



SOLUTION BROCHURE

Barrier-free travel with ebblo Assist

ebblo Assist – Digital inclusion in public transport



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ebblo Assist is an innovative passenger information system that makes it possible for the blind and visually impaired and people with restricted mobility to use public transport without needing assistance. The solution combines a smartphone app for iOS and Android, vehicle hardware and a backend system in a barrier-free overall solution – developed in close cooperation with the Swiss Association for the Blind and Visually Impaired (sbv).

For ebblo Assist, Trapeze's tried-and-tested mobility assistance system "INTROS" has gone through further technological development and new functions have been added. INTROS is already being used successfully in several cities, including Kiel, Saarbrücken and Schaffhausen, while the extended system ebblo Assist will be used in Berlin for the first time. INTROS was also already developed with specialists from the sbv, in other words, directly by affected people for affected people. The solution has gone through continuous improvements with intensive practical tests, and thus combines years of experience with state-of-the-art technology.

ebblo Assist was devised accordingly so that it fulfils even complex customer requirements. Large transport operators in particular need efficient back-end systems and their own self-service portals – exactly what ebblo Assist provides.

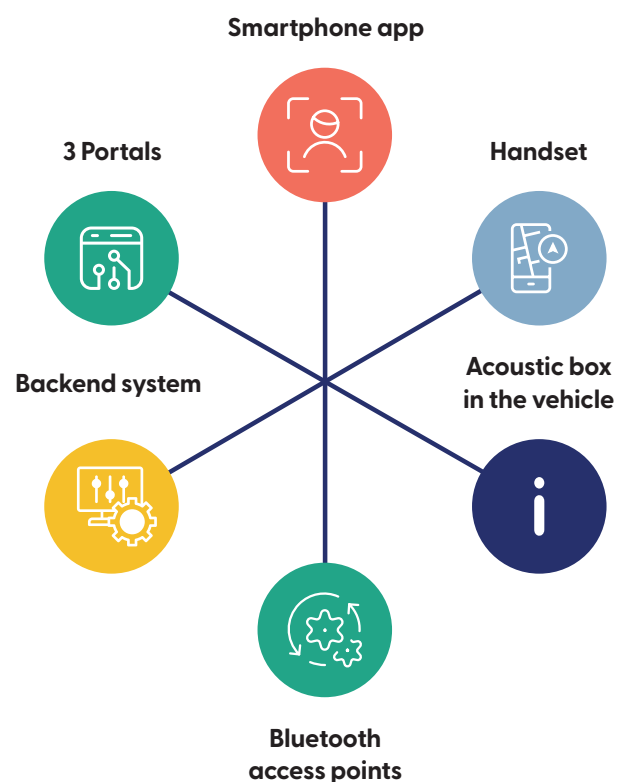
Efficient vehicle hardware, a neuronal text-to-speech engine and open interfaces create a basis for making public transport sustainably more inclusive.

Challenges

People with restrictions continue to come up against numerous barriers when using public transport. Stops frequently fail to provide the crucial information about which vehicle is arriving and where it is going. The position of the doors is not clearly apparent, causing uncertainty when boarding. Orientation while the vehicle is moving is a particular challenge, and alighting in time often causes stress. Communication with the driver is frequently not possible or does not go smoothly, which further impacts self-sufficiency.

At the same time, the transport operators are facing complex requirements. They are obliged to meet statutory regulations for barrier-free accessibility and reducing noise levels. At the same time, they must keep their workflows efficient and enhance their public image. Integrating new technologies is hampered by different on-board computers, AVL systems and vehicle equipment. Furthermore, there is a need to comply with data protection regulations and manage consents in accordance with the law.

ebblo Assist consists of



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ebblo Assist meets these challenges with a non-discriminating, scalable system for acoustic and digital passenger information. It is based on open interfaces and a modular architecture that facilitates integration in many different system landscapes.



ebblo Assist can be used both with Trapeze or ebblo on-board computers and also with devices of other makes. It becomes completely integrated in existing workflows, and supports both planned journeys and also spontaneous trips.

Journey planning and real-time information via smartphone app

- sbv's barrier-free "Intros-ÖV-Radar" app has a screen-reader-compatible user interface
- The app supports journey planning (e.g. with HAFAS) and also real-time information
- Digital boarding and alighting requests are transferred, routes saved, navigation
- Own apps can be integrated on request

Handset

- Ergonomic handset, for uncomplicated, anonymous use
- Two buttons: trigger announcement or boarding and alighting request

Acoustic box in the vehicle

- Efficient acoustic box with octa-core processor and Linux operating system
- Integrated amplifier
- Neuronal text-to-speech engine for announcements in top voice quality

Bluetooth access points

- Ensure stable connection to the app or handset
- Integration with on-board computer and driver terminal via standard protocols (e.g. IBIS-IP)
- Seamless embedding in existing vehicle systems

Backend and portals

- Backend: Cloud-native platform (SaaS), securely hosted in European data centres (GDPR-compliant)
- Admin portal: Transport operators manage their fleet, configure volume profiles and monitor the status of devices in real time
- Self-service portal: Passengers manage their personal data and settings independently
- Helpdesk portal: Support team can efficiently assist passengers with setup or during their journey

Advantages for passengers and transport operators

ebblo Assist offers passengers real benefits in terms of independence. Blind and visually impaired passengers and people with restricted mobility can use public transport without needing assistance, with acoustic signals, door finding signals and real-time interaction with the driver offering a high degree of safety. The system creates equal access, promotes inclusion and enhances comfort with intuitive usage and clear information.



