

The power of Unified Critical Communication

Unified Critical Communication



Content

1	An introduction to critical communication	4
2	Critical communication within physical security industry	6
3	Unlocking the concept of unification within critical communication	8
4	Four ways unified critical communication can benefit your organization	10
5	Unified Critical Communication helping industries	14

An introduction to **Critical Communication**

During times of crisis or emergency, reliable **PUBLIC SAFETY COMMUNICATIONS** are crucial not only to help first responders save lives but also to help keep first responders safe, improve response time, and enhance interagency coordination.

These types of communications are usually referred to as mission critical communication. Within the context of public safety, mission critical communication solutions may include mobile (5G), radio telecommunication, and mass notification systems.

Another type of critical communication is called **BUSINESS-CRITICAL COMMUNICATION**. These are communication technologies that are essential for maintaining the daily operational efficiency of an organization as well as keeping their employees, visitors, and other assets safe and secure. For example, at a train station, operators need to constantly inform passengers of any delays or schedule changes to avoid frustration and confusion among rail passengers. Technologies such as mass notification systems, professional mobile radio, voice evacuation systems, intercoms, and help points play an important role in a business-critical communication solution.



Critical communication within the physical security industry

The physical security market encompasses a broad spectrum of security and communication solutions designed to safeguard buildings and assets from threats ranging from theft and vandalism to terrorism and unauthorized access. A robust security and communication system is critical for a business as it can protect businesses from financial losses due to theft, misuse, or vandalism, as well as ensuring that employees and visitors are safe and secure at work from life threatening situations such as fire and terrorism. Several technologies such as access control locks, alarms, surveillance cameras, communication systems, and building management systems play an important role in securing buildings and assets while safeguarding employees and visitors.

Critical communication solutions help to ensure the overall security of a building. When integrated with existing security systems such as video surveillance, access control systems and perimeter detection systems, audio can enhance your overall security posture. The ability to listen to and speak through audio systems can benefit site-wide security management as well as general operations and commercial communication. The following section highlights 3 areas where critical communication solutions play an important role:

- **Audio for safety**
- **Audio for security**
- **Audio for daily operations**

■ Audio for safety

Audio coverage from a loudspeaker system will always reach and alert an entire crowd with more efficiency than a video screen or a visual-exclusive announcement. The added advantage of audio use is that no crowd members must break their visual focus or create a hazardous cluster for line-of-sight over information on a screen; audio systems serve best the requirements for one-to-many announcements, whether they are for casual or critical purposes.

■ Audio for security

When integrated with other systems such as video surveillance, access control systems and perimeter detection systems, sound and speech systems can play an important part in enhancing the overall security of a facility. Audio can aid one-to-one, one-to-many, and one-to-all communications during an unfolding security threat.

