



IMPROVE THE JOURNEY

Our information systems have been designed for more reliable, easier to manage, better to maintain and, in terms of content, even more exciting passenger information. The systems guarantee that the relevant data is available for passengers at every step of their journey.

Manage every information channel

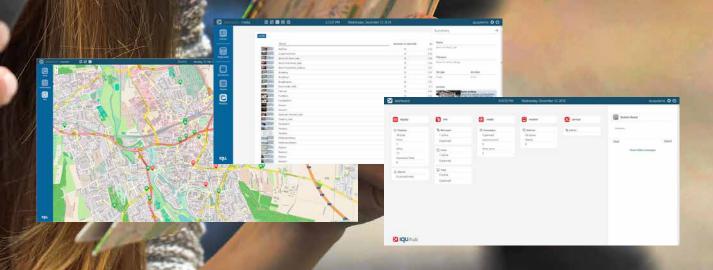
If you are looking for an effective solution to manage and deliver passenger information, our system provides you with a multitude of interfaces to multiple sources but also APIs to an array of information channels. This way, you can ensure that relevant information is available where you need it most: at every location in your transport network.

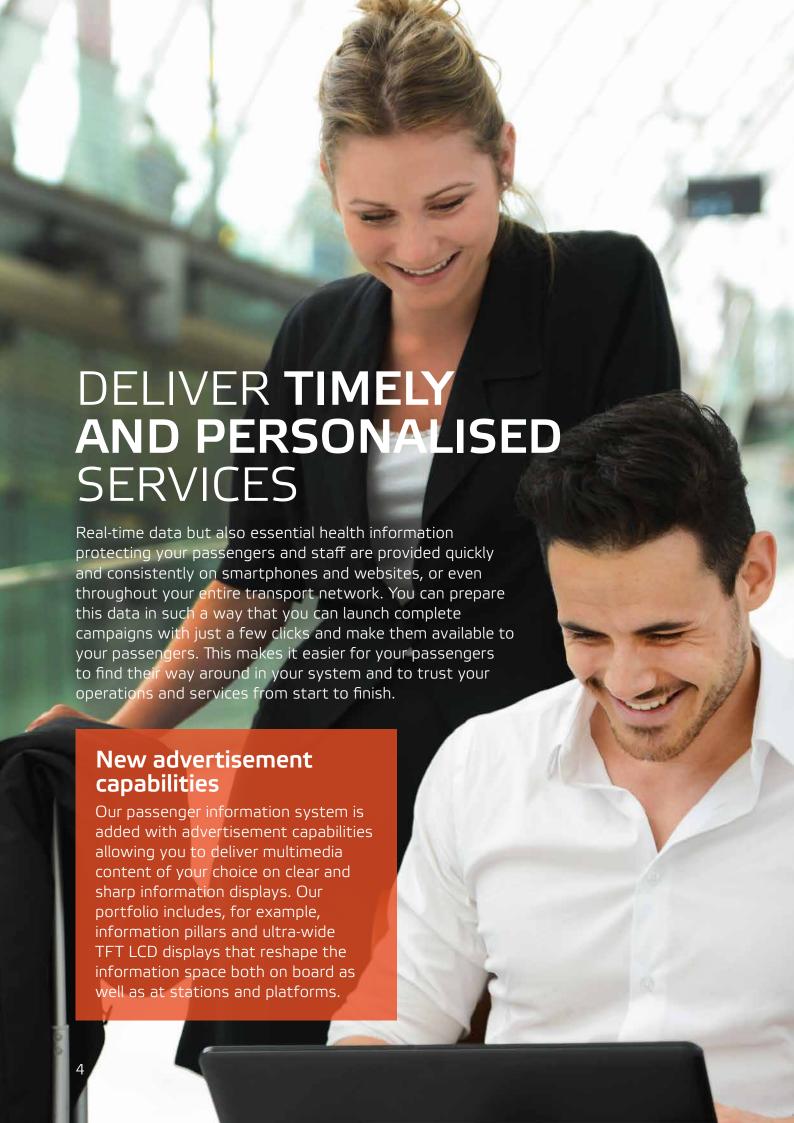
Keep passengers informed

In order to minimize the dispatcher's workload, we have defined automated processes for them. As long as there are no service disruptions, they would only need to monitor the operation of the network. And if critical situations should occur during operation, your dispatchers can quickly launch specific information campaigns across all channels and media.

