



## Project Experience

**Project: 2013 Launch of 203 pcs variable message passenger information displays at bus stops in Cracow [Poland].**

**Industry/Company:**

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

**Position:**

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

**Duration:** 1-2 years

**Scope of duties and responsibilities:**

- Planning and coordination of project activities.
- Software installation and testing at the office and on-site.
- Analysis of project requirements and evaluation of the scope of work.
- Ordering the necessary components for project implementation in accordance with the delivery and commissioning schedule.
- Created the necessary technical documentation, such as:
  - User Manual
  - service manual
  - guide to how safely operate
  - description of the subject of the contract,
  - technical information of the installed software (eg. Win 7, Win 10, Win Embedded, firmware vr, fonts, twilight sensor intensity, database, wlan connection details, gsm connection details, gps coordinates).
  - technical information of the installed hardware (eg. Housing and Boards Part Numbers, electrical parameters and HW installations, hardware redundancy - stock availability, electrical schematics, block diagram connection, etc.)
- Participated in commissioning and acceptance tests on the client's side in accordance with milestones.
- Warranty and post-warranty customer support, which involved on-site visits, software re-installation, and parts replacement.

**Project: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams [EN45545].**

**Industry/Company:**

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

**Position:**

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

**Duration:** 1-2 years

**Scope of duties and responsibilities:**

- Analysis of project requirements and evaluation of the scope of work.
- Participated in project meetings - internal and external with the client.
- Planning and coordinating project activities.
- Ordering the necessary components for project implementation in accordance with the delivery and commissioning schedule.
- Software installation and testing at the office and on-site..
- Creating and updating technical and project documentation
- Modified or Created an operating manual for the functionality purchased by the client.
- Participate in factory acceptance tests (FAT) and on-site acceptance tests (SAT).
- Provided warranty and post-warranty customer support, which involved on-site visits, software re-installation, and HW replacement.

**In addition:**

- Performed analysis of schematics, and therefore of the signals connected in the vehicle.
- Remained in constant contact with the client and other companies integrating their devices in the vehicle.
- Conducted on-site inspections to estimate the scope of work.
- from Project point of view: I was responsible for developing design and acceptance documentation, eg. description of the subject of the order, purpose, persons involved, update versions and changes in documentation, individual stages of work,
- from Technical point of view: I was responsible for software versions, firmware, etc.

Type of hardware proposed - list of wire harnesses, antennas, control units, displays. I am planning wire harness architecture, types of connections, block diagrams, and connection diagrams for all hardware used in the Vehicle.

## Project Experience

Project: **2014 Integration of 37 pcs voice announcement buttons with bus stop displays.**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 6-12 months.

Scope of duties and responsibilities:

- Scope of duties as in the first project.

Additionally:

- Analysis of technical documentation and possibilities of connecting an acoustic signal.
- On-site visits to assess the possibilities and scope of work.
- Selection of appropriate acoustic buttons compliant with standards on the German, Swiss, and Polish markets.
- Design electrical and acoustic connections.
- Device testing at the company's office and then at the client's site.
- I prepared technical documentation for the electrical installation on-site

Project: **2014 Commissioning of on-board Passenger Information computers in 196 pcs NGT6 and NGT8 Trams [EN45545].**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 1-3 years.

Scope of duties and responsibilities:

Scope of work as in the: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams.

Additionally:

- I conducted on-site inspections to estimate the scope of work.
- Also I do on-site inspection to check the range to which technical modifications should be made.
- I delivered solutions to provide low cost and good reliability (One of the solutions is electrical and electronic adapters)

Project: **2015 Launch of on-board Passenger Information computers in 36 pcs PESA Trams [EN45545].**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 6-12 months.

Scope of work and responsibilities:

Scope of work as in the: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams.

## Project Experience

Project: **2016 Launch of on-board Passenger Information computers in 72 pcs SOLARIS buses [ECE R118].**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 1-3 years

Scope of Tasks and Responsibilities:

Scope of work as in the: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams.

Project: **2016 Commissioning of on-board Passenger Information computers in 15 pcs AUTOSAN Buses [ECE R118].**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 6-12 months

Scope of tasks and responsibilities:

Scope of work as in the: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams.

Project: **2017 Commissioning of on-board passenger information computers in 32 pcs SOLARIS buses [ECE R118].**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 6-12 months

Scope of tasks and responsibilities:

Scope of work as in the: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams.

Project: **2018 Launch of Passenger Information On-Board Computers in 18 pcs AUTOSAN Buses [ECE R118].**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 1-3 years.

Scope of Tasks and Responsibilities:

Scope of work as in the: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams.

## Project Experience

**Project: 2018 Launch of Passenger Information On-Board Computers in 52 pcs SOLARIS Buses [ECE R118].**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 1-3 years

Scope of Tasks and Responsibilities:

Scope of work as in the: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams.

**Project: 2018 Commissioning of on-board Passenger Information computers in 86 pcs MERCEDES Buses [ECE R118].**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 1-3 years

Scope of tasks and responsibilities:

Scope of work as in the: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams.

**Project: 2018 Launch of on-board Passenger Information computers in 12 pcs VOLVO Buses [ECE R118].**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 6-12 months

Scope of tasks and responsibilities:

Scope of work as in the: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams.

**Project: 2020 Launch of on-board Passenger Information computers in 25 pcs SOLARIS Buses [ECE R118].**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 1-3 years.

Scope of work and responsibilities:

Scope of work as in the: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams.

## Project Experience

Project: **2022 Launch of on-board Passenger Information computers in 60 pcs STADLER Trams [EN 45545].**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 1-3 years.

Scope of Tasks and Responsibilities:

Scope of work as in the: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams.

Project: **2022 Launch of on-board Passenger Information computers in 10 pcs MAN Buses [ECE R118].**

Industry/Company:

Trapeze Switzerland - Hardware & Software solutions for Public Transport [ITS industry].

Position:

R&D Engineer, Design Engineer, System Engineer, Project Coordinator, Solution Delivery, Customer Support, Software and Hardware Acceptance Tester, Project Engineer.

Duration: 6-12 months.

Scope of work:

Scope of work as in the: 2013 Commissioning of on-board Passenger Information computers in 30 pcs Bombardier Trams.