



POIS – The FELA PIS passenger information system

20.12.2022

POIS

Software-module

POIS Software-module

- POIScentral
 - Control center and backend
 - Interface to VDV standard, timetables and operational data import, real time data hub
- POISmobile
 - Control of the components in the vehicle
 - Transmission of the video and audio content to the displays, audio systems, call stations and HMI
 - Interfaces and software for mixed and multiple traction



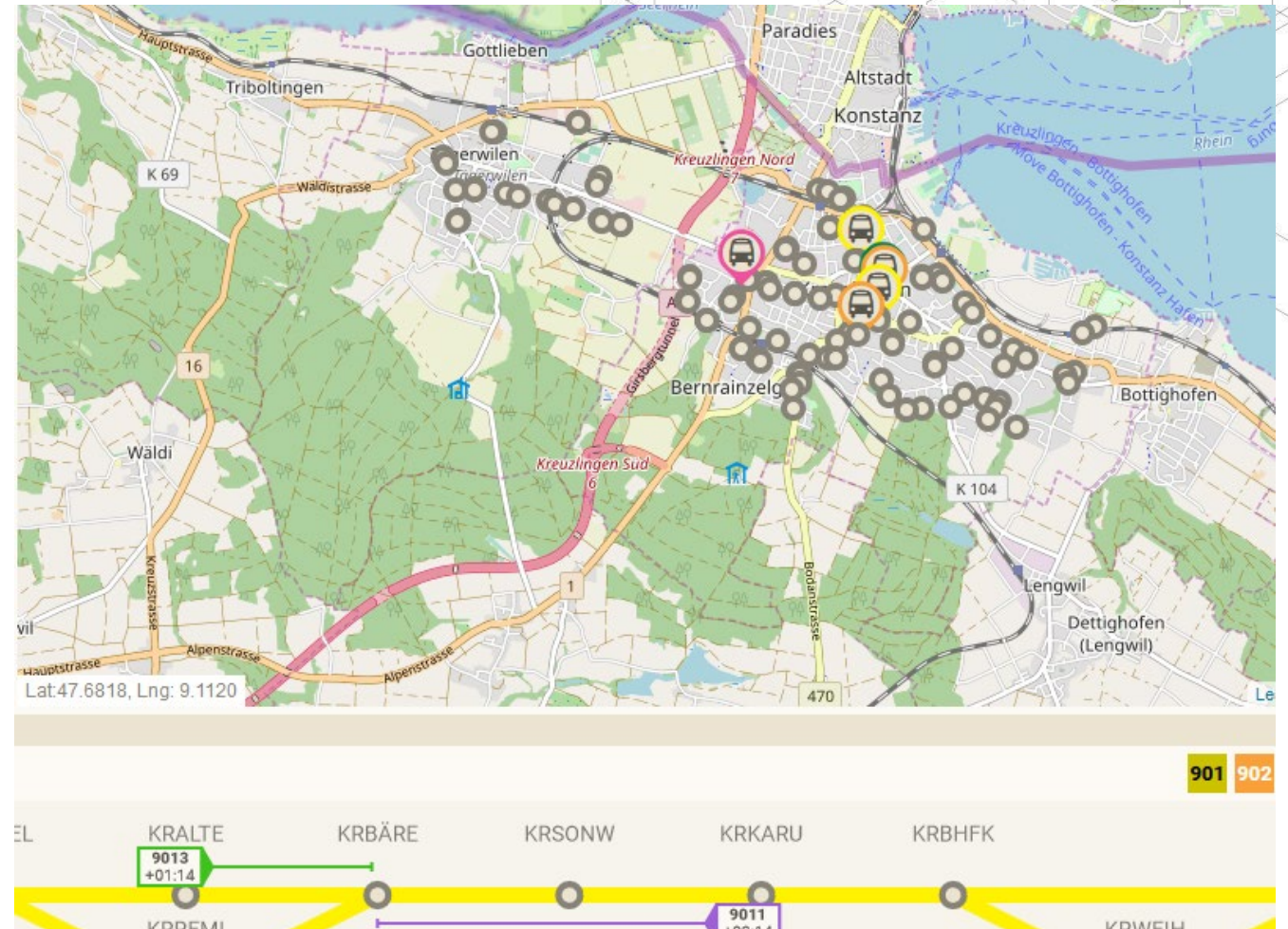
Web based control center

- Central control of all systems and components for passenger information
- Visualization of real-time information
- Intuitive user concept
- Modular, scalable and platform independent



Real-time visualization control center

- Map display
- Vehicle table
- Line variants
- Short messages about the vehicle
- Data analysis and statistics
- Fault management PIS



More features

- Connection to the FELA data hub
- Interfaces to VDV 452, 453 -ANS, -DFI, -VIS, 454 AUS und REF-AUS
- Rapid implementation of customer-specific extensions
- Coordinated customization for VDV 452 interface
- Over the Air Updates



POISmobile visualization

Information for the train driver

- Representation of the current stops
- Make announcements
- Display of the camera images in the event of an alarm
- Texts of the outdoor advertisements
- Audio settings
- Notifications from the control center
- Display front/rear camera images
- Setup of multiple traction



