# wialon

# Accident monitoring system with AI cameras for a transportation company in Mexico

## PROBLEM

Frio Express is a transportation company aimed to provide integral solutions to the transportation and logistics requirements of its Mexican and American clients. The company relies on sophisticated control and dispatch systems along with telecommunications technology to maximize efficiency and quality in real time.

Despite a long presence on the market, Frio Express experienced a number of essential problems concerning their fleet.

The company had the following list of issues to be solved:

- lack of evidence to determine responsibilities in accidents;
- excess driving hours of drivers based on Mexican transportation regulations;
- poor control and driver management practices;
- no real-time road assistance to drivers;
- no means of road accidents prevention.

## SOLUTION

Thanks to the Wialon partner from Mexico, Cobertura Total en Telemetria Mexico (CTTMX), the transportation company has got a robust accident monitoring system, which converts the tractor-trailer into an interactive management system that communicates with the operator using artificial intelligence cameras from Howen.

These cameras, apart from providing a **live stream** to watch and **automatically saving the incident videos**, generate different alerts to prevent accidents. In case of an accident, the acquired footage lets the fleet managers analyze what happened or provide evidence for third parties. The fleet management system can also trigger disabling the truck tractor and/or **generate sound and visual alerts** which will keep the driver in the know.

- **Wialon** receives the info from GPS tracking and allows for the **visualization of the vehicles on the map**. Also, it provides **real-time video streams** from the vehicles and generates **incident reports** of the events that the intelligent system captures. Wialon also allows **automatic download of event video**.
- TRM platform has all the visibility functions integrated via Wialon API, as well as the activation of the different actuators that are part of the system for the automation of the truck tractor. Through VSS API, the service provider has integrated the **remote configuration of the devices**.



THE SOLUTION ALLOWS TO VIEW THE FOOTAGE FROM OUTSIDE THE TRUCK AND IN THE CABIN

### COMPANY PROFILE

**COUNTRY:**
Mexico

**IOT PROJECT OF THE YEAR NOMINATION:**
Long-haul shipping

**BUSINESS SPHERE:**
Long-haul transportation

**MONITORING UNIT:**
Freight vehicle

There are some specific features of the accident monitoring system that add to the project opportunities:

- The 1TB solid state hard drive allows the system to **store all the evidence**. The hard drives, in the event of a greater vibration such as a shock, will not be damaged and the information will not be lost.
- The accident monitoring system sends data via cellular network, and **alerts upon certain events or actions** are generated. This lets the monitoring staff act immediately.
- All events generated will trigger an **alarm in the tractor** trailer activating an actuator. It can reduce the speed of the unit and emit a sound and light alert inside the cabin which will help the driver understand something is wrong.
- A special black box will **save the events if there is no cellular coverage** and will send them to Wialon once the network coverage is recovered. It also has Wi-Fi connectivity; when the truck arrives at its base and logs into it, the recorded video can be downloaded in high definition without spending cellular data.

## RESULT

Frio Express is completely satisfied with the proposed accident monitoring system. Now the Mexican transportation company can determine responsibilities in accidents and identify poor control and driver management.

### ACCIDENT EVIDENCE

The project has helped to resolve claims for clarifications with customers and insurance companies due to the video on board and the various functions accompanying the solution.

### DRIVER CONTROL

Inaccurate driving, overspeeding, or other issues are identified and recorded by the vehicle video monitoring system, and both the fleet manager and the driver get alerts in real-time. Drivers can be coached on better driver practices.

### PREVENTION OF ROAD ACCIDENTS

Thanks to the fleet driver management features, more serious accidents don't happen as potentially dangerous actions or situations are reported right away.

## IMPLEMENTED PRODUCTS

**WIALON HOSTING**

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