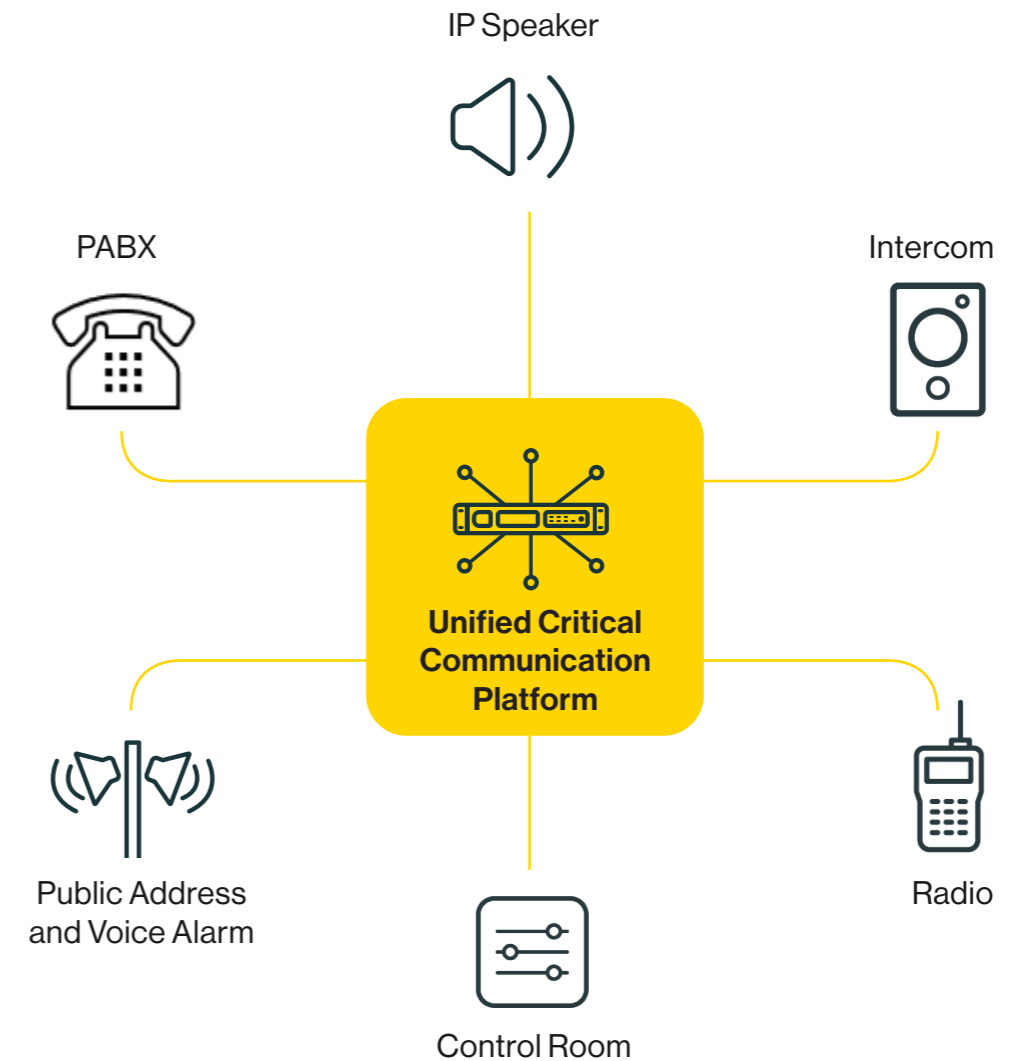
■ Audio for daily operations

Communication with the 'eye in the sky' can prove useful in many situations; staff with limited sightlines over areas of operation could be given instructions to save time or communicate issues with an overseer for guidance. With two-way audio in security systems doubling up as an intercom service, task completion becomes simple and efficient.

Unlocking the concept of unification within critical communication

Unification of critical communication technologies represents a paradigm shift in the way people and businesses communicate, making a transition from traditional, siloed communication to more collaborative communication approach. A unified critical communication platform brings together a multitude of communication technologies and tools into a single platform. Rather than relying on a single communication technology, Unified Critical Communications combines the strengths of a diverse range of technologies, while mitigating their individual weaknesses.

Technologies in this context may refer to intercoms, IP telephones, IP speakers, professional mobile radio, and public address and voice alarm. A unified approach consolidates all your communication offerings to one central platform, so you can simplify and efficiently manage different forms of communication, such as voice calls, video conferencing, instant messaging, and email. This also allows the user to move from one communication technology to another seamlessly.



In addition to simplifying your business-critical communications for the end users, unification also offers other benefits for control room operators and system integrators. Most security and communications platforms today will require the control room operators to use multiple systems because none offer the required functionalities in one user interface. By bringing all critical communication technologies under a single platform, unification provides everything a control room operator needs within a unified software suite and Graphical User Interface (GUI). This helps them to monitor security breaches and run investigations from a single GUI.

Four ways unified critical communication can benefit your organization

Unifying critical communication solutions is not a new technology but rather a novel approach to integrations. With this approach, diverse communication solutions, whether it's public address, voice evacuation, or IP speakers, work together to present a consistent and unified experience for users as well as system operators.

Historically, these communication technologies are treated as separate systems and delivered by different vendors and system integrators. We often overlook the multitude of benefits that can be unlocked by a unified approach. In this section, we highlight some of the benefits of a unified critical communication approach.



Improve
communication
resilience



Reduce
response
times



Reducing
number of
integration point



Easy
Onboarding of
Operators



1



Improve communication resilience

When multiple communication technologies are unified, it reduces your reliance on a single technology and therefore avoids service interruption due to a single technology failure. Imagine a scenario where the radio system is out of service in an industrial plant.

