PUBLIC SAFETY COMMUNICATIONS

TRENDS, PRIORITIES, NEW TECHNOLOGIES

MOTOROLA SOLUTIONS

PUBLIC SAFETY SURVEY
EUROPE, MIDDLE-EAST AND AFRICA

Public Safety communications continue to transform. Video is growing. Agencies want cloud-based apps. High speed real-time data, still top priority. Digital radio is here to stay. Cybersecurity, a constant battle. Social media and texting key for community interaction. Technology management still needed.

TREND 1 GROWTH IN VIDEO, ESPECIALLY BODY WORN

VIDEO USAGE

The recent survey shows consistent growth in the use of video across almost all types and substantial growth of 80% in responder-worn (body-worn) video (32% today vs 18% in 2015). In 2015 almost half (48%) of agencies used some form of video. That has risen to around two-thirds (67%) in 2017.

GROWTH IN USE OF VIDEO (2015 TO 2017)

80% RESPONDER WORN

FIXED 20%

IN-VEHICLE 51%

19% VIDEO ANALYTICS

Although we are seeing growth across the board and this exceptional growth in body-worn video, **fixed and in-vehicle video** are still the top video uses:

CURRENT USE OF VIDEO SOLUTIONS (2017)

FIXED VIDEO **45%**

IN-VEHICLE VIDEO **38%**

RESPONDER WORN VIDEO **32%**

PRIVATE ENTERPRISE VIDEO **21%**

BARRIERS TO VIDEO USAGE

The main barrier to video adoption remains administrative overhead and cost with the same proportion of recipients (44%) quoting this as the biggest barrier, followed by concerns over privacy (25% to 23%).... However, we are now also seeing significant growth in concerns over security of data against tampering which has grown over 41% (13 to 18%).

CONCERNS OVER USE OF VIDEO (2017)

44% **ADMINISTRATIVE OVERHEAD AND COST**

23% **PERSONAL PRIVACY**

18% **DATA SECURITY**

VIDEO AND THE CLOUD

Video comes high on the list of applications that respondents want in the cloud.48% of respondents want to have cloud-based video storage and 34% want video analytics there.

So where does the cloud fit in?

TREND 2 PUBLIC SAFETY IN THE CLOUD

CLOUD APPS IN USE TODAY

Cloud-based applications for Public Safety are a relatively new offering. We wanted to find out who is using them and identify key needs.

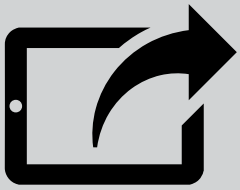
Agencies are already using a wide spread of cloud based applications. In fact, over one-third of respondents tell us they are already using cloud based reporting. What are the top 5?

PUBLIC SAFETY CLOUD APPLICATIONS IN USE TODAY (2017)

1. **34% REPORTING**

2. **29% VIDEO DATA STORAGE**

3. **26% CRIME AND INCIDENT DATA SHARING**



4. **23% SOCIAL MEDIA ANALYSIS**

5. **23% REAL TIME MAPPING**

CAD (Computer Aided Despatch) and ICCS (Integrated Communications Control Systems) don't feature strongly but do get a mention (19 and 16% respectively) At the moment bottom of the pile are crime prediction (14%) and voice logging (12%). The average figure for current usage across all 12 app types we surveyed is 20.5%.

CLOUD IN THE FUTURE

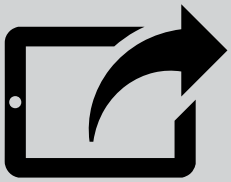
As well as finding out what cloud-based apps are in use today we asked what cloud-based apps our respondents wanted. We found that the picture of cloud-based apps that respondents want is slightly different to the one reflecting those already in use. Respondents want a wide range of apps but four key ones stand out and almost half of respondents mention video data storage. What are the top 4?

NEED FOR FUTURE CLOUD-BASED PUBLIC SAFETY APPS

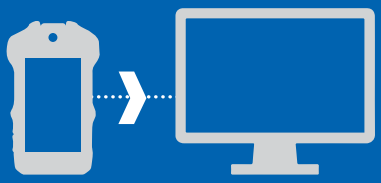
1. **48%** VIDEO DATA STORAGE

2. **45%** REAL TIME MAPPING

3. **41%** CRIME AND INCIDENT SHARING



4. **40%** DEMS



The average figure across all the 12 app types respondents wanted is 36.2% - (against 20.5% in use) - expressing a clear need for cloud-based apps - a potential for almost 76% growth.