Let your system grow

You can utilize our system equally for the smallest fleets and numbers of passenger information units, as well as for complete train, tram and bus fleets and entire cities. The web-based and modular software architecture adapts to your needs, regardless whether you want to expand your operation or use new software functions. Our iqu/hub is the right software tool for you.





CASE REFERENCE

Passenger information system in the Stuttgart Region

With comprehensive software and more than 270 displays within the Stuttgart Metropolitan Area (VVS), Teleste's passenger information system is one of the largest applications of its kind in Germany. The system covers a high technological bandwidth with TFT, monochrome and full-color LED displays.

In addition, over 40 clients and more than 100 users use the web-based central background system to efficiently monitor and administer the displays. The real-time data comes via the VVS data hub and is transferred directly to the displays without delay.



FOCUS ON WHAT IS IMPORTANT: THE PASSENGER

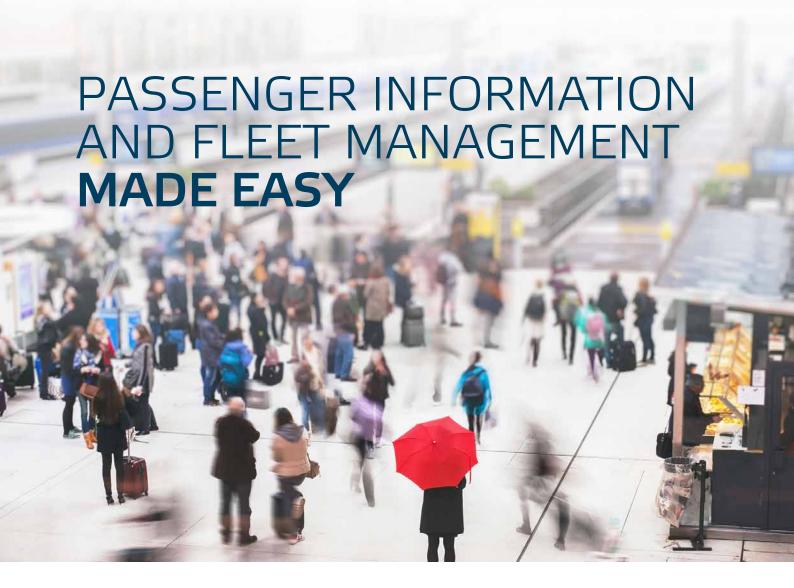
Today's passengers expect accurate and real-time travel information, available right when they need it. By ensuring the delivery of up-to-date information throughout the transport system, you can improve the passenger experience as well as eventually increase ridership and revenues.

Utilizing a multitude of sources

The essential basis of real-time information is the position data of buses and trains, which is essential for accurate arrival and departure information. If this data is generated continuously, passengers use it to plan their journeys or to find alternative lines, routes and connections in the event of service disruptions. Here, Teleste's background system uses real-time data from a wide range of sources to effectively and accurately inform passengers across all transport systems and communication channels.

Different services for different needs

One of the major challenges for public transport is the vast variety of passengers and passenger needs. Our background system processes the data for a variety of communication channels to meet the individual needs of passengers. Whether displays, websites, social media or even smartphones: With our sophisticated software suite iqu/hub, you will offer your passengers both consistent data and individualized and tailored information across all communication channels.



Our passenger information system offers several smart modules for checking the content of displays, delivering information about service disruptions, creating content playlists for selected displays or for monitoring your fleet on a digital map. You can simply choose the modules that best meet your needs and requirements. The system is browser-based and can be operated anywhere.