Intuitive usage and clear information with ebblo Assist



Meet statutory regulations for barrier-free accessibility

ebblo Assist is adaptable:

Personal settings – such as louder volume or longer interchange times – make sure that the individual needs of users are taken into consideration. These preferences can be conveniently saved in the self-service portal.

There are also multiple benefits for transport operators. With ebblo Assist, they can reliably fulfil the statutory regulations for barrier-free accessibility, while also enhancing their public image by making a visible commitment to social responsibility. More efficient boarding and alighting processes reduce the number of delays in the operational workflow.

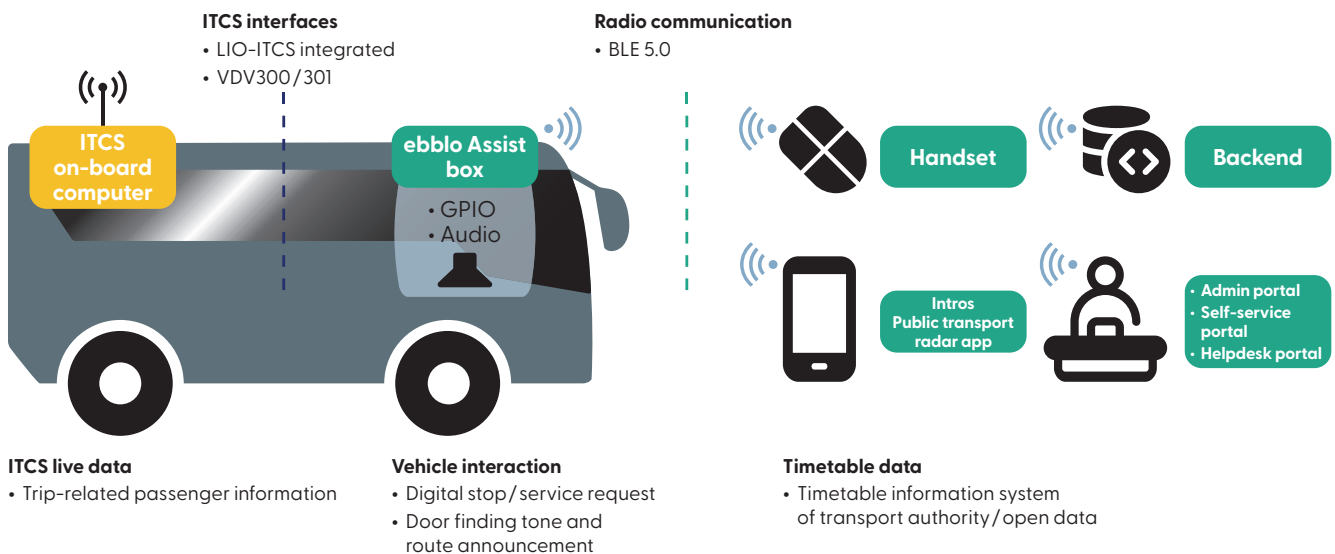
ebblo Assist for companies of all sizes:

The system is easily scaled and can be used in both small fleets and large multi-agencies.

ebblo Assist can be used with third-party on-board computers or AVLC systems:

The open architecture means that ebblo Assist also works without ebblo or Trapeze on-board computers and can be integrated flexibly in existing AVLC and IBIS-IP environments.

INTROS solution architecture



Prerequisites

Certain general conditions have to be fulfilled for ebblo Assist to develop its full potential. Vehicles already equipped with Trapeze or ebblo on-board computers of the latest generation can use the system straight away. The ebblo Assist Box is available for companies without Trapeze or ebblo on-board computers. The box is connected to the on-board computer via IBIS-IP and to the vehicle's exterior loudspeakers via the audio system.

On the organisational level, a client has to be set up on the AVOC cloud platform. This platform manages all data in compliance with the GDPR and maintains the user accounts; it is also responsible for central control of the system functions. The "Intros ÖV-Radar" app itself is available in the app stores. Furthermore, drivers and service engineers are given specific training. The operator can set up a help desk to provide users with direct support when the need arises.



ebblo Assist – a pioneering solution for your company too

You don't have to be an ebblo or Trapeze customer to use ebblo Assist. The technology is based on open interfaces and can be used in all vehicles. ebblo Assist works both with ebblo or Trapeze on-board computers and also other makes of vehicle equipment. You can equip complete multi-agencies with ebblo Assist, even if the transport operators use operations control systems (AVLC) of different makes.

Place your trust in our expertise when it comes to barrier-free accessibility, which we have acquired in the course of product development and numerous practical tests. Thanks to the valuable cooperation with the Swiss Association for the Blind and Visually Impaired, we are able to offer an optimised, marketable product that gives passengers concrete support on an everyday basis and facilitates barrier-free journeys.



About us

ebblo helps public transport providers move confidently into the future. Our advanced Intelligent Transport Control Systems (ITCS) adapt as mobility evolves – powered by future-proof technologies and decades of expertise. We deliver robust, best-in-class solutions, scalable platforms and next generation architectures – ensuring flexibility, control, and security. Our solutions streamline operations, improve accuracy, and enable cleaner, faster, and more accessible and barrier-free networks – making public transport the natural choice for everyone. With proven reliability and transformative innovation, ebblo is your trusted partner for what's next.

ebblo is part of Modaxo, the global collective of people transportation technology companies within Constellation Software Inc. (TSX: CSU).

Ready for what's next?

Transform your public transport operations with innovation engineered for change.

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