BARRIERS TO CLOUD ADOPTION

There are some real barriers seen by our respondents to the adoption of cloud. Almost two-thirds cite security concerns and over half are concerned about privacy/access and cost:

CONCERNS OVER PUBLIC SAFETY CLOUD ADOPTION

66% SECURITY

55% COST

52% PRIVACY AND WHO CAN ACCESS MY DATA

PRIORITY 1 HIGH SPEED DATA AND MULTIDEVICE, MULTIAGENCY COMMUNICATION

There has been little change in the priority of needs since the last survey. The ability to communicate across different networks and devices is still top (2015 – 81%, 2017 – 79%) followed by high speed data access in the field (2015 – 76% , 2017 – 76%).

TOP 4 COMMUNICATIONS NEEDS (2017)

1. **79%** ACROSS DIFFERENT NETWORKS AND DEVICES
2. **76%** HIGH SPEED DATA IN THE FIELD
3. **66%** WITH LOCAL AGENCIES
4. **65%** WITH MOBILE DATA AS OFTEN AS VOICE

REAL TIME DATA?

The vast majority of respondents still believe real time data access for first responders is critical or very important – and the stats actually show a small rise (78% in 2015, rising to 82% in 2017).

82% OF RESPONDENTS BELIEVE REAL TIME DATA ACCESS FOR FIRST RESPONDERS **IS CRITICAL OR VERY IMPORTANT**

SMARTPHONES?

Overall, first responders are now more likely to have smartphones (88% in the most recent survey vs 82% previously) but this is still split between agency provided and personal smartphones. The number of agencies that now provide all their first responders with smartphones has more than doubled from 10.78% to 22.75%. But who pays for it? If you are a first responder that brings your own device to work, the survey shows that you are even less likely to get your bill paid for than before. The percentage of agencies reimbursing their first responders for personal device use has almost halved from 26% in 2015 to 14% today (2017).

88% OF RESPONDERS **HAVE SMARTPHONES**

PRIORITY 2 DIGITAL MIGRATION AND GROWTH OF LTE

We asked who has or is planning on migrating to a digital (e.g. TETRA, P25, DMR) land mobile radio network? Since the last survey there is little change in the overall shape of the survey response. Compared to the previous survey, about half as many respondents are considering actually migrating to a digital network within the 'next year'. This was already a small proportion, (13% in 2015) but it is further reduced (to 6%) in 2017.

Overall, a similar proportion of respondents already operate on a digital LMR system (33% in 2015, 34% in 2017). However, there is an increased number who 'don't know' when they will migrate to digital (30% in 2017 rising from 24% in 2015). So, it looks like there is still room for migration but increased uncertainty over when!

When asked when respondents believe mission-critical voice capability for first responders will be available on LTE, it appears respondents are expecting to wait longer. The majority expect to wait 3-5years (36% in 2017) vs 1-2 years (39% in 2015) and twice as many now expect to wait 10 years or more (12% in 2017 vs 6% in 2015). We do see that attitudes are changing. In 2015 the largest proportion of agencies (47%) were expecting to use an LTE system in conjunction with their current radio system. Now the largest proportion (over 50%) in 2017, see themselves using LTE once voice capabilities are mature.

OVER HALF

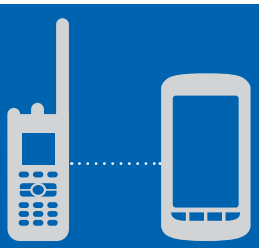
OF AGENCIES

SEE THEMSELVES USING LTE ONCE VOICE CAPABILITIES ARE MATURE

What about investment? Are agencies delaying their investments in their current radio voice network due to the possibility of moving service to a public safety LTE network? Not really. We continue to see a complex mix of agencies with different investment plans but the largest proportion are still either continuing to invest in LMR or continuing to invest as well as planning for a future LTE network (over 62% in 2015 vs 72% in 2017 vs... The largest number/proportion is still those continuing to invest as well as planning for a future LTE network (38% growing to 44% in 2017).

72%

OF AGENCIES ARE CONTINUING TO INVEST IN LMR WHETHER THEY ARE ALSO PLANNING FOR A FUTURE LTE NETWORK OR NOT



From an unclear mix of barriers that respondents reported in 2015, there is now a clear majority (52% in 2017) of respondents who now see 'budget limits' as the greatest barrier to the adoption of Public Safety LTE. Respondents are now showing much less concern over standards, spectrum or network availability.

