



# WORKPLACE RESILIENCE BUILDING THE NEXT-GENERATION EMERGENCY CALL CENTRE



# OUR COMMUNITIES RELY ON THE EMERGENCY SERVICES TO PROTECT AND ASSIST THEM, OFTEN WHEN THEY ARE AT THEIR MOST VULNERABLE. AT THE SAME TIME, AGENCIES STRIVE TO PROTECT THEIR STAFF AND EMPLOYEES WHILE MEETING THE NEEDS AND HIGH EXPECTATIONS OF THE PUBLIC.

Yet, in order to work efficiently and effectively, studies<sup>1</sup> have shown that public safety organisations depend on public trust. The establishment of trust suggests that authorities are reliable and that they make decisions based on the right information and motivation. For public safety agencies, that trust begins in the emergency call centre, the information hub where mission-critical decisions are made every day to ensure better outcomes.

As the first, first responders, call takers and dispatchers play a crucial role in the operations of emergency call centres (ECC). Further, the capacity of ECCs to deliver reliable and effective incident response is intrinsically related to the performance and working conditions of their staff.

ECC operators are exposed to multiple stressors, that if left unmanaged, can significantly worsen stress, performance, and costs metrics, such as decreased retention

and increased costs related to sick leave. In fact, a 2021 wellbeing survey of call-takers by the Romanian public safety authority, STS, revealed that 23% of staff suffered medium or high levels of burnout<sup>2</sup>.

## WORKING CONDITIONS CONTRIBUTING TO STRESS AND BURNOUT

Key factors in operator burnout include call volume stress and the requirement to work overtime to cover shift shortages. At the height of the COVID-19 pandemic, many countries noted an increase in the number of emergency calls. This highlighted the importance of **inter-agency cooperation** through ECC interconnections and the pooling of resources to cope with peaks in demand while reducing the risk of operator burnout. With the introduction of social distancing and quarantine during the COVID-19 pandemic, many ECCs were presented with a unique challenge: how to maintain operational resilience with the risk that call-takers might

be unable to attend work. To address this, many ECCs introduced remote emergency call-taking, highlighting the criticality of a flexible ECC ICT architecture that can support new ways of working.

## MANDATE FOR FLEXIBLE WORKING

In addition to operational resilience, remote working has also helped address further challenges for ECCs: improving staff welfare and widening the catchment area for recruitment. Following the introduction of home-working by Notruf Niederosterreich, Austria's Emergency Communication and Coordination Centre, the following benefits to staff wellbeing were noted:

- Health and safety risk reduction through the avoidance of travel to and from the ECC
- Improved employee satisfaction
- More spare time to spend with friends and family

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Source: Romanian public safety authority, STS.





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## ADDRESSING RETENTION AND RECRUITMENT CHALLENGES

**As ECCs expand their emergency contact channels in line with the European Electronic Communications Code (EECC), call-takers may face new risks of potential traumatisation due to exposure to incident-related imagery (IRI). This could include live streaming video from a smartphone. Staffing is already a significant challenge for ECCs and exposing personnel to IRI with potentially objectionable content adds more pressure to the retention and recruitment of team members.**

A further challenge is that given the new sensory input involved with IRI in the ECC, additional critical and analytical skills may be required for those joining the profession. As noted by NENA<sup>3</sup>, previously, minimal experience was required for entry-level candidates. These additional skill requirements may present recruitment challenges given that call-takers are typically recruited from a small catchment area, close to the location of the ECC. Remote working mitigates this challenge by expanding the catchment area and widening the pool of potential candidates for ECC roles.



# LIMITATIONS OF THE EXISTING ECC INFRASTRUCTURE

## REMOTE WORKING

The shift to a hybrid ECC operational environment that includes remote working options is driving the need for anywhere, anytime access to ICT resources. These emerging demands challenge the traditional ECC technology architecture which is typically based on software applications hosted on physical hardware located on-premises. Such architectures are poorly suited to flexible working environments that require scalable and secure remote access from a broad range of devices.

## SILOED SYSTEMS HAMPER PRODUCTIVITY AND INCREASE ERRORS

The siloed systems found in traditional ECCs are another source of stress for operators and in addition, can hamper productivity and negatively impact the consistency of data captured by call-takers due to manual double-entry of information.

Today, many public safety agencies are realising the benefits of a cloud-hosted unified software platform for running their mission-critical control room operations.



## OPERATIONAL COMPLEXITY

On-premise ICT systems pose other limitations on the operational resilience of ECCs. Firstly, any kind of system downtime is unacceptable in a 24/7 mission-critical communications environment. This means that public safety agencies must invest heavily in duplicating system resources and functionality, typically in the form of infrequently-used 'dark' backup control rooms, either co-located with the main site or at a different physical location, that can be brought online quickly if the main system unexpectedly fails or due to planned system maintenance. Secondly, scaling the system to meet the short-term needs of a major public incident or to support general growth is both costly and time-consuming.

Today, many public safety agencies are realising the benefits of a cloud-hosted unified software platform for running their mission-critical control room operations. As well as enabling more flexible control room operations, this new unified cloud-based approach allows personnel to access resources from virtually any location. This next-generation control room gives agencies a collaborative and flexible environment that enables swift intelligence-based decision-making for safer outcomes.