POISmobile visualization

Audio communication for the train driver

- Wagon specific passenger announcements
- Calls from/to the control center
- Emergency call communication to the intercoms
- Video activation in the event of an SOS
- Cab to cab communication



POISmobile visualization

Information for the passenger

- V580 compliant
- Many design options
- Web based and flexibel

S7 Bern **STOP**

10:10	Worblaufen	Halt auf Verlangen
10:13	Papiermühle	Halt auf Verlangen
10:16	Ittigen	Halt auf Verlangen
	Worb Dorf	

Ankunft 12:00

S18 Stadelhofen **STOP**

Abfahrt 10:10

10:10	Kreuzplatz	Halt auf Verlangen
10:13	Signastrasse	Halt auf Verlangen
10:16	Hegibachplatz	Halt auf Verlangen
10:19	Hedwigsteig	Halt auf Verlangen
12:00	Esslingen	

Zug hält

10:10	Mitterschwanden	Halt auf Verlangen
10:13	Grubisbalm	Halt auf Verlangen
10:16	Freibergen	Halt auf Verlangen
12:00	Rigi Kulm	

Tägerwilen,
907 Ernst Kreid **STOP**

Abfahrt 10:10

10:10	Tägerwilen, Sportplatz
10:13	Tägerwilen, Bahnhof Tägerwilen Gottliebe
10:16	Tägerwilen, Industrie
12:00	Kreuzlingen, Paulistrasse

R ESTACION CENTRAL SAN ANTONIO **STOP**

10:10	EL ARCO
10:12	Av. SANTA BÁRBARA
10:14	ALEJO CALATAYUD
	AGRONOMIA

Llegada 12:00

S18 中心站 **STOP**

离开 2:09

12:11	餐厅
12:14	研究
12:17	游乐园
12:19	医院
12:22	湖全景

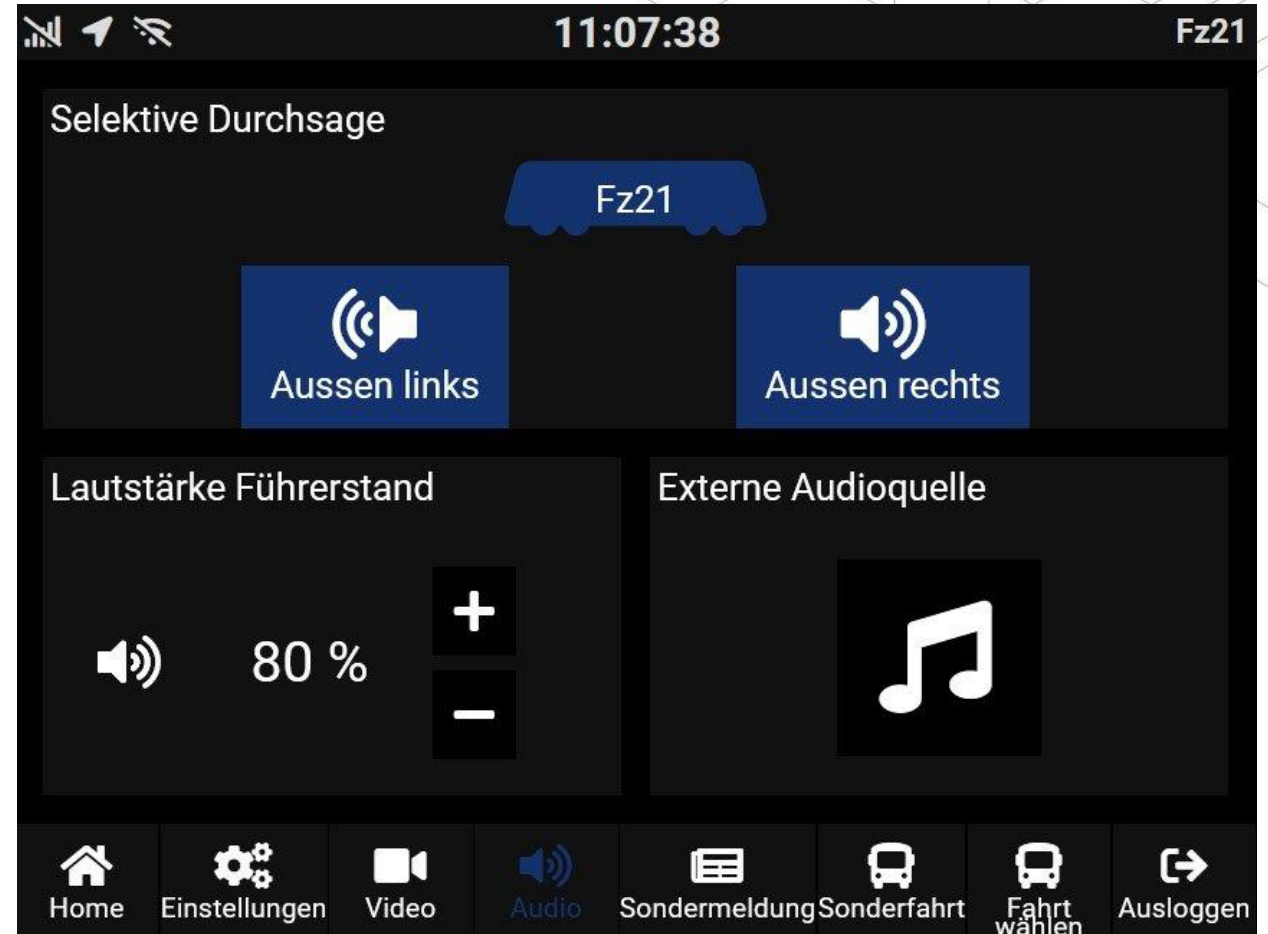
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YEAR OF THE TIGER

