INTEGRATED
COMMUNICATIONS
CONTROL SYSTEM
AS A SERVICE
How will you simplify ESN migration?

Control room IT solutions play a vital role in incident management. Technologies such as Integrated Communications Control Systems (ICCS) are at the heart of incident response workflows, helping to streamline telephone call handling, contact management and radio dispatching.

The migration to the Emergency Services Network (ESN) changes the landscape for ICCS solutions. To access ESN functionality, existing ICCS solutions will need to be upgraded and certified. Adding to the complexity is the need to maintain Airwave connectivity during the transition and the associated change management required to enable a smooth control room upgrade.
IN ADDITION TO PROVIDING THE RIGHT FUNCTIONALITY, ICCS SOLUTIONS MUST ADDRESS THE NEED FOR EFFICIENT SCALABILITY.

In the new landscape, your ability to effectively and efficiently manage incidents will be impacted by how you address specific operational challenges:

- How can you provide a unified experience for operators managing ESN and Airwave users?
- How will you minimise the risk of disrupting operations during the control room upgrade?
- Can you retain your incident response capability in the event of a control room IT system failure?
- Have you made sufficient allowance in operator positions to cope with peaks in emergency call volumes?
- Have you procured sufficient server hardware and software licenses to effectively manage major incidents?

“Integrated communications control systems are at the heart of incident response workflows.”
WHAT IF YOU COULD...

IMPLEMENT A SMOOTH CONTROL ROOM UPGRADE AND AT THE SAME TIME REDUCE YOUR INVESTMENT IN UNUSED CAPACITY?

Simply put, you can. A change is occurring in the way IT solutions are purchased and deployed. Advancements in cloud computing and web-based technologies underpin new IT delivery models that can transform your control room operations.

What does this mean? Instead of taking on the overhead of maintaining on-premise IT systems, a cloud strategy can help you focus resources on your core control room operations. In fact, organisations that have adopted cloud services have achieved, on average, 15.07% reduction in IT spending and 16.76% reduction in IT maintenance costs1. In addition, capacity can be dynamically adjusted on-demand, paving the way for pay-per-use billing and significant operational cost savings.

ICCS as a Service (ICCSaaS) transforms control room operations by combining mission-critical security and availability with elastic capacity through Motorola Solutions’ private cloud, hosted in ESN data centres. An ESN certified solution, ICCSaaS addresses fundamental requirements of the emergency services, simplifying ESN control room migration, enhancing operational agility and optimising capital and operational costs.

1 Source: Vanson Bourne (2012) The Business Impact of the Cloud
ICCSaaS represents the next evolution of control room capabilities. The service is based on the Mobile Asset Control System (MACS), a web-based unified communications platform that simplifies and integrates control room workflows for efficient incident management.

Recognising the need to support the specific configuration and integration requirements of your control room, ICCSaaS eschews the one-size-fits-all approach. ICCSaaS harnesses the power of a multi-instance cloud, providing true data isolation and allowing you to upgrade your ICCS at a time that is right for you.

RELY ON A SECURE, HIGH AVAILABILITY OPERATIONAL ENVIRONMENT.

With ICCSaaS, you will receive ongoing support and maintenance services on a 24x7x365 basis, leveraging our current ESN managed services platform. Information security and service availability are addressed through a layered approach that provides geographically redundant protections and a combination of physical security and cybersecurity controls.

ESN data centres provide the critical first layer of defence for ICCSaaS, with ISO27001 and IL3 accredited security controls in place. Physical access controls in all hosting locations coupled with access management to all secured areas are integral to the information security architecture.

At the application level, the MACS ICCS provides role-based access controls and a distributed architecture that delivers the enhanced resilience and availability required for mission-critical control room operations.

END-TO-END LAYERED SECURITY FRAMEWORK

**FIREWALL**

**USER ORGANISATION**
**CONTROL ROOM**
**OPERATIONAL ENVIRONMENT**

**DNSP ASSURED NETWORK**
**CESG CAS-T**

**VPN ENCRYPTED DATA**

**BOUNDARY PROTECTION**

**IS027001, IL3 ESN DATA CENTRES WITH GEOGRAPHICAL REDUNDANCY. PHYSICAL SECURITY OF DATA FACILITY**

**CYBERSECURITY MONITORING**

**MACS APPLICATION SECURITY**
IMPROVE YOUR AGILITY WITH ON-DEMAND CAPACITY EXPANSION.

In the traditional on-premise ICCS implementation model, organisations typically need to over-purchase capacity for operational resilience. With ICCSaaS, a virtualized server architecture ensures that you can rapidly scale capacity up or down to efficiently manage periods of peak demand such as during major incidents.

REDUCE ON-PREMISE IT INFRASTRUCTURE OVERHEADS.

When deploying on-premise IT systems, your overheads include patching, monitoring and auditing the infrastructure as well as implementing physical security controls.

With ICCSaaS, the MACS ICCS software runs on virtual machines created in the cloud, significantly reducing your IT support costs and deployment footprint. A remote connection to Airwave is achieved through the use of geographically redundant Dispatch Communication Servers (DCS), removing the need for on-premise CCI hardware. In addition to reducing on-premise infrastructure, the virtualised DCS architecture offers resource pooling efficiencies and reduces the need for CCI over-provisioning.

Thanks to the web-based architecture of MACS, your operators can access the ICCS client application using existing PCs — by simply bringing up a browser. To simplify deployment, existing USB accessories such as foot switches and headsets will work seamlessly with MACS ICCS clients.

MINIMIZE DOWNTIME DUE TO SYSTEM UPGRADES.

In addition to enhancing availability, the replication of service recipient instances across two ESN data centres makes ICCS application upgrades much less disruptive, minimises downtime and provides a safe back-out path.

ACCESS THE RIGHT INFORMATION AT THE RIGHT TIME.

The success criteria for control room IT systems must be based on ensuring users access the right service at the right time. To achieve this, an integrated IT framework is required whereby disparate systems are unified, so as to enable simplified task-based views for users.

The MACS ICCS is a modular control room platform that manages all communications and provides the operator with situational awareness through a unified voice, messaging and tracking solution. The unified approach, enabled via a set of simple application programming interfaces (API), supports the integration of multiple systems such as CAD, voice logging, social media channels and telephony with Airwave and ESN services.
ICCSaaS has been developed to simplify your ESN migration and enable next-generation control room capabilities. The service addresses the need for agility, scalability, flexibility and continuous innovation through a flexible cloud architecture. The service’s design also recognises the need for a hybrid approach that unifies across on-premise and off-premise environments to create integrated workflows through simple APIs.

To support the myriad of deployment scenarios, we are offering ICCSaaS through a tiered set of packages with different levels of solution customisation. Motorola Solutions’ experienced managed services consultants will work with you to select the right package based on your desired outcomes. Now is the time to begin your control room transformation.