

Telia VoIP

Voice communication between drivers and traffic management

Improve communication between drivers and traffic management by adding VoIP voice communication to your vehicle. A screen, microphone and speaker are placed by the driver's seat, and the conversation can begin.

Call one of multiple drivers

Telia VoIP is an expanded messaging feature that helps traffic management communicate with drivers using voice.

In the communication central portal, traffic management can easily manage garages, filter posts, call buses or other contacts, and respond to incoming call requests from the driver

SOS with GPS

VoIP is ideally suited to be paired with the Driver's Alarm emergency alarm. The Driver's Alarm button indicates the GPS position of the vehicle while the driver is connected via the public telephone network to traffic central or emergency dispatch center, which can listen in on the situation. Data from incoming alarms are then visible in the cloud-based portal.

Key benefits

- Efficient voice communication between traffic control and drivers
- Possibility to connect VoIP with an alarm button and GPS for increased security
- Remote software configuration
- Intuitive user interface on screen and portal

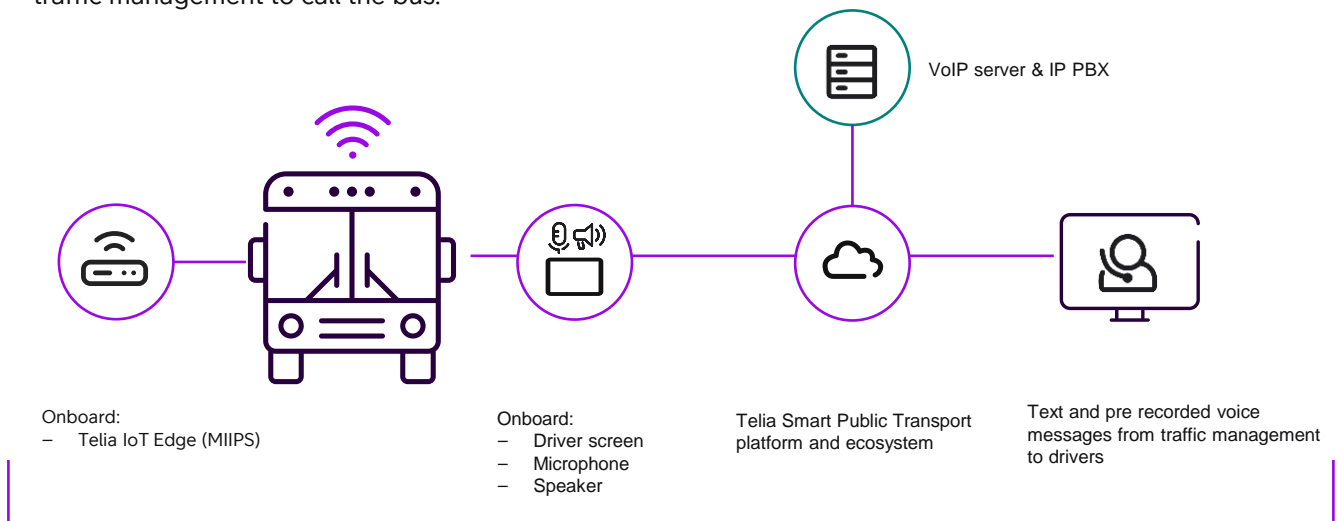


How VoIP works

VoIP is a service that runs on the Telia Smart Public Transport platform and is connected via Telia IoT Edge; our powerful onboard edge processor and gateway. Telia IoT Edge delivers real-time data to drivers and to the cloud.

A Telia IoT Edge unit, Telia driver's touchscreen and communication equipment are installed in the vehicle. The robust screen offers an advanced, user-friendly interface that enables interaction between drivers and traffic management. The driver can use the screen to respond to calls from the traffic management, or send a request for the traffic management to call the bus.

The Telia IoT Edge unit sends information over the mobile network via Telia's server, and the information then becomes accessible in the customer portal. The portal provides a good overview of garages, routes, vehicles, and call requests, etc. When a call request is received, traffic management may decide to call immediately or wait. Traffic management can call a vehicle directly or contact a specific trip and start a group call with multiple vehicles.



End-to-end security, reliability & support

Consolidate your IT systems to one open platform

Telia IoT Edge is a powerful onboard edge processor and communication gateway. It is retrofittable and connects onboard systems and devices to the cloud. This makes it possible to download vehicle data, control, survey, update and configure IT-systems in the vehicle remotely. Telia IoT Edge combines robust, maintenance-free design with reliable and open software and application.