POISmobile

Audio information for the passenger

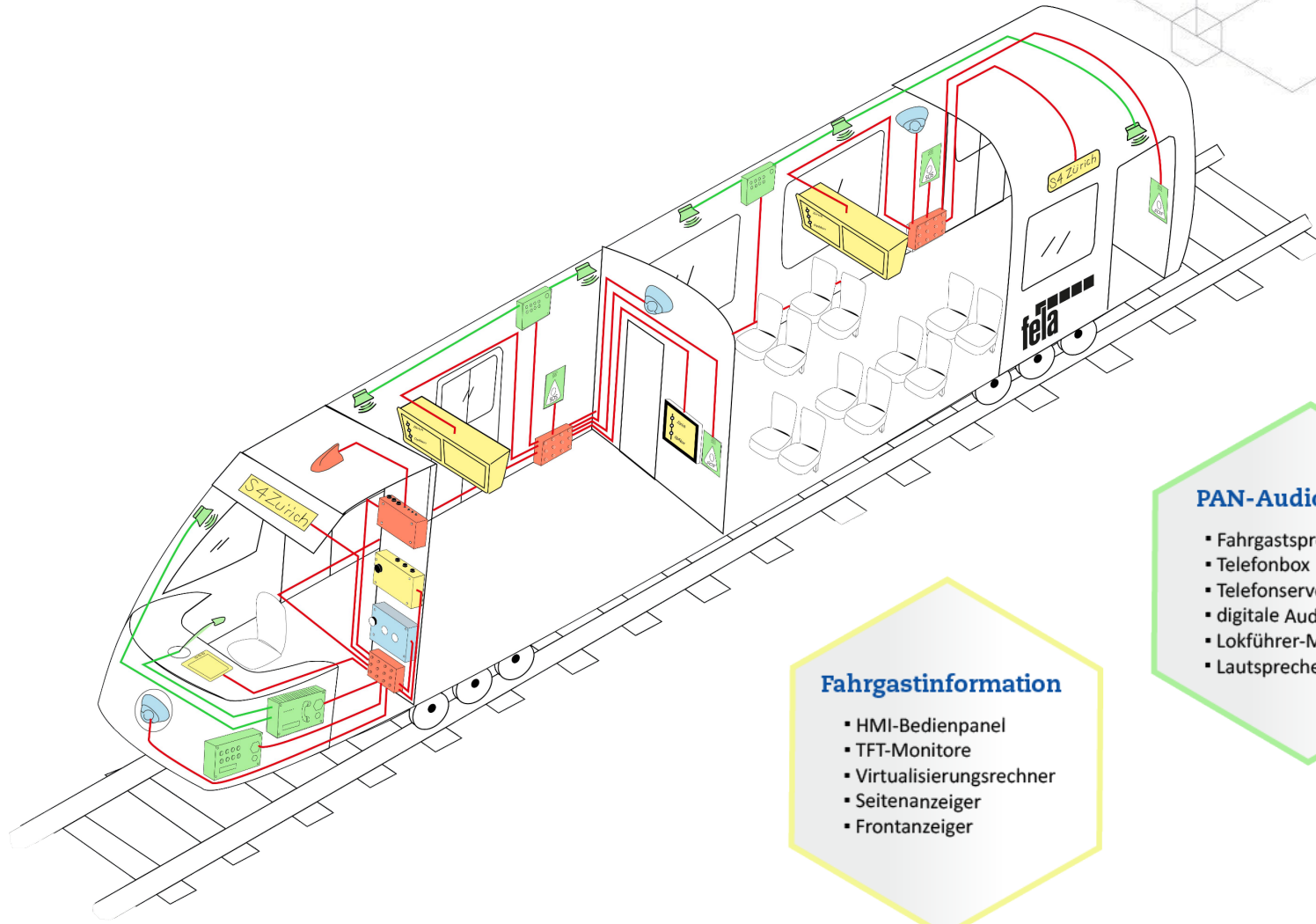
- Automatic announcements of stops and special points
- Indoors or outdoor output
- Manual announcements by the train driver to the passengers
- Voice of the control center in the passenger compartment
- Text To Speech functions



POIS

Vehicle components

What's on the vehicle...



