Wiener Linien Control Centre in Erdberg © Frequentis

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FOR A SAFER WORLD

Prioritising the Passenger Journey

As railways adapt to reduced passenger numbers and new capacity limits to maintain social distancing, it is as important as ever for safety, reliability and punctuality to meet passenger expectations. Markus Myslivec, Head of Public Transport Solutions at Frequentis, explains how integrating software solutions for operations and incident management can help.

Before the pandemic there was a focus on improving the rail passenger experience, reducing overcrowding and expanding capacity at peak times. As passengers start to return to work it's clear that commuter numbers are a long way from returning to pre-Covid levels. Numbers aside, passenger journey and safety are still key; keeping passengers informed about incidents and keeping disruptions to a minimum remains a priority.
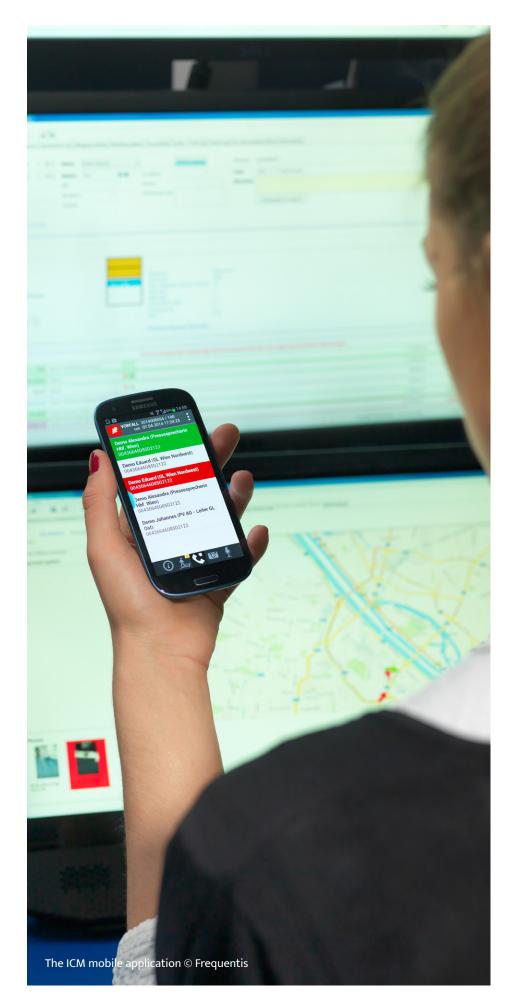
In the rail sector, Frequentis is focused on promoting a high level of integration between the software solutions needed for day-to-day operations, and those used when an incident occurs. This integration is key to the management of any incident on or around the railway and is reflected by the improved key performance indicators (KPIs).

Three of the improved KPIs are initial response time, the quality of the decision-making process, and the efficiency of communication between responders. These can make or break the performance of incident response. The Frequentis Operations Communications Manager (OCM), and Incident and

The ICM mobile application © Frequentis

Crisis Management (ICM) software solutions are specifically designed to deliver the required integration to optimise those performance indicators.

Business Continuity

The rail network is a vital piece of infrastructure and must be maintained and operational regardless of the circumstances. For organisations undergoing enforced business downtime, this can be treated as a chance to analyse and implement key improvements in operational and business processes.

The Frequentis ICM software solution for railways enables distributed working via mobile app and the installation of an emergency client at remote working sites, laptops and computers. Two existing customers already use ICM with virtualised desktops, allowing more flexibility for both routine work and business continuity scenarios.

Face coverings are not the only measure in place to protect customers; in some countries, capacity limits have been set for each train to allow social distancing to be maintained. It is therefore even more essential that disruptions are dealt with swiftly, to keep passengers moving. The ICM mobile application can also provide staff at stations and on trains with real-time information about what's happening, which can be passed on to passengers.

How Does the Technology Work?

The Frequentis OCM software solution offers a unified communications and control

interface allowing rail controllers to communicate with numerous stakeholders across different networks and technologies, as well as different devices. This improves the decision-making processes.

The OCM is designed to act as the starting point for an efficient and paperless workflow for operational communication and for incident management by allowing its operator to enter new incidents automated or semi-automated when they occur. All the incidents present in an operators' designated area can also be seen through their console. When an incident is entered into the OCM, the incident manager will be notified immediately at the ICM, and all the relevant information will be presented to them.

Frequentis suggests an ICM solution as a "single source of truth" for railway operators. By integrating the OCM effectively with the ICM platform, the cause of an incident and how to deal with it can be simultaneously identified and performed from the same tools. This is the first step of any incident response, allowing it to be directed to the appropriate staff and handled quickly.

By introducing better integration, different groups can work together on the same incident, adding and editing information simultaneously. This improves response times, because the driver of the train, for example, doesn't have to repeat the details of the issue again when it reaches the incident response manager. Such efficient sharing of information is key to a fast and efficient incident resolution. With closer integration, you shorten the response time with a tool that also reduces the complexity of the decision-making process.

After serving as the point of entry for the incident response process, the OCM may also act as the front end, web-based graphical user interface for the ICM itself. This enables a full integration of communication and management procedures. The extent to which these should be integrated depends on operational needs, operational procedures and how incident management is handled by the organisation. Either way, the flexibility of the software is such that it can be tailored to these needs.

Increasing Automation

Our intention with this technology software solution is to drive automation to the next level, remove duplication and provide information as soon as possible in this workflow, always in electronic form, and always with automatic handover between the systems. Without paperwork, the need to re-enter duplicated information is eliminated and as a consequence the process becomes significantly more efficient.

Despite the pandemic, rail is set to continue on a path of ever-increasing capacity demand, intensifying the need for swift recovery from operational disruptions. As passengers start to return to railways, it is important to look at the procedures and software solutions that will let you keep calm and carry on should any incident or even another crisis scenario occur. There is a potential to simultaneously enhance passenger safety with integrated software solutions for improved, digitalised and virtualised operations – this shouldn't be wasted.

Author Bio

Markus Myslivec, Frequentis Head of Public Transport Solutions

Markus has a long history in railway communications, ranging from software development for GSM-R mobile terminals to technical leadership in fixed line operational communication projects. He represents Frequentis within ETSI TC RT and the UNITEL committee. He is heavily engaged in inter-domain knowledge and technology transfer for other areas of Frequentis business.

Company Bio

Frequentis Public Transport solutions leverage more than seventy years of experience focusing on safety-critical communications and applications. Cross-industry expertise gained from supporting control centre communication sets the foundation for industry-leading railway and urban transport solutions. With its strong position in operations communication, as well as incident and crisis management, the company also holds the number one market share in GSM-R dispatcher terminal positions; more than 8,000 units are currently deployed in customer control centres in over 25 countries. Customers include Network Rail in the UK, Deutsche Bahn in Germany, ÖBB and Wiener Linien in Austria and Sydney Trains in Australia.

For more information visit **www.frequentis.com/public-transport**