assistance in a range of other areas such as network operations management, radio operations management and radio maintenance.

With multiple networks, new technology platforms and the need for continuous updates, agencies will increasingly seek outsourced management services from network experts. System management is going to be essential to prevent unforeseen issues that can impact on mission critical network availability and performance.
SURVEY PARTICIPATION

Motorola’s annual survey offers insight into the technology trends in the public safety sector. This research was conducted in late 2015 and reflects input from over 100 public safety professionals across Europe and Africa in a cross-section of agencies of every size. The survey for Europe and Africa is in its first year. It builds on a similar survey conducted in North America, now in its fifth year.

Of the respondents, 36% of agencies have fewer than 50 employees, 17% have between 51 and 100, 6% between 101 and 250, 9% between 251 and 750, and 32% over 750 employees.

Survey participants represented a wide variety of public safety officials, including police, fire, emergency medical services, defence and government administration and departments.

Notes

1 - All % figures rounded to nearest whole percent.

For more information on planning and deploying an integrated communications approach to address these trends, talk to your local Motorola representative or visit www.motorolasolutions.com