Fahrgastinformation

- HMI-Bedienpanel
- TFT-Monitore
- Virtualisierungsrechner
- Seitenanzeiger
- Frontanzeiger

PAN-Audiosystem

- Fahrgastspchstellen
- Telefonbox
- Telefonserver
- digitale Audioverstärker
- Lokführer-Mikrofon
- Lautsprecher

CCTV-System

- Innenkameras
- Frontkamera
- Videorekorder

ZUKO-System

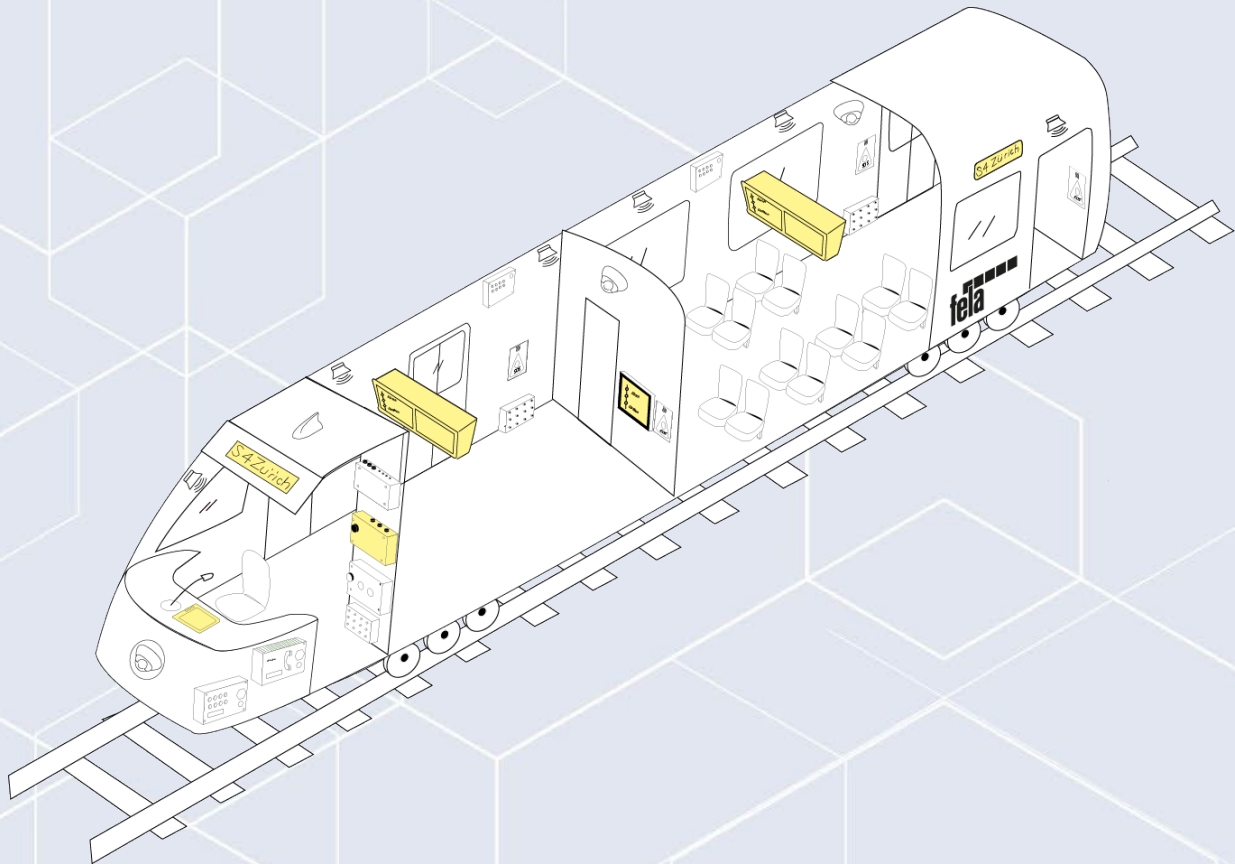
- Ethernet Switches
- Router
- Antenne

PIS components

- Interior displays as TFT monitors and LED variants
- Front and side indicators in LED or TFT technology
- Voice stations for calls for help and emergency calls
- Audio output systems with digital amplifiers
- Telephone box
- HMI control panel in the train driver's cab
- Video surveillance with recording and live stream
- Network components and routers



PIS visualization



TFT monitors

- High-quality TFT monitors
- Customizable to customer requirements
- Wall or ceiling mounting
- Light weight
- DIN EN50155
- Various models and screen diagonals
- Long service life and lifecycle management



LED matrix exterior displays

- Optimized for outdoor use on the front and side
- Ultra bright LEDs
- Optimal readability
- In the variants white, amber or multi color
- Very long lifespan
- Compact design
- Implemented dimming function
- TFT variants in preparation

