State Fire Service is a professional, uniformed and equipped firefighting brigade specialized to recognize, prevent and counter natural disasters and hazards in Poland.

State Fire Service operating structure:

- National Headquarters,
- 16 Voivodeships Departments Headquarters,
- 335 District (Municipal) Stations

[1] Source: www.straz.gov.pl
GPS Positioning system with emergency siren monitoring

The **ET GPS** system is designed to monitor the position of moving objects. A GPS tracker saves the object location, speed, direction of movement, and information from sensors and interfaces. The data saved in the internal memory of the GPS tracker are transferred to the monitoring system. This information allows for making reports on routes, stops, location of fire pump, ignition or additional sensor/interface activation, e.g. emergency siren.

Display of executed route with indication of time and location of emergency siren activation.

System for monitoring vehicle operating parameters

The **ET CAN** system allows for monitoring and saving various parameters associated with the current operation of the vehicle without the need to install many additional sensors. **ET CAN** enables to read and register vehicle operating parameters from CAN-BUS interface, such as fuel level, odometer, pressure in the brake circuit, fuel consumption, current engine speed (RPM), coolant temperature, etc.

```
Name: Fire Truck 1
Last update: 02-05-18 02-05-18 6:00:00
Speed: 0 (km/h)
Ignition: ON
Fuel: 17 [l]
Speed (CAN): [0] (km/h)
Coolant temperature: 79 [°C]
Engine speed: 6 [RPM]
Total fuel consumption: 23336 [l]
Engine operation time: 3865 [h]
Odometer: 195082 [km]
```
Body monitoring system was developed in close cooperation with State Fire Service in order to meet their requirements. It enables to monitor and register variety of information depending on body structure type, such as fire pump operations, low-expansion foam amount, etc.

Name: KR 12345
Symbol: Fire Truck 2
Last update: 27-05-18 05:25:20
00:00:46
Speed: 0 [km/h]
Fuel: 115 [l]
Emergency Siren: ON
On-board computer: ON
Fire pump: ON
Ignition: ON
Low-expansion foam level: 15%
Fire pump pressure: 7 [Bar]
Lift: Not working

Name: KR 54321
Symbol: Firefighter 1
22:13:34
Speed: 0 [km/h]
Free space: 4%
Fuel: 77 [%]
On-board computer: ON
Ignition: ON
Lift: Working

Summary report – additional equipment operations
On-board computer with touchscreen is a key part of ET Connect system. It supports and facilitates the execution of the tasks. On-board computer offers many functionalities, such as communication with the driver or GPS navigation. It also permits viewing the planned route and tasks sent by the dispatcher. Received tasks and their addresses are geocoded, thus it is possible to automatically navigate to the task points via Auto-Mapa navigation without necessity of manual address entry.

On-board computer displays any activity with information about type, time, location and description of the event.

On-board computer allows to communicate the status of the task. Current status is transferred directly to the dispatcher and time of the event is automatically registered.

Terminal permits two-way communication with the operator.
**SMOK Komunikator** application, installed on handheld devices is a tool supporting firebrigade operations, which accelerates time reaction, data transmission of actual mission status and facilitates the process of reaching the event place.

**ET Integrator** system enables to integrate with various dispatcher softwares and is integrated with decision support platform in terms of ticket registration, authorization card creation, vehicle management for event treatment, etc.

**Application main page**

- Sending messages with the photo attachment of the mission location.
- Sending the status of the current mission to the dispatcher main platform.
- Receiving event logs or any text messages.
- Automatic navigation to the mission location.
SMOK S is a small, personal, mobile GPS tracker, which was applied to the State Fire Service for tracking the firefighters. Device has been designed to be user-friendly and simple to operate. While switched on, it automatically determines the location of the person equipped with this device, what can be tracked in the application. The tracker has two buttons, which can be predefined on demand accordingly to the needs, for example as an emergency or SOS button. Pushing the button triggers the process of summoning assistance for an emergency situation with information about user location and calls the predefined phone numbers with help messages.

Data from the mobile GPS tracker is displayed in the mobile application SMOK Mobile and SMOK Net launched by any web browser.
COUNTIES/DISTRICTS, IN WHICH STATE FIRE SERVICE DEPARTMENTS ARE USING THE ELTE GPS SYSTEMS

We offer complex systems which combine state-of-the-art technology and computer science, support and monitor the processes of service provision, optimize the use of resources, and enhance the logistics of transport and communication. All this leads to lower costs, higher quality and increase in satisfaction of your customers.

As the manufacturer of both software and hardware system components, we can guarantee flexible and customized solutions that meet your individual needs, and allow for further expansion and continuous upgrade.

The top level of our services, high quality components and professional warranty and post-warranty service have been appreciated by our numerous customers.

For the last few years State Fire Service has used Elte GPS systems for its operations consisting of hardware mounted on over 3 thousand fire trucks and dedicated software implemented for 16 Voivodeships Departments Headquar ters and District and Municipal Stations.