In an increasingly customer-centric world, it is no longer enough to preserve safety at all times – this is a given. Instead, the quality of a provider’s response when the unexpected happens is what builds an exceptional brand reputation, which can be the difference between a customer base that is loyal for life, or seeing market share melt away.

To meet increasing customer expectations, transport organisations must invest in earlier recognition of incidents, to enable them to identify and fix the root causes quickly and efficiently. This white paper explains how choosing the right incident management solution can help these organisations maximise service continuity. In this way, providers can deliver passenger experiences that ensure they come back for another journey – and tell others to do the same.
Recognising the power of our hyper-connected world

No journey happens in a vacuum: passengers have always shared their experiences of public transport with friends and family. The difference is that today, the audience for these opinions can number into the tens, hundreds, thousands, or even millions, due to the power of social media and mobile devices.

If a passenger’s good news story goes viral, public transport organisations can benefit from incredibly effective free marketing. However, unfortunately for these companies, bad news stories tend to receive more coverage. When negative experiences strike a chord, they can cause significant damage to a provider’s reputation and, eventually, erode hard-won market share.

For transport organisations, such as rail freight companies, delivering poor service in a business-to-business environment is unlikely to stir up a social-media storm, but it will certainly dampen future revenue prospects. When companies are let down by a partner, they typically react not emotionally but rationally: by choosing a different partner in future.

So, what can transport organisations do? The answer is preventing the incidents that cause bad customer experiences in the first place, or enhancing the effectiveness and speed of their responses.

By incidents, we are referring to anything that causes a deviation from planned operations, which can range from minor delays due to signal failures to emergency situations where passenger safety is at risk or where cargo may be damaged in transit.

Figure 1: Incident management - support efficiency and safety while improving customer satisfaction

<table>
<thead>
<tr>
<th>Public transport operators</th>
<th>Passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Efficiency</strong></td>
<td><strong>Customer satisfaction</strong></td>
</tr>
<tr>
<td>€ Meet contractual and regulatory performance targets</td>
<td>Deliver better value for money</td>
</tr>
<tr>
<td>‍ Boost capacity through seamless integration with traffic management</td>
<td>Offer more frequent connections</td>
</tr>
<tr>
<td>‍ Restore or replace services faster in the event of disruptions</td>
<td>Reduce disruptions or delays to journeys</td>
</tr>
<tr>
<td><strong>Service</strong></td>
<td></td>
</tr>
<tr>
<td>Improve customer information</td>
<td>Provide faster, clearer information</td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td></td>
</tr>
<tr>
<td>Continuously improve safety</td>
<td>Higher perceived and actual safety on platforms and trains</td>
</tr>
</tbody>
</table>
Most, if not all, transport organisations already have processes and technology in place to tackle the more extreme end of the scale. In most countries, regulatory bodies demand proof that providers are ready for worst-case scenarios. It is the less dramatic incidents that providers may not be equipped to deal with without disappointing customers, whose expectations continue to rise.

To meet this challenge, organisations must correlate data from a growing number of operational systems, and make sense of it at sufficient speed to prevent, predict and flag incidents.

Insights must be communicated to the correct stakeholders and the right processes must be triggered, so that the necessary steps are taken to revert to normal operations as soon as possible – and Frequentis can help make this possible.

**Defining the required capabilities for incident management**

In general terms, Frequentis believes that solutions in the area of incident management rest on three functional pillars: decision support, communication support and workflow support.

By deploying an incident-management solution that embodies these capabilities and works seamlessly within complex, ever-evolving technology landscapes, transport organisations can improve their ability to respond rapidly and effectively. Ultimately, this will support them in providing more reliable, punctual and satisfying services to their customers.

Such information management systems are now so interconnected with other internal and external systems that they should not be considered in isolation.

From the architectural standpoint, the Frequentis solution philosophy is therefore to take a scalable, open, flexible approach based on modular systems that integrate freely with each other, with existing on-premises technologies and with technologies used by external partners. The system should permit sizing to suit the exact needs of each organisation, and should provide essential functionality and standard interfaces “out of the box”, with the possibility of extensive customisation.

In functional terms, this paper proposes that prompt restoration of normal services after an incident depends on having a highly integrated platform with the following capabilities, presented in the natural order from detection through resolution to post-incident reporting:

**Rapid identification and shared situational awareness**

Public transport organisations need to understand the “what, where, when” of every potential incident as soon as possible, through an incident management solution that is seamlessly integrated with other upstream and downstream systems. Frequentis can help you create shared situational awareness through technology that gathers and disseminates information between all relevant internal and external stakeholders, including tailored updates to end-customers.

**Defining workflows**

For operators to work effectively, organisations should equip them with dynamic resolution workflows. To support collaborative workflows and smooth cooperation, the management system should be able to automatically identify responsible stakeholders based on the type of incident and the stage reached in the resolution workflow.
Streamlined information distribution
An effective solution will automatically streamline information and alerts, tailoring them to the needs of each stakeholder and communicating them across the most appropriate channels. In doing this, organisations can help responders and other parties focus on the most important issues at each stage from detection through to resolution, and keep customers aware of circumstances throughout.

Rigorous documentation and post-incident summaries
An effective solution will preserve a clear record of all relevant activities in a comprehensive incident case file, automatically capturing and archiving information without requiring operator input. The incident management system should be capable of automatically generating a single post-incident summary suitable for audit purposes and compliant with the relevant regulatory and legislative frameworks.

Figure 2: Streamlining incident management in a highly dynamic environment
Future possibilities for incident management

By deploying an incident management solution that integrates support for decisions, communication and workflow in a dynamic and highly automated environment, public transport organisations can enable exceptional service continuity.

With faster detection, automated assignment of responsibilities, and targeted communication throughout the resolution process, this type of solution is invaluable during incidents where an organisation’s reputation is at stake. Equally, enabling faster resolution of incidents helps ensure that minor issues do not escalate into more serious problems.

From the management perspective, these capabilities facilitate better preparation for incidents of all kinds and give confidence that the organisation is investing in elevating customer experiences. A solution providing all of these capabilities will help reduce the potential impact of incidents – for example, ensuring substitute routes are available to your partners, or reducing compensation payments relating to delayed or cancelled services. It will also improve the efficiency and reduce the cost of managing incidents.

From the perspective of the control-centre operator, the use of dynamic, context-sensitive workflows and user interfaces will help improve the focus on key tasks, enabling more work to be handled in parallel without additional effort or stress. Meanwhile, front-line responders will benefit from timely and relevant information updates that simplify collaboration and provide real-time situational awareness.

Crucially, from the perspective of the end-customer, the ability to access fast, clear updates about service interruptions will improve satisfaction. For passengers, this will mean greater convenience and less chance of being left stranded part-way through a journey. For cargo operators, it will support clearer communications with downstream customers, ensuring that the ultimate recipients of the cargo in question can have advance warning of potential delivery delays.

As transport organisations get faster at resolving incidents, it is likely that enhanced service punctuality and reduced timetable disruptions will follow. Embracing this transformation will help providers ensure they need not fear their organisation’s name in a headline – because every story will be a good news story.