



Mobility management platform

MOBILE-ITCS

The Intermodal Transport Control System



The control center is the beating heart of a public transit provider. Vehicles are monitored, schedule deviations are recognized, necessary dispatching measures are executed and drivers are supported. The control center is also where dispatchers must perform as mobility experts. While dispatchers are managing the fleet, the system is recalculating and disseminating real-time information to ensure passengers are properly informed. To manage all of this, a robust operations management platform is essential.

MOBILE-ITCS

Operations Control

Incident Management

Connection Protection

Real-time Passenger Information

Third-party Integration for MaaS



Operations solution for bus & rail

MOBILE-ITCS is designed with your needs in mind.

*Whether for bus, streetcar or light rail transit, the system
is well prepared for integration with multiple agencies, as
well as multiple modes of transportation.*

PREPARED FOR THE NEW MOBILITY PARADIGM

The Intermodal Transport Control System

Connecting your operations across dispatchers, bus operators, transportation supervisors and passengers is critical - especially when there is an incident or change in schedule. MOBILE-ITCS is a comprehensive fleet management system supporting all passenger information channels and providing both incident and on-demand transportation management.

At the core of the ITCS is a powerful IT and communication platform, COPILOTpc. The compact on board unit organizes voice and data radio, calculates position and schedule adherence, integrates passenger announcements and supports all operational functionalities.

MOBILE-ITCS provides rich functionality for better service quality through linked services - from guaranteed connections and reliable customer information across multiple transportation providers - to interfaces with private transit services. This creates highly efficient mobility chains and an outstanding service quality.



Monitoring and control of current operations



Intelligent algorithms to calculate headways and delays



Automatic incident management



Real-time passenger information



Up-to-the-minute bus and train positioning

PASSENGER INFORMATION



With **DEPARTURESlive**, INIT's iOS and Android app, passengers can access real-time passenger information quickly and conveniently. They simply select stops from a list, map or from their bookmarks, and then receive reliable information on the next departures. The app also has a trip planner which can be used to retrieve information on possible door-to-door connections including transfers and walks.

The app offers **Augmented Reality**: using the smartphone camera, passengers can see at a glance the stops that are closest, as well as their distances. Once a stop has been selected, users can switch directly to the pedestrian navigation feature for step by step directions.

Assistive Technology

Visually-impaired riders often worry that the bus operator does not notice them flagging for the bus. INIT's mobile app provides personalized trip guidance by virtual hailing to alert bus operators that a rider wishes to board the bus. At the expected arrival time, an alert is given to the rider for when to board the bus. For hearing-impaired riders, the app uses the T-loop feature of hearing aids to provide an announcement upon arrival to the desired bus stop.



DYNAMIC COMMUNICATIONS

Fast & reliable real-time information

Your passengers want instant access to all kinds of information regarding their trips. They expect safe and timely travels from point A to point B. When there's an incident, they want to receive immediate information on their travel alternatives and for the problem to be solved promptly.

MOBILE-ITCS is an innovative operations control and real-time passenger information solution that allows you to keep your passengers up-to-speed every step of their journey. Using today's multi-media channels, your information can be shared seamlessly via social media, passenger displays, websites, apps and third-party applications. We help you build a powerful platform for multimodal mobility management.

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Prepared for disruptions

MOBILE-ITCS accurately calculates departure times using precise vehicle location information as well as intelligent prediction algorithms. It also considers the executed dispatching measures, even taking into account the trickle-down effects of the incident. This ensures that passengers always receive real-time information they can trust - especially when it matters most.

Using today's multimedia channels, your information can be shared comfortably through social media, displays, websites, mobile apps and third-party applications.



OPERATIONS CONTROL

Real-time traffic interface

overlays graphical real-time traffic info on the map display so dispatchers can proactively manage service disruptions. It can also be displayed on the vehicle mobile data terminal (MDT) to enable driver-initiated alternative routing.

Real-time State of Charge (SoC)

allows dispatchers an overview of charge levels for individual electric vehicles. It is also possible to define threshold values so an alert is triggered when the charge level falls below a certain threshold to ensure the dispatcher is aware.

Automated incident handling

ensures the consistent application of your Standard Operating Procedures (SOP) across your organization. Using a Complex Event Processing Engine (CEP Engine), dispatchers can monitor outside sources of information, like weather feeds and multiple internal sources of data. The CEP Engine suggests actions to the dispatcher like route deviations based on real-time traffic, or can trigger restorative measures based upon schedule adherence. Create your own scenarios (Sporting event, accident, road congestion, etc.) and trigger them when they happen.

