Medical waste transportation and disposal monitoring

Challenge

The Utilitservis company collects, transports, and disposes of medical waste. The company uses the most modern equipment for working with hazardous materials, which provides high-temperature destruction and complete disposal of waste. The company's fleet consists of 11 specialized vehicles, authorized for transporting class A (in special bags and in accordance with a strict procedure) and class B hazardous waste.

The company didn't work with GPS monitoring systems before, that's why the solution was to be delivered from scratch. The system would detect the transportation of medical waste from the point of departure to the point of destination and solve the following tasks:

- **Waste disposal monitoring.** The client is interested in such indicators as the time and the date of waste collection, its place, and waste weight. A photographic recording serves as evidence: a photo camera sends photos of the scales with the load, as well as the value of the weight on the scales, to the system.
- **Reporting for payments.** Reports generated by the monitoring system are used to pay drivers.
- **Fuel monitoring.** The system tracks fuel fillings and fuel thefts in order to enable the client to control fleet maintenance costs.

Solution

Our partner, 76 Oil Tyumen, offered the following solution:

- Galileosky 7.0 devices are installed on 8 out of 11 garbage trucks. The devices interact with external gadgets via various interfaces: scales, photo cameras, etc.
- The partner's specialists have used Easy Logic for developing scripts which adjust the functioning of the devices depending on the brand of the vehicle:
  - For GAZelle vehicles: a driver installs a container on scales and presses the button. This triggers an algorithm that collects data from the scales and takes a photo.
  - For MAZ vehicles: a driver loads the tank and presses the button. The system collects the data, lifts the tank, and the camera located in the direction of movement of the hydraulics takes a photo.
- Data from the devices is sent to Wialon: data about the waste weight, a photo during uploading, waste class (applies to GAS vehicles by using a toggle switch).
- The delivered monitoring system has allowed the client to control the work of drivers and comply with special work requirements for disposing of healthcare waste.

Results

The delivered monitoring system has allowed the client to control the work of drivers and comply with special work requirements for disposing of healthcare waste.

Completed work reports

The system detects key parameters: time, location, cargo weight.

Reports for driver payments

The ready-to-use templates display the necessary information in a convenient way.

Fuel control

The system provides for analyzing fuel fillings and fuel thefts.

Regulatory compliance

The monitoring system helps control compliance with hazardous waste disposal requirements.

Company profile

IoT project of the year nomination: Waste management

Industry: Local deliveries

Solutions

Wialon

Hardware

Galileosky 7x

Read more case studies

Get started

Follow us