

# Monitoring road services in Colombia

## Challenge

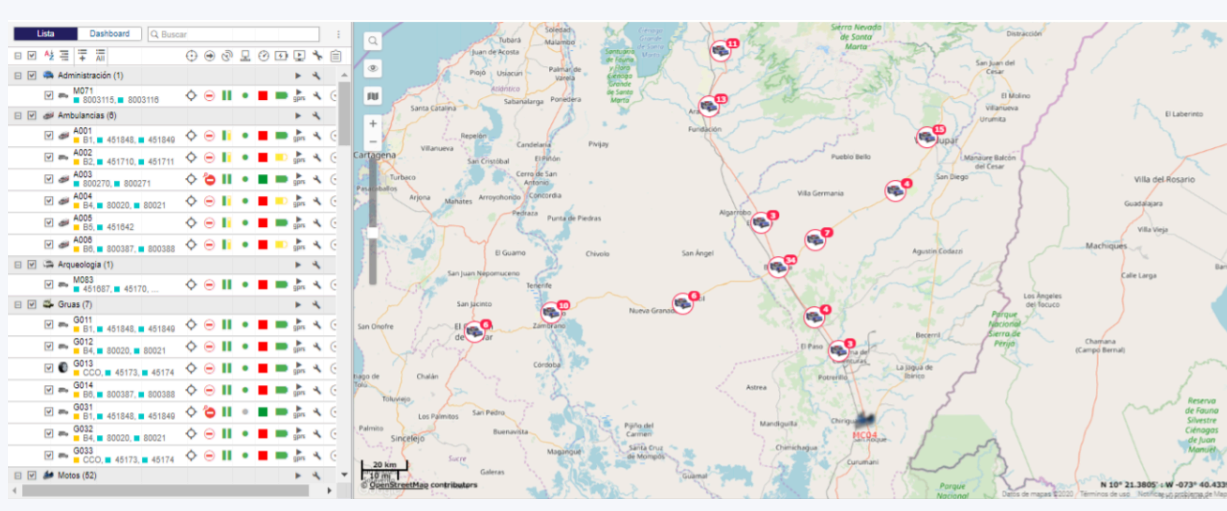
[Yuma](#), Colombia, specializes in road services: toll management, road construction, maintenance, and others. One of the company's responsibilities is assistance during road accidents.

- The presence of Yuma specialists was obligatory when a car crash occurred. They were the first to come to the place to take pictures, assess the damage, and provide further assistance to the parties involved.
- All the information about an accident was collected manually. Moreover, it took a certain time to get to the place. The expenses like fuel costs also fell on the company.
- Drivers who used the roads that Yuma is in charge of often didn't know how to contact the company as its contacts were only on the road signs. In case of an accident, this information wasn't at hand.
- The Yuma specialists didn't know what exactly had happened until they reached the place of an accident. For example, it could be a car overturning or somebody felt bad while driving – every case required different measures.

## Solution

[AVS Solutions S.A.S, Colombia](#), created a solution that allowed Yuma to take the situation on the roads under control.

- First, AVS Solutions specialists equipped Yuma's vehicles (ambulances, police vehicles, cranes, etc) with Suntech (ST3300A, [ST300R](#), [ST3300](#)) and CalAmp LMU-1175 GPS trackers.
- Next, they developed Optra – a web app for dispatchers and a mobile app for drivers.
- All forms and reports that dispatchers deal with were digitized.
- Through the Wialon API/SDK, the GPS data from the vehicles is sent to the client's server.
- All road assistance vehicles are displayed on the [Optra](#) web platform and mobile app. When an accident happens, an app user sends all the information (photograph, type of accident, etc.) to the Yuma web server.



Assistance units displayed in the Optra web app

- The server sends all the required assistance units to the place of the accident. Now, Yuma's specialists don't have to arrive first at the accident site to take the necessary actions.
- The app users (dispatchers and drivers) can see the closest units and monitor the assistance vehicles on their way in real-time.

In the future, the AVS Solutions specialists are planning to add statistics to the app. The areas with the highest number of accidents will be indicated on a map and dashboards.

## Results

Now, Yuma employs a monitoring solution that considerably facilitates work with accidents on the road.

**✓ Savings**  
The client saves time and fuel as now it's not necessary to drive to an accident just to assess the situation.

**✓ Accessibility of services**  
Drivers can immediately inform Yuma about a road accident and specify its type via a mobile app.

**✓ Safety**  
Drivers who get into road accidents get help as quickly as possible, thanks to the Optra app.

**✓ Automation of processes**  
Assistance vehicles automatically get information about an accident and drive there straight away.

## Company profile

**🏆 IoT project of the year nomination:** Public safety

**Country:** Colombia

**Industry:** General fleets

## Solutions



## Hardware

**☒ Suntech ST300R**

**☒ Suntech ST3300**

**☒ LMU-1100 Series**

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