Display control with the display hub

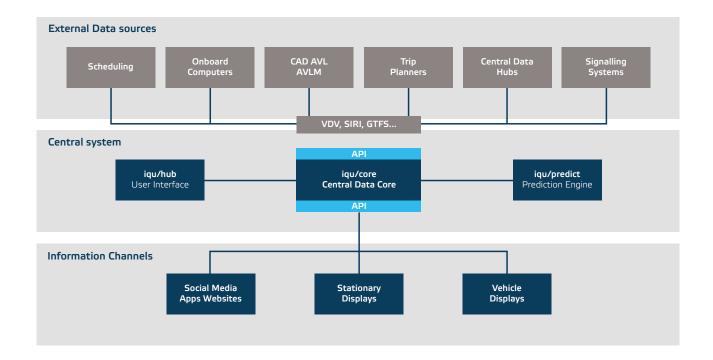
When you have hundreds or thousands of displays on the street, at a station or railway, bus or metro line, you have to know whether they work and what they are showing. Our passenger information system allows you to do that: the simple, graphic view enables you to check the status of your displays and what is currently being presented on them. You can see:

- Status updates from all the displays
- Tabular and simple visualization of all error messages
- The display content that is retrieved via live stream and screenshots

Passenger information management

One of the essential tasks in a passenger information system is notifying the affected passengers in case of service disruptions or unexpected incidents. To enable quick and easy management and delivery of messages, our system offers you:

- Overview of all existing information measures
- Creation of new messages in just a few mouse clicks
- Fast initialization of complete information campaigns
- Logical selection of stops, displays, routes and dates



Media content management with the media hub

In addition to classic content such as departures and special texts, the media hub can also be used to present higher-quality information, especially on TFT displays. This includes, for example, texts, images and videos that are compiled into playlists and visualized on selected displays or display groups.

These playlists can also be scheduled to be displayed automatically at certain times of the day or on specific days of the week. With the media hub you have an easy overview of all visual playlists and also their contents, in order to adjust and edit all essential visual elements at a later stage.

Fleet monitoring with the monitor hub

To keep track of your fleet, you need to access their location information easily and in real-time. Our system offers you a very inexpensive alternative to traditional AVL (automated vehicle location) system solutions allowing you to monitor your vehicles moving around the city, or rail and metro lines. On a clear and simple map view, you can instantly see whether each of the vehicles is on time and how it is connected to the other vehicles within your transport system. Providing information from fleet management to other parts of the system allows you to create unique and precise

passenger information including, for example, automatically calculated and delivered departure forecasts for all vehicles and stops.

The smart data core application iqu/core

In order to perform all these tasks of passenger information and fleet monitoring precisely, a high-performance core application is required. With iqu/core, a data core is available that links all known data sources via APIs and interfaces such as VDV, SIRI, GTFS, etc. with the data consumers, also on an API basis. The data is processed in abstracted form in real time and transmitted to all connected applications. The APIs are disclosed as far as possible so that third-party systems can also connect to our system.

Consistency across all media and channels

Teleste's portfolio includes a wide range of modern display technologies such as TFT LCD, mono-chrome and full color RBG LED as well as low energy displays. In addition to display media at stations, as well as in vehicles, data is transmitted to social networks and apps. All these media are served by the iqu/core, which incorporates all available data. This ensures that maximum consistency of all information is achieved on all channels. The modular system architecture ensures that the Teleste solution can be integrated into almost any existing IT environment.



TELESTE CORPORATION P.O.Box 323 FI-20101 Turku Finland www.teleste.com

P2P_Teleste Passenger Information System, April 2022

Copyright © 2022 Teleste Corporation. All rights reserved. Teleste and the Teleste logo are registered trademarks of Teleste Corporation. Other product and service marks are the property of their respective owners. Teleste reserves the right to make changes to any features and specifications of the products without prior notice. Although the information in this document has been reproduced in good faith, the content of this document is provided "as is". Teleste makes no warranties of any kind in relation to the accuracy, reliability or content of this document, except as required by applicable law.