With an open platform, APIs and standards; you can easily integrate your own services – or add third party applications. So you can make the most of whatever the future brings.

Technical components: Telia VoIP

Onboard unit	Telia IoT Edge (MIIPS)
Touch screen	Telia Android Screen
Speaker	
Microphone	
Handset	
System	Call administered via VoIP PBX Asterisk (software-based switchboard)
Web Interface	Communication Central
Software	CODEC for voice (enables Voice over IP)

Want to learn more? Let's talk!

Web: telia.se/foretag/uppkoppling/smart-kollektivtrafik

Email: iot-sales@teliacompany.com



Telia Message Push

Text communication between drivers and traffic management

Send messages from traffic management's cloud-based user interface to the touchscreen located on the driver dashboard. The driver can respond to traffic management with a status code

Communication by text

Message Push is a messaging feature that helps traffic management communicate with drivers through text and voice-based messages. Traffic management can easily manage garages, send mass messages, filter posts and respond to status codes at the press of a button. When traffic management sends a critical message, the message is prioritized and shown directly on the driver's screen. In other words, the driver does not need to actively open the message.

Customize your status codes

Because no two traffic management centers are alike, customers can upload their own status codes for driver communication based on the needs of the individual company.

Key benefits

- Own status codes for easy and safe responses
- Set your priority: standard, urgent and critical
- The driver can respond with a status code or initiate/send communication
- Overview of your garages, routes and vehicles
- Send individual or mass messages
- Remote software configuration
- Intuitive cloud-based communication portal





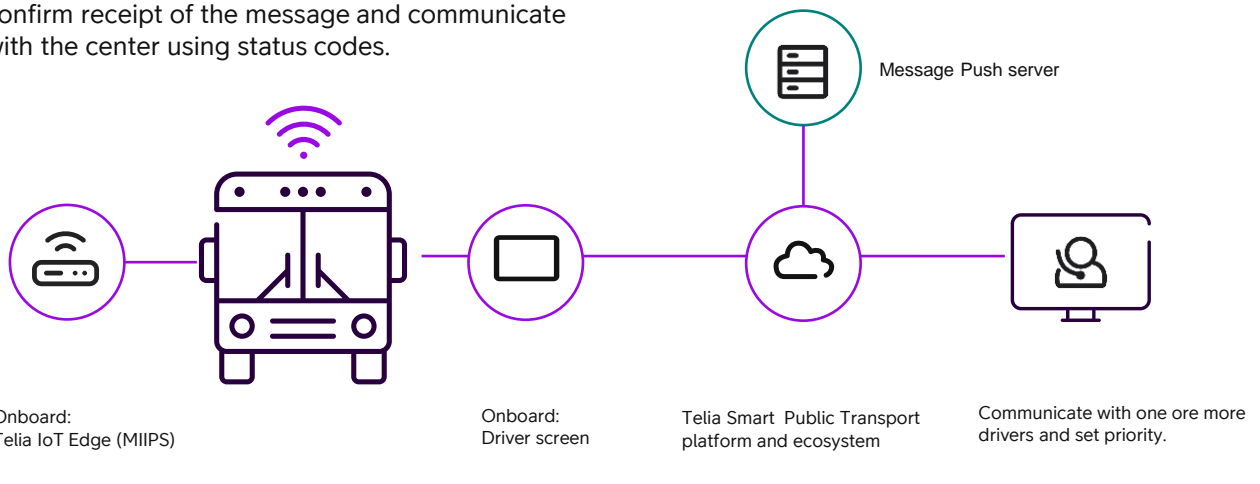
How Message Push works

Message Push is a service that runs on the Telia Smart Public Transport platform and is connected via Telia IoT Edge; our powerful onboard edge processor and gateway. Telia IoT Edge delivers real-time data to drivers and to the cloud.

A Telia IoT Edge and a touchscreen are installed in the vehicle. The robust driver screen provides an advanced, user-friendly interface that enables interaction between the driver and the traffic management center. The screen allows the driver to receive messages from traffic management, confirm receipt of the message and communicate with the center using status codes.

The Telia IoT Edge unit sends information over the mobile network to Teila's server. This information then becomes accessible via the traffic management center customer portal. The portal provides a good overview of your garages, routes and vehicles, as well as incoming status codes.

It is easy to send messages to one or more buses and see the driver's response in the form of a status code. The administration sees a current view of the most recent messages and can easily search the log for older messages.



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