FOR INFORMATION

INNOVATION REPORT

EGIS INFRAESTRUCTURA

05 November 2025

Autopista Golfo Centro
Autopista Jala-Compostela
Libramiento Hermosillo

GENERAL INFORMATION
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1 INTRODUCTION

1.1 Overview and goals

As part of the continuous improvement's efforts and operational excellence goals, we are implementing and studying various actions on a local level, and in cooperation with other group entities. The stated objective is to improve our sustainability, working conditions for our employees and service level. We are focusing on actions that can generate savings or additional revenue in a context of tight resources and affordable workforce that sometimes limit investment opportunities.

2 INNOVATIONS

2.1 ELECTRIC PATROLLING TEST

Since April 2025, we have been using a Renault Kangoo for patrolling in the 1st stretch of our Golfo Centro project. The operational results are positive, and the vehicle performs as required. Some specs:

- Autonomy: **280km** in ECOMODE without A/C
- Charge time on 11kW charger (from 0 to 100%): **2h45**
- Average kilometers per day: **285km**
- Kilometers done during test phase: **55.000km**
- CAPEX/Leasing cost compared to gasoline vehicle: +60%
- OPEX cost compared to gasoline vehicle: -73%
- Overall cost on a 5-year amortization: **-34% (-35k€/y)**

This saving is applicable for heavy-use vehicles, such as our patrolling activity, as we have short distances, various moments without events during the shifts to recharge (need about 3hr of charge per day, split at different times of the day) and constant use 24/7.

2.2 ELECTRIC PATROLLING AT SCALE

Following the test, we have bought 2 more vehicles for a 100% electric patrolling on the first stretch of the project and are in process to buy 5 more for the 2nd and 3rd stretches early 2026. In the medium term, we will also consider the rest of our vehicle fleet: Maintenance pickups, employee minibus, company cars.

3 ONGOING STUDY

3.1 DRONE PATROLLING

We are currently studying the possibility to conduct patrolling by autonomous drone in our Hermosillo project in the north of Mexico.

Objectives:

- Generate a reduction in patrol costs per manned vehicle (today monthly cost ~1k€ gasoline)
- Improve the efficiency of vehicle detection and support. Currently, 63% of reports come from users at toll booths and 15% from patrol routes.

Efficiency will be measured by increasing the percentage of reports per patrol route using drones. Review highway equipment using video to improve the replacement and end-of-life assessment of assets.

Egis is financing this POC with hopes to demonstrate the technical feasibility in Mexico of a drone patrolling system. We currently believe it will be more expensive than van patrolling but will also offer a better service, more frequent patrolling with a lower CO2 footprint and an automatization aspect to incident detection that we are lacking today. Therefore, we'll sell this new activity as an additional service in existing projects and will aslo be able to include it in future offers.

4 FUTURE INNOVATIONS

4.1 Gray water recirculation

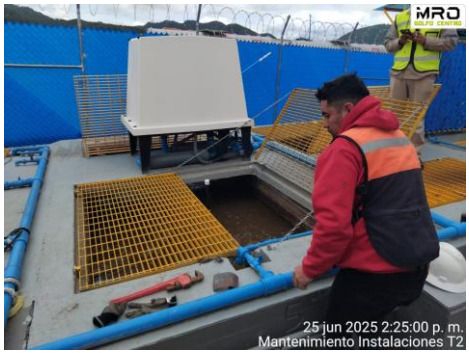
In our Golfo Centro project, we manage rest areas and are responsible for providing water for handwashing and flushing toilets. This rest area is not connected to a public water grid and receives water from cistern trucks we have delivering (800.000 liters per month) every day on the site.

We also have a treatment plant to handle residues from toilets and clean the wastewater into gray water, which is not drinkable but can be released in a river in compliance with local regulations.

We have a project to divert this gray water into a tank that will be connected to toilets only, so that we use the gray water for flushing, and keep using drinkable water for handwashing.

The saving is estimated at 75% of the consumption of drinkable water, with an ROI of 18 months and environmental benefits.

The project is currently suspended following a negative water quality test earlier this year.



5 STUDIED TOPICS

5.1 AI-scheduling

With the help of Ulises Rodriguez from Egis HQ, we have considered automatization of our scheduling for all teams on GC project, tolling, maintenance and traffic management. A total of 500 employees, most of them working shifts and with frequent adjustments due to sick leaves, absentees, personal requirements and a substantial attrition rate.

The Factorial software is a complete solution for Scheduling, HR, Payroll, leaves and more, however, it considers that each employee needs a license when in reality only ~20 of our employees need access to the tool for edition purposes and the rest just consult their shift roll and request vacations.

Current cost of the activity:

- Time: **6 h / month** for Plaza managers; **7 plazas**
- Salary: **11 EUR / h**
- **Monthly cost on the activity**: **442 EUR**

Software solution Factorial

- License cost: **3.5 EUR / employee / month**
- Project staff: **500 employees**
- **Monthly cost licenses**: **1 720 EUR / month**

In the Mexican context, this project is not feasible.

5.2 Event detection from video stream

We have contacted the French startup XXII for a quotation on a video analysis system that could connect to our existing PTZ cameras in the ITS system and control them as well as detect events.

The cameras would have a set routine to scan their field of view and detect on the highway:

- Stopped vehicles on the shoulder
- Stopped vehicles on the carriageway
- Object on the carriageway
- Illegal access

The software would then raise an alarm and focus the toll center's main screen on the camera with an event and zoom-in. The operator can confirm the type of event and start the coordination with our patrolling team.

Nonperformance cost per year:

- Contract penalization:

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Software solution XXII:

- License cost:
  - **700 EUR / camera / month**
  - **5000 EUR / control center / month**
- **For 62 cameras in our project, this technology is not even remotely affordable (520k€ annually)**

In the Mexican context, this project is not feasible.

5.3 Photo-catalytic paint

The innovation challenge organized in Mexico last year led to a winner that was to be tested on the ground: a proposal for cleaning the pollutants generated by vehicles on highways by painting the concrete tri-blocks with a photo-catalytic paint. The paint is supposed to absorb methane and other air pollutants and improve the AQI around the highway/toll plaza.

After more thorough research, it was understood that the product has been criticized and does not deliver any measurable effect in terms of air pollution in an outdoor environment. Additionally, the CO2 capture claims are difficult to verify and do not offer a significant kgCO2/€ ratio compared to forestation or other proven methods.

This project has been abandoned.

6 FORWARD PLANNING

Initiatives to be continued and planned for 2026:

- EV roll out as per section above;
- Drone patrolling as per section above;
- Expanding beyond the current baseline collaboration tools (Onedrive/Sharepoint/MS Teams) to train managers and supervisors on the **use of AI** and target efficiency gains to focus on value generation; and
- Maintenance tool applied to our local operations and as a service offered to our client to gain efficiency and generate additional revenue.

7 LIST OF ABBREVIATIONS

AGC or GC	Autopista Golfo Centro
PTZ	Pan–tilt–zoom camera mounted on a roadside pole
ITS	Intelligent Transportation System, (cameras, trafic counters, message signs)
AQI	Air Qulity Index