Connection protection

can be pre-planned in the planning tool or created ad-hoc by dispatchers - or even operators. Dispatchers can hold connections that would have been released by the automatic system, can release connections that would have been held and can manage the connection protection system as a whole to ensure passengers are not left stranded.

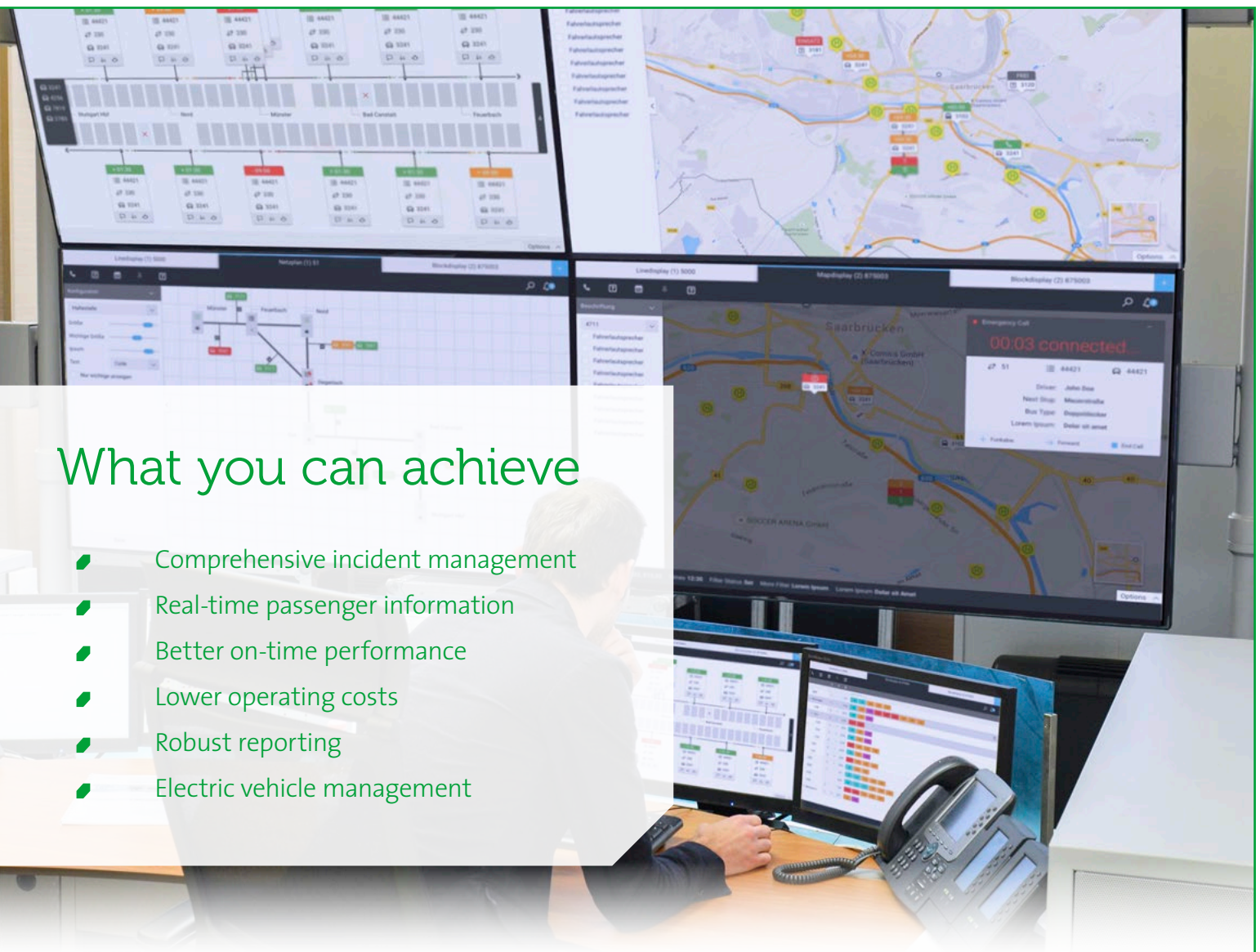
MOBILE-ITCS
has more than
30 Computer-
Aided Service
Restoration
(CASR)
measures and
features.

Ad-hoc detours

allows operators to receive detour and route information and an adjusted schedule on their driver display in the case of an unplanned detour. In addition, turn-by-turn instructions on the new route are provided. The ad-hoc defined detours and information on schedule changes are automatically transferred to the passenger information system.