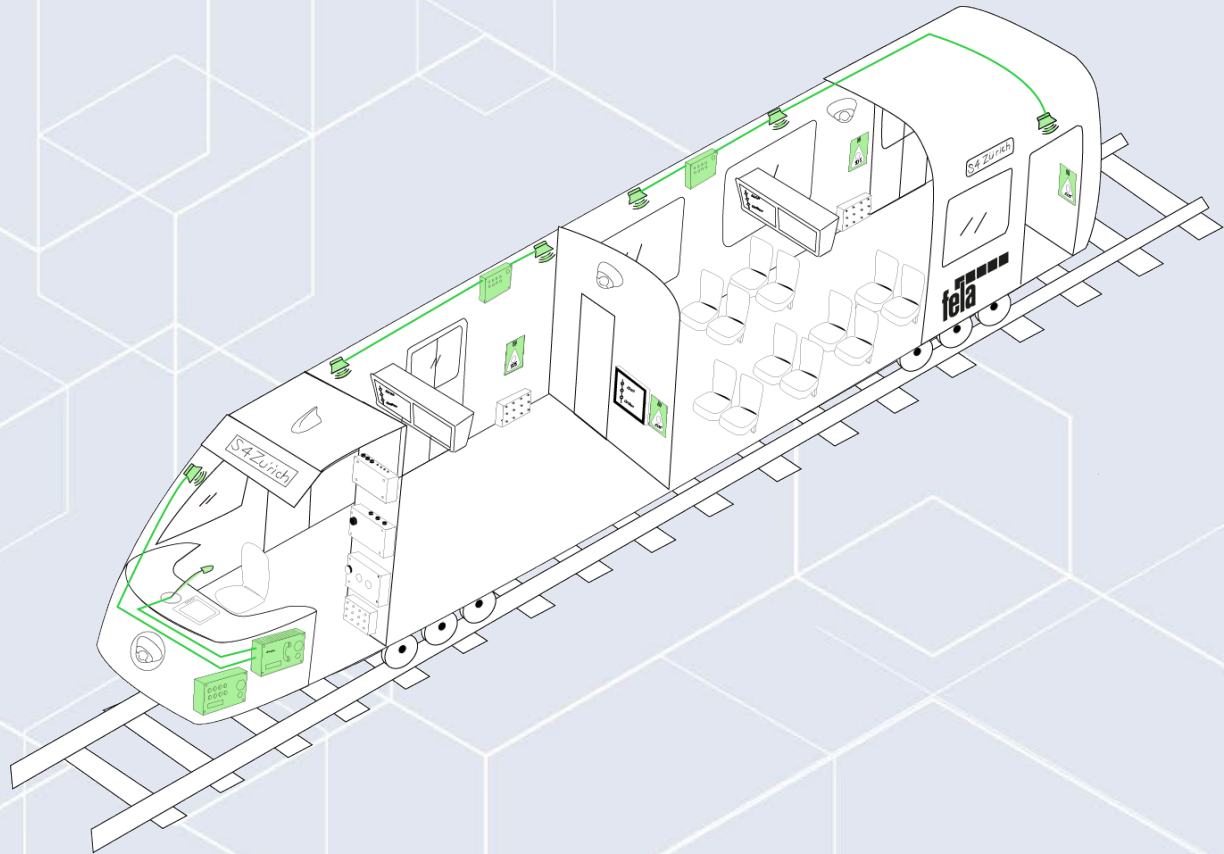


HMI operating panel

POISmobile Operation from the driver's cab

- Suitable for railways according to EN50155
- Non-glare display
- Touch operation
- Robust construction
- Easy construction
- Soft keys



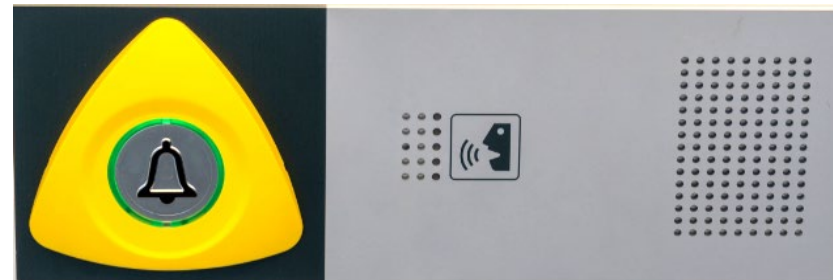
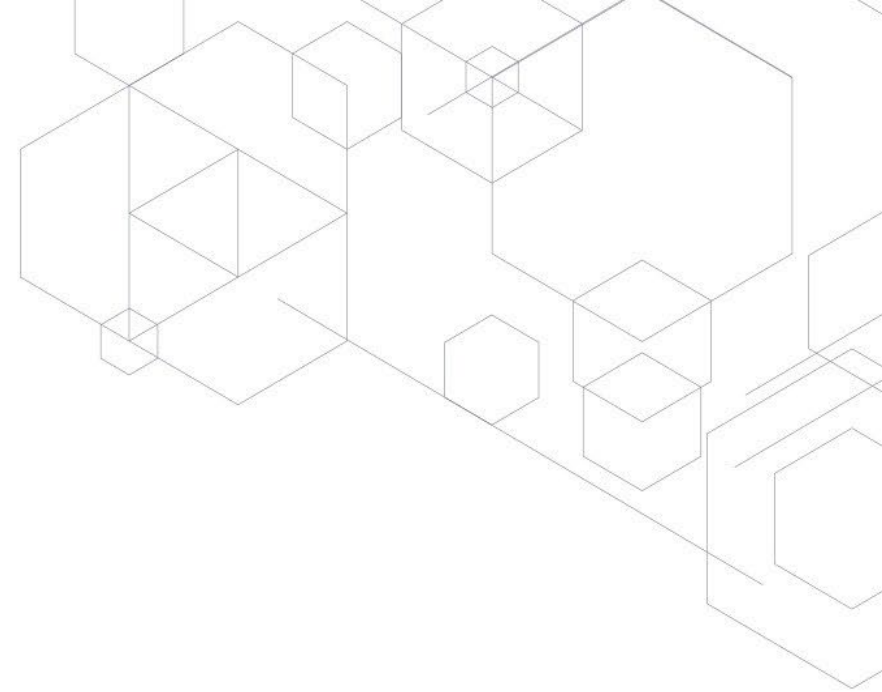