Using fixed intercom panels, the security personnel can still communicate with the target audience and send emergency voice messages. In school settings, security personnel have the ability to deliver broadcast messages to intercoms inside the classroom, even if the bell system fails.

2



Reduce response times

With improved collaboration possibilities among security personnel, control room operators, and staff, a unified critical communication platform helps to increase situation awareness, ensuring everyone has the latest updates on a critical situation and therefore ensuring a coordinated response in an emergency. Furthermore, by merging a multitude of communication technologies into a single platform, operators can reach a wider audience, effectively extending the boundaries of communication. Unification also simplifies communication processes, allowing for quicker decision-making, smoother coordination, and more efficient resource allocation.

3



Easy Onboarding of Operators

Since all information is united under a single user interface, operators no longer need to learn multiple systems, thereby reducing the on-boarding time of security operators. By unifying all critical communication under a single user interface, you empower your operators by giving them the information they need to be more efficient, make better decisions, and respond to incidents faster.

4



Reduce Integration Points

When critical communication solutions are unified as a single system, system integrators are able to reduce the overall number of integration points. Fewer integration points lead to simpler and more manageable system architectures, thereby reducing complexity and risk. With fewer integration points, there are fewer chances for errors or failures to occur, which can improve system reliability and reduce downtime. Furthermore, fewer integration points often translate to lower development, maintenance, and operational costs, as there are fewer components to manage and support. Managing fewer integration points simplifies maintenance tasks and troubleshooting efforts, as there are fewer potential points of failure to diagnose and address.

Healthcare

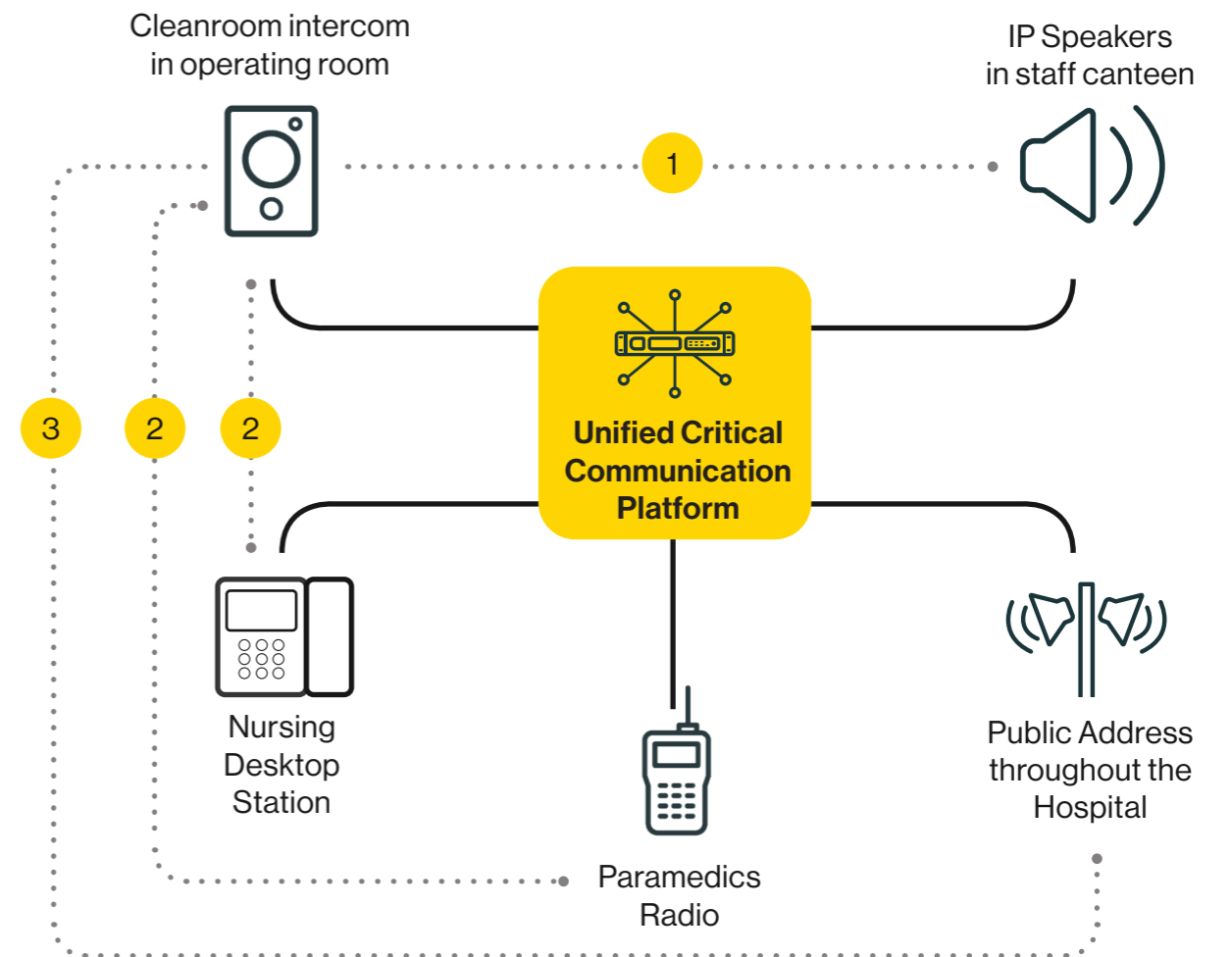
Scenarios:

Hospitals face the tall order of managing stressful situations involving a high number of emergency services, staff, patients, and visitors. Medical staff must remain informed at the right time in the right place to deliver patient care effectively. That's why it's crucial for hospital and healthcare staff to have a unified solution that enables clear and timely communication.

With unified critical communication solutions, collaboration between various medical staff becomes more fluid.

- 1. Paging for staff summons**
 Within an operating theater, an intercom facilitates immediate assistance for nurses and surgeons during surgery, such as requesting the summoning of a specialist.
- 2. Real time, two-way communication**
 Medical staff inside the surgery room can receive information from paramedics upfront using the same communication devices, enabling them to be better prepared for surgery.
- 3. Issue Blue code Messages**
 In the event of an emergency unfolding within the operating theater, surgeons can initiate a code blue emergency using the intercom system, broadcasting the message throughout the hospital's PAVA loudspeakers to inform staff that a patient requires resuscitation due to an unexpected cardiac or respiratory arrest.

Unified Critical Communication helping industries



Paging to staff
 An intercom facilitates immediate assistance for nurses and surgeons.



Real time, two-way communication
 Medical staff inside the surgery room can receive information from paramedics upfront.



Issue Blue code Messages
 Surgeons can initiate a code blue emergency using the intercom system.

5

Prison

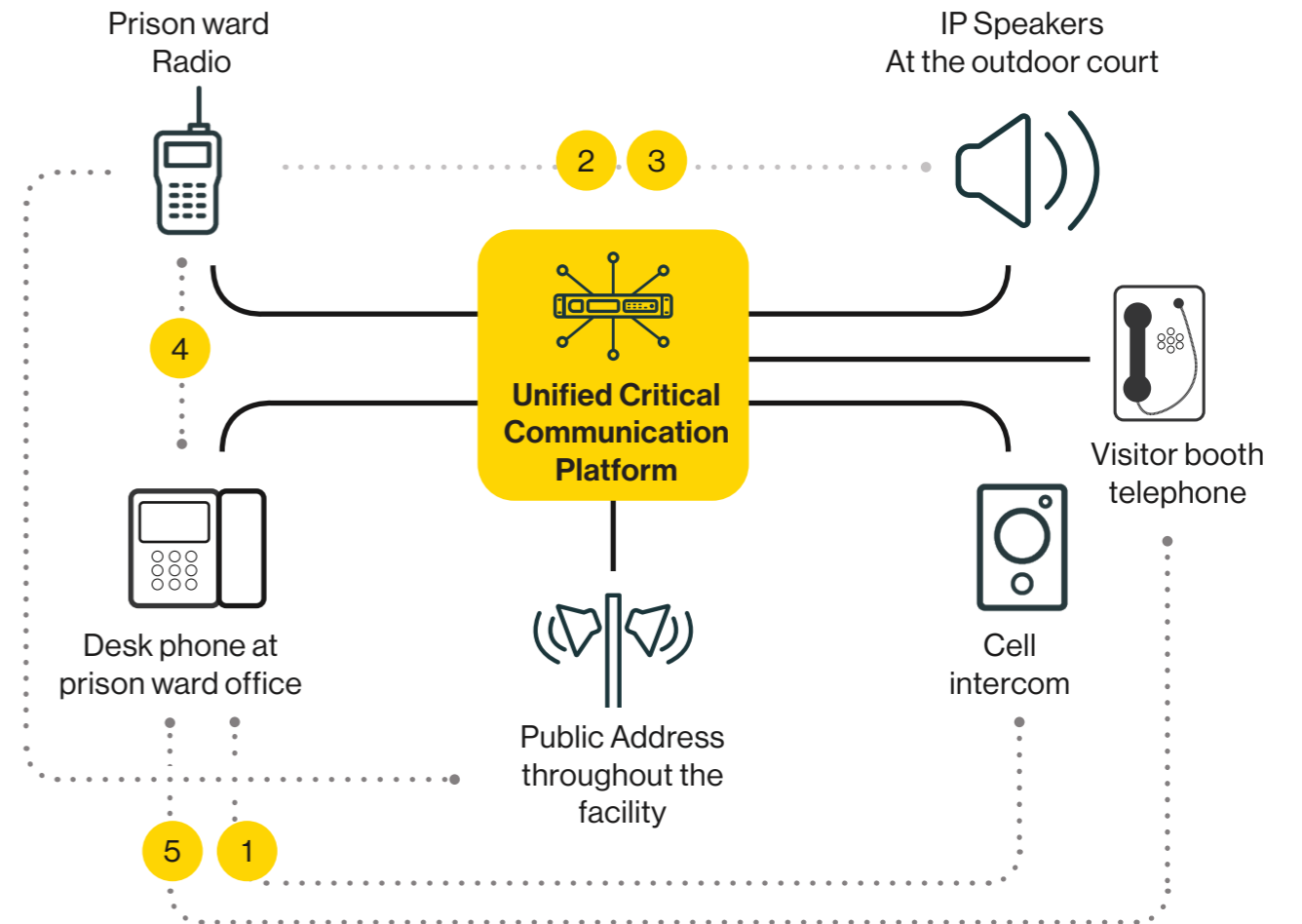