Multi-view dispatching

allows you to combine up to four ITCS displays in one window. This makes it easier for dispatchers to get all the relevant information they need to properly assess a situation or resolve an error.



What you can achieve

- ✓ Comprehensive incident management
- ✓ Real-time passenger information
- ✓ Better on-time performance
- ✓ Lower operating costs
- ✓ Robust reporting
- ✓ Electric vehicle management

DRIVERS

Pre-trip inspection

allows you to run an inspection of interior and exterior bus components by entering any issues right from the driver terminal. The predefined list leads to more detailed sub-lists, e.g. wheelchair restraint broken, lighting inoperative, speakers non-functional. This module ensures timely reporting for keeping the fleet in a good state of repair.

Turn-by-turn navigation

provides audible and visual directions for drivers navigating unfamiliar routes, unplanned detours or on-demand transportation.

CUSTOMER STORY: TRIMET



In Portland, as in many cities, baby boomers are entering retirement in droves. TriMet has taken advantage of this demographic shift by hiring hundreds of retirees as new operators. This is a win-win for both parties, even if the solution also comes with some challenges.

Because TriMet's new operators weren't familiar with the layout of Portland streets, the agency was experiencing a significant loss in reliability due to an enormous number of off-routes. Operators were making wrong turns, and in some cases getting stuck because they were unable to turn the bus around.

In answer to this dilemma, TriMet turned to INIT to incorporate a turn-by-turn navigation system into the on board driver terminal. The innovative solution allowed operators to hear audible alerts and receive turn-by-turn instructions to keep them on-route and on-time. The result was an immediate reduction in the number of off-routes by TriMet operators.

TriMet's fully integrated ITCS and real-time passenger information systems allowed the agency to use data from the ITCS to provide an analysis for pinpointing traffic delay areas within the city. With this information, TriMet noticed a street that was causing major interruptions.

By implementing a dedicated bus and bike lane and adding additional signage, the agency was able to experience a 12% reduction in delays at that location. INIT technologies continue to improve efficiency and reliability in Portland as well as in other major cities around the globe.

12%
reduction in delays

TRIMET

.....
Fully integrated ITCS, RTPI and
E-fare systems
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Multi-client structure
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Region-wide system
.....

660 fixed route buses
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270 on-demand vehicles
.....

10 year partnership
.....

MODULAR & CUSTOMIZABLE

MOBILE-ITCS is a modularly structured fleet management system that can be tailored to the requirements of individual transit agencies and scaled to small, medium or large-sized transportation companies.

Integration with various third-party systems, as well as multi-client capability ensures flexible operations control allowing each company to manage their own data and services efficiently.



FEATURES



State-of-the-art operations control



Communication



Traffic signal priority



Real-time passenger information



Connection protection



Mobile dispatching tools



Real-time SoC monitoring



Forms & reports management



Turn-by-turn navigation



Incident management



Automatic Vehicle Location (AVL)



Autonomous vehicle integration

MOBILEmodi: Mobile dispatching tool



Incident management is the number one priority to ensure on-time performance and passenger satisfaction. MOBILEmodi is a mobile dispatching tool that delivers current operational and disruption information to supervisors in the field using an Android device.

A helpful extension of the MOBILE-ITCS, MOBILEmodi provides support to field dispatchers for managing disruptions like unplanned events, accidents or delays. Through dynamic vehicle and map displays, a comprehensive overview of current operations can be seen. With MOBILEmodi, traffic supervisors have the same access to relevant ITCS information as dispatchers in the control center.

MOBILEmodi is equipped with voice and text communications so supervisors can receive messages from vehicles or other mobile supervisors, as well as send text messages to one or more vehicles or lines.

With the integration of the form management tool, MOBILEforms, supervisors can manage and report on incidents in the field. Photos, alerts, forms and reports provide for complete operational management and execution of the most useful service restoration measures.

MOBILEmodi

- View service status via block, line or map display
- Communicate (voice and text) with vehicles and dispatch
- Automate SOPs
- Perform the most useful CASRs

If you would like to know more about MOBILE-ITCS, please contact us at sales@initusa.com, or visit our Solutions page at initusa.com.

More than 600 customers worldwide rely on our integrated solutions to support them with their daily tasks

- *Planning & Dispatching*
- *Ticketing & Fare Management*
- *Operations Control & Real-Time Passenger Information*
- *Analyzing & Optimizing*

and they also benefit from our proven Service & Maintenance support.

INIT is the worldwide leading supplier of integrated planning, dispatching, telematics and ticketing systems for buses and trains. For more than 30 years, we have been assisting transit agencies in making public transit more attractive, faster and more efficient.

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