PAN audio

Intercoms – RTE 40100

Emergency and help call intercoms

- High audio quality
- Robust and vandal-proof
- Low assembly effort
- IP interface
- Full duplex mode
- EN50155 – EN45545
- Variants in horizontal and vertical possible

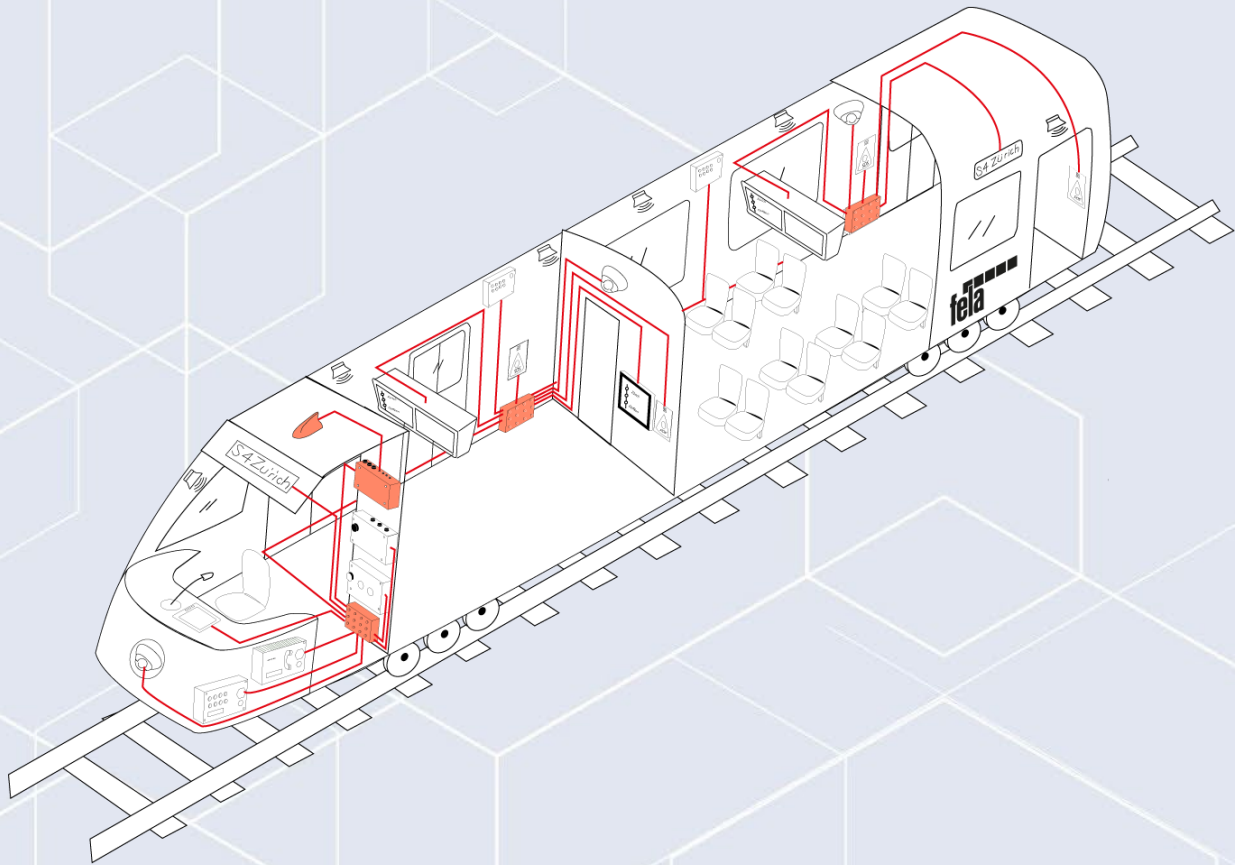


ACA 2201 digital amplifier

Communication in the vehicle and to the control center

- Digital multi-channel amplifier
- Digital transmission with modern codecs
- Announcements in high audio quality
- Intelligent control of PIS through POISmobile
- Flexible to integrate and scalable
- Announcements, driver's cab communication and engine driver with control center
- Fallback through UIC interface