Scenario:

Prisons are typically high-risk environments where an altercation can quickly escalate into a deadly incident. In such cases, prison guards must take coordinated actions swiftly to maintain a high level of security.

A prison ward must be able to take well-coordinated actions swiftly using various communication technologies. They must be able to use these technologies fluidly regardless of location, as every second delay in response can result in deadly consequences. With a unified critical communication platform, prison owners can deliver on these critical communication needs; enabling faster and coordinated response throughout the prison.

1. **Manage calls from cells**
Manage call coming from the prison cells.
2. **Issue emergency alerts**
Issue emergency alerts throughout the prison in the event of emergencies such as riots, lockdown, or medical emergencies (one-way communication).
3. **Warn inmates**
Warn one or few inmates in places like outdoor play area (one-way communication)
4. **Security response**
Enable communication among staff when a swift security response is needed, such as an unauthorized entry by a prisoner (two-way communication).
5. **Listen in on visitor booth calls**

Unified Critical Communication helping industries



1 Manage calls
Manage call coming from the prison cells.



2 Issue emergency alerts
Issue emergency alerts throughout the prison.



3 Warn inmates
Warn off one or few inmates in places like outdoor play area.



4 Security response
Enable communication among staff when a swift security response is needed.



5 Listen in on visitor booth calls

Rail Platform

Scenario:

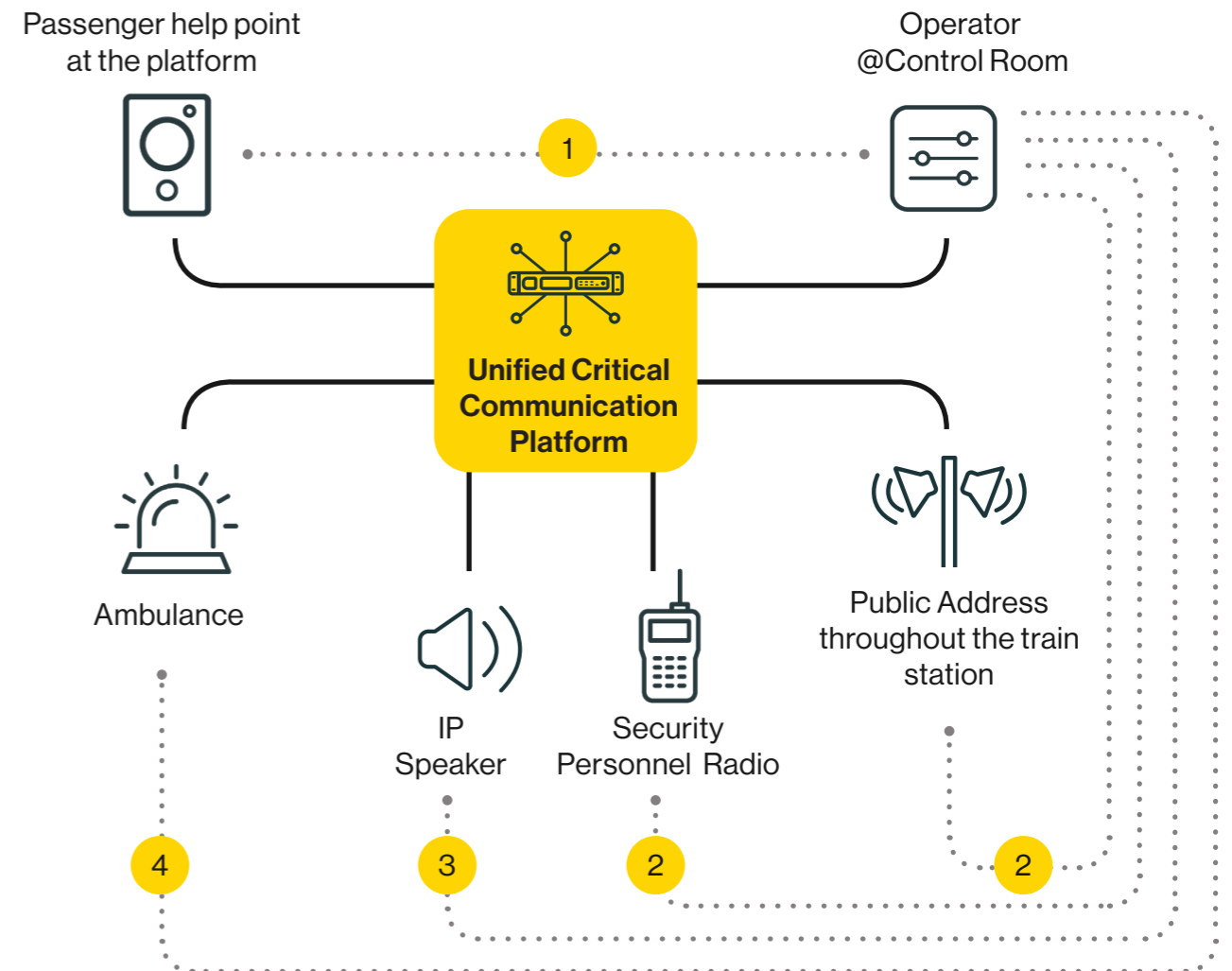
Train stations are very busy places, and the challenge lies in ensuring that coordination across multiple trains, operators, and facilities runs seamlessly to provide the best possible travel experience for passengers.

Rail staff and security personnel at a busy train station need to be vigilant throughout the rush hours to be able act swiftly in case of an emergency. Not only do they need to act quickly, but very often they need to collaborate with other rail staff as well as external forces such as the police and ambulance services.

Here, communication technologies need to be boundaryless, and should flow naturally toward the locations where problems can be solved and where decisions can be made.

1. **Passenger seeking for assistance**
Passenger seeking for assistance during critical incident such as medical emergency.
2. **Paging Staff**
Operator paging staff to summon at the scene.
3. **Seeking staff at the station**
Operator seeking for help from any medical staff at the station.
4. **Emergency service**
Operator escalates to emergency services.

Unified Critical Communication helping industries



1 Passenger seeking for assistance
Passenger seeking for assistance during critical incident.



2 Paging Staff
Paging for any medical staff at the station



3 Seeking staff at the station
Operator seeking for help from any medical staff at the station.



4 Emergency service
Communication to ambulance, updating passenger's condition.



Unified Critical Communication

Better security
Better safety
Better operational efficiency



This document is Zenitel proprietary. Any copying is prohibited, if not otherwise explicitly agreed in writing with Zenitel.