OVER HALF

OF AGENCIES

SEE BUDGET LIMITS AS THE GREATEST BARRIER TO PUBLIC SAFETY LTE

PRIORITY 3 COMBATING CYBERSECURITY

Agencies are still using a wide variety of tools to combat cybersecurity threats – the top three remain – virus and malware scanners(66%), firewalls (65%), and employee training (56%) (2017 figures).

TOP 4 TOOLS IN USE AGAINST CYBERSECURITY THREATS (2017)

1

66%

VIRUS AND MALWARE SCANNERS

2

65%

FIREWALLS

3

56%

EMPLOYEE TRAINING

4

52%

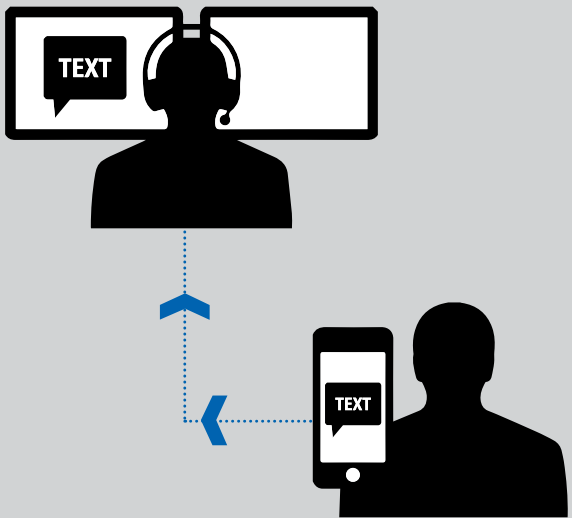
SPAM AND PHISHING FILTERING

PRIORITY 4 COMMUNITY INTERACTION

EMERGENCY CALL CENTRES

Call centres continue to be able to receive data from the public via a variety of routes. We see a small (ca.10%) increase in the ability of call centres to receive text messages with over half (54%) of call centres now being able to receive text messages. Social media shows only a small (1%) increase and the ability to receive video and pictures actually shows a reduction!

OVER HALF
OF CALL CENTRES
CAN NOW RECEIVE
TEXT MESSAGES



SOCIAL MEDIA

Agencies continue to use social media for receiving information from the public, monitoring and intelligence gathering. The biggest use is still for disseminating information to the public although this has dropped from 73% (2015) to 63% (2017). There is little difference in the proportion of agencies not using social media at all (15% rising to 17% in 2017).

63%
OF AGENCIES

ARE USING SOCIAL MEDIA TO
SHARE INFORMATION
WITH THE PUBLIC

PRIORITY 5 TECHNOLOGY MANAGEMENT

We wanted to know where agencies may need additional assistance in the future. The overall average need for additional assistance across the 7 categories we surveyed against shows a small drop from 35% to 33% but the biggest area of need is still network maintenance (tech support/repair) 38% in 2017 (from 46% in 2015).

TOP 4 NEEDS FOR ADDITIONAL ASSISTANCE (2017)

1

38%

NETWORK MAINTENANCE (TECH SUPPORT / REPAIR)

2

31%

LIFECYCLE SUPPORT / REFRESH OF SOFTWARE AND EQUIPMENT

3

29%

SECURITY SERVICES

4

28%

RADIO MAINTENANCE

SURVEY PARTICIPATION AND HISTORY

Our survey offers insight into technology trends in the public safety sector. **The 2015 survey** (conducted in late 2015) grew from similar surveys conducted in North America and was the first focused on Europe and Africa. **The 2017 survey expanded the reach** to Europe, Middle-East and Africa and now reflects the input of almost 200 public safety professionals in 46 countries.

In 2017 we have seen an increase in the size of the agencies participating in the survey compared with 2015. Over 50% were from agencies of over 750 employees this year (in 2015 the biggest proportion was 36% of agencies employing less than 50, followed by 32% employing over 750) Overall in the 2017 survey, 17% of agencies have fewer than 50 employees, 8% have between 101 and 250 ,12% between 251 and 750 and 53% over 750 employees.

The survey benefits from a **wide range of public safety agency types** with the majority from Police and Law Enforcement (53%), followed by Fire and Rescue (13%) and Emergency Response (5%).

Notes

1 - All rounding to nearest 1% except where required in some growth stats.

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**

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