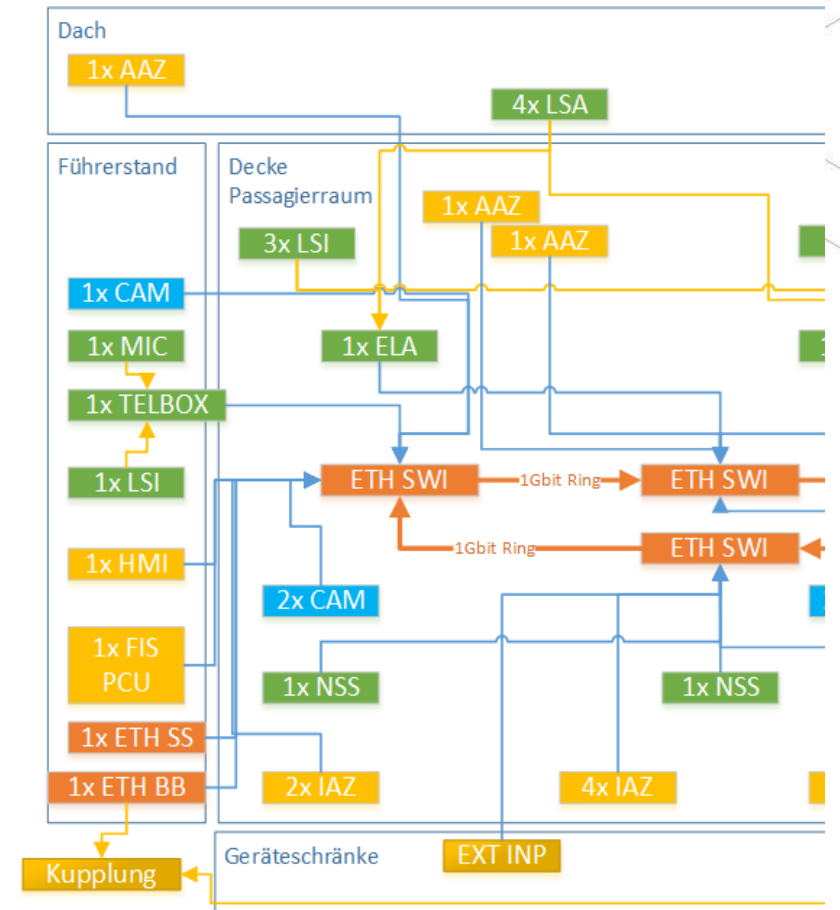
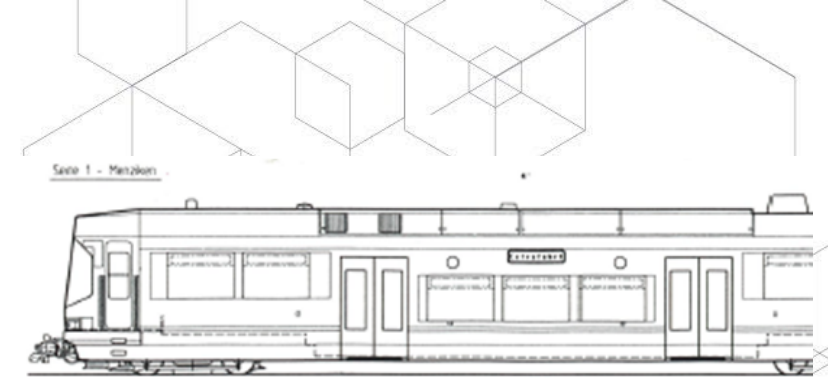