# HARNESSING A CLOUD-BASED UNIFIED SOFTWARE PLATFORM FOR WORKPLACE RESILIENCE

Rather than depending on disparate point solutions, a cloud-enabled ECC built on a unified software platform allows for easier collaboration both within and across agencies, strengthening ECC workplace resilience and building trust among the public.

The Motorola Solutions Command Centre Software suite is a secure cloud-hosted, end-to-end control room software solution that unifies the flow of data as an incident unfolds to provide greater clarity for mission-critical response and decision making. The suite is built on a unified data platform that collects all agency data across 112 emergency call handling, dispatch, video analytics, field reports, records, evidence and community engagement. It makes the data instantly actionable through assisted intelligence and a comprehensive 360-degree view of the incident.

With the Command Centre Software suite, agencies can achieve new levels of resilience, effectiveness, and speed.

## HERE'S HOW.

### TRANSFORMING THE ECC WITH THE UNIFIED COMMAND CENTRE SOFTWARE SUITE



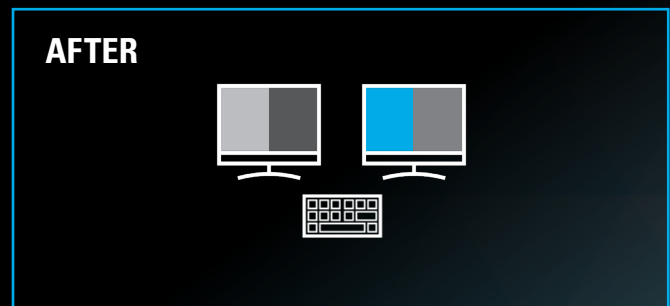
#### POINT SYSTEMS APPROACH

##### Impact on Operators

- Manual double-entry of information due to system silos, increasing the likelihood of errors
- Inconsistent entry of information negatively impacts data search results
- Inconsistent system user interfaces compound operator stress and risk of burnout
- Limited flexibility for home-working negatively impacts work-life balance

##### Impact on ICT and ECC Management Team

- Disruptive and complex system maintenance and upgrades
- Siloed approach to procurement results leads to a continual focus on chasing obsolescence
- Siloed approach reduces overall system utility and negatively impacts innovation



#### UNIFIED COMMAND CENTRE SOFTWARE APPROACH

##### Impact on Operators

- Seamless workflow across integrated systems increases efficiency, eliminates errors
- User interface ensures consistent information entry to maximise accuracy of data search results
- Federated searches across multiple databases with Call Assist functionality increases operator productivity, reduces the impact of techno-stress
- Web-based technology enables flexible working from any device with remote working options, improving work-life balance

##### Impact on ICT and ECC Management Team

- Browser-based client application ensures no data is stored locally, to ensure data privacy compliance
- High-availability, secure hosting environment for command centre software simplifies ongoing maintenance
- Dynamic capacity for backup and spate conditions
- Seamless software upgrades ensure operational resilience
- Flexible cloud-hosted system architecture supports continual operational innovation such as omni-channel public contact





## FIND ADDITIONAL COLLABORATION OPPORTUNITIES ACROSS AGENCIES

Virtualising the ECC offers new opportunities for collaboration and resource sharing both within and between agencies. Inside the ECC, connectivity between various functions, such as call taking, dispatch, evidence management, and records, means that information can flow seamlessly in a single workflow, creating efficiencies and reducing inaccuracies. For example, partner agencies such as fire and rescue services dealing with a major incident, can easily contact one another for additional capacity, whether located in a neighbouring region or anywhere else in the country.



## BUILDING WORKPLACE RESILIENCE

While the traditional ECC model is outdated and ineffective for public safety organisations, today's cloud-enabled control room solutions ensures that agencies can build workplace resilience. This ensures that their operations can benefit from flexibility, efficiency, and scalability that's required to support the mission-critical decisions they make each day.

With the Command Centre Software suite from Motorola Solutions, public safety agencies have the opportunity to harness the power of a unified, cloud-hosted software platform to enhance their operations, helping them better serve their communities while achieving safer outcomes.

Taken together, this new level of resilience helps agencies cement a strong foundation from trust. One that they can continue to build upon as they partner with the community for more effective public safety.

For more information on Workplace Resilience and the technology powering next-generation control rooms,

[BOOK A CONSULTATION](#)

**SAFETY  
BUILT FROM  
TRUST**



**WORKPLACE RESILIENCE**

<sup>1</sup> Nix, J et al. Trust in the police: The influence of procedural justice and perceived collective efficacy. *Crime and Delinquency*, 61(4), 610 - 640

<sup>2</sup> Iulia Mihaela Filip, Psychologist & Andrea Miana Veres, Psychologist, Special Telecommunications Service, Romania. Psychological Intervention to maintain mental health of the 112 call-takers. EENA Conference 2022.

<sup>3</sup> NENA-STA-002.2-2022 NENA Standard to Protect the Wellbeing of 9-1-1 Professionals

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