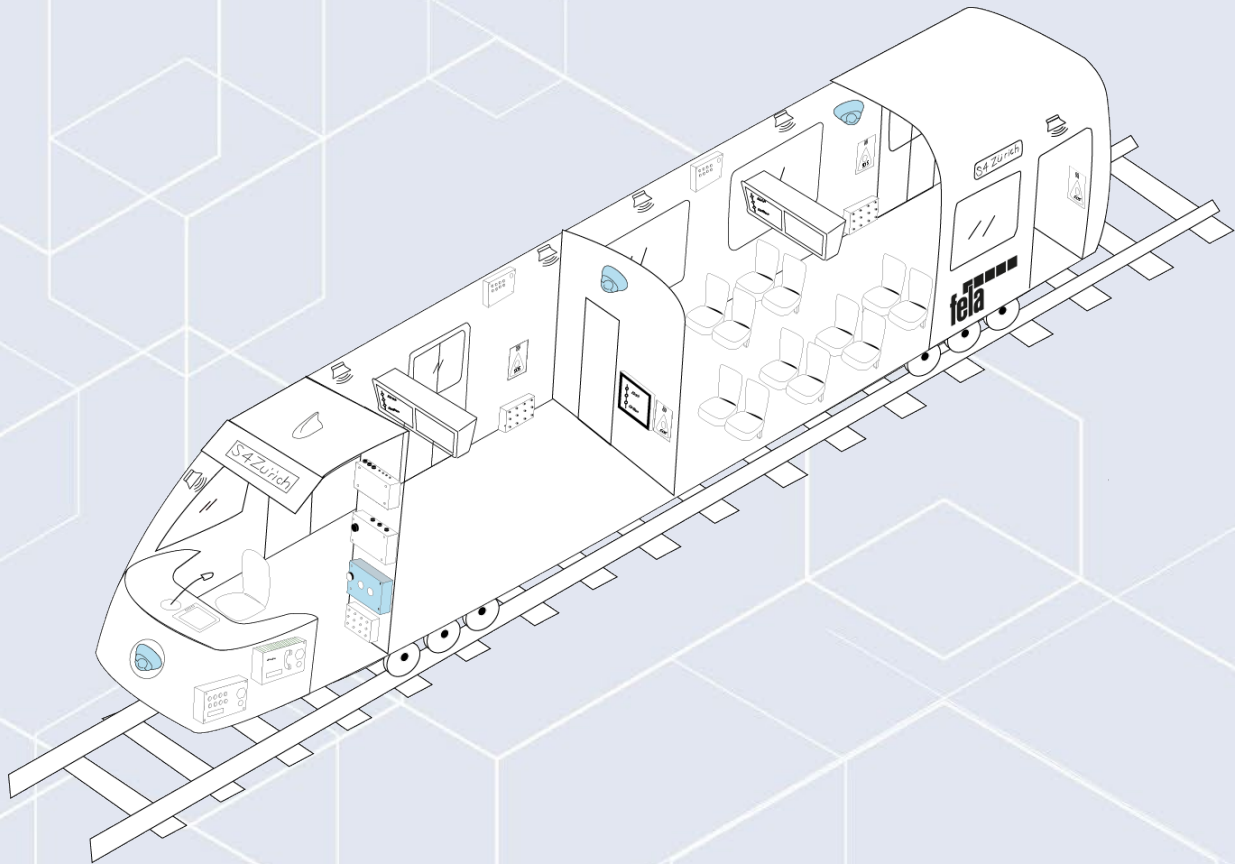
ZUKO the network

The vehicle network

Switches and routers

- Network cabling in the vehicle
- Redundant
- Across wagons
- M12 with PoE
- Router for train-land connection
- Coupling modules for mixed and multiple traction
- Easy integration of additional systems such as APC, advertising displays, passenger wifi



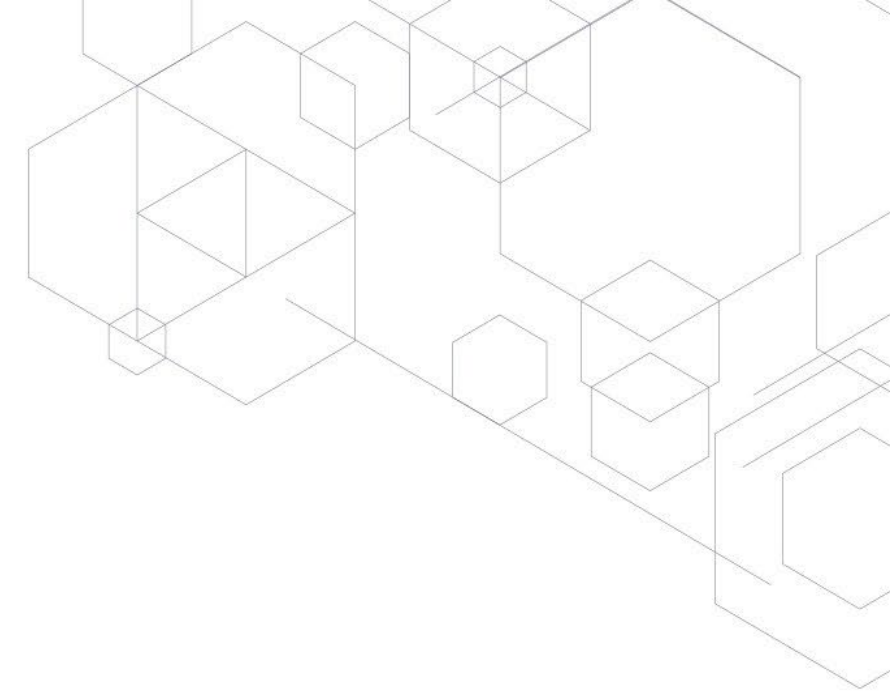


CCTV video system

CCTV video surveillance

Safety for passengers

- Integration of approved camera systems
- Illumination study
- EN62676-4 2015
- Event-triggered or individual control
- Zoom function
- Automatic activation in case of emergency
- Indoor and outdoor surveillance
- Legally secure storage of data for 72 hours



FELA

services

Planning and implementation

FELA services from the idea to acceptance

- Planning and concept creation
- Construction and operation of the test facilities
- Commissioning on site together with the customer
- Engineering of technical documentation
- Training of customers in the areas of installation and configuration
- Support online – on the phone – on site
- Refit concepts, planning and implementation



Your partner for project implementation

Swiss Engineering

Whether new projects or obsolescence with refit, FELA offers technological competence combined with innovation.

All from a single source. Swiss made.





Power for Mobility!



Thank you!



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