



SECAP

16th ROAD SAFETY CONFERENCE

- 5th of March 2024
- Madrid, Spain

Hosted by

seopan
Asociación de Empresas Constructoras
y Concesionarias de Infraestructuras

Motorway Workers safety under extreme weather conditions

DIMITRIOS MANDALOSIS
CHIEF OPERATIONS OFFICER
AEGEAN MOTORWAY SA



Flooding incidents: Phase A



Phase A – Sudden & Extreme heavy rain (2 days)

Impact

- Over a length of 100 km
- Severe damage on embankments and pavement
- Water inflow in Tunnel T2
- Collapse of Telecom service provision at the area
- Toll suspensions

Actions

- Traffic management measures for traffic deviation
- Activation of Disaster Recovery Site - Communication through company's Backbone Network
- Visual inspection of all assets

Infrastructure adaptation & resilience

Near miss incident in Phase A



Near miss incident

- An employee operating a skid steer loader (Bobcat) during pavement cleaning works had to abandon it due to rising water level
- Constant communication with MMC

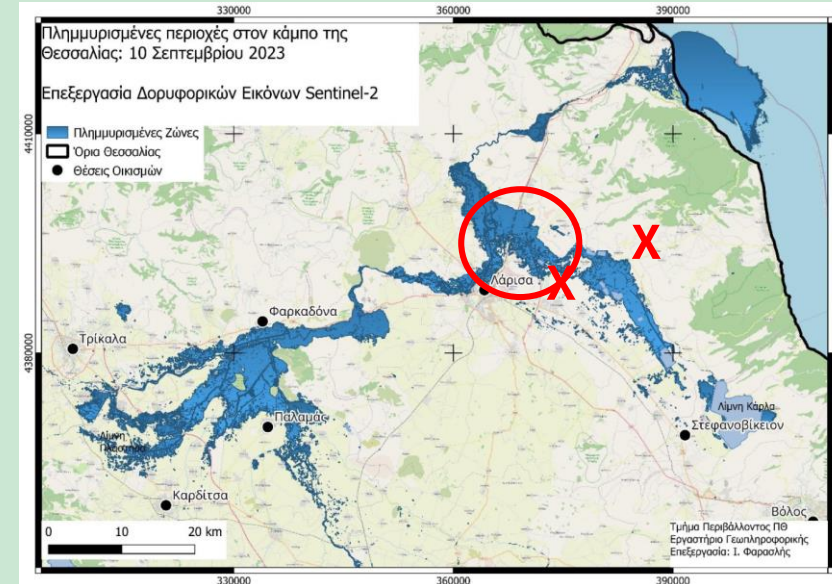
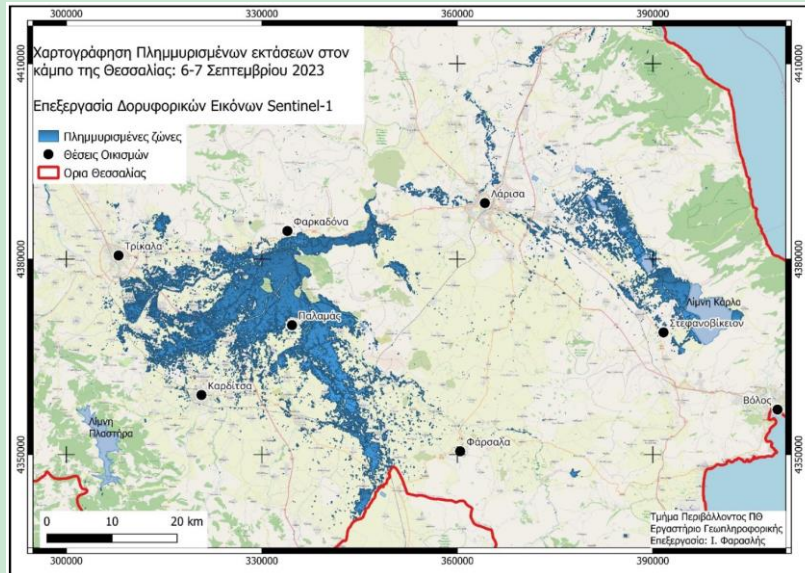


Lessons Learned Commitment to Safe Operations

- Training in emergency situation management
- Training in the handling of heavy machinery during severe weather conditions

SAFETY FIRST

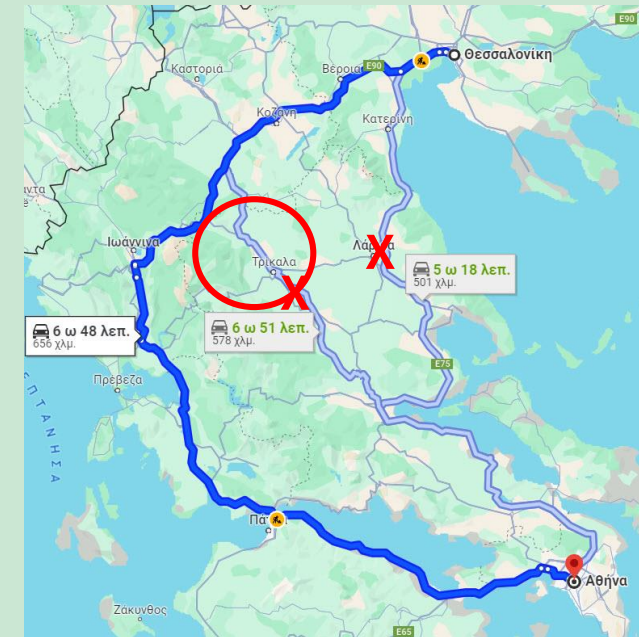
Flooding incidents: Phase B



Phase B – Gradual rise of the waters (3 consequent days)

- A couple of days after the heavy rainfalls, Aegean Motorway dealt with huge quantities of storm water, moving in Thessaly Plain from W → E
- An area over 5 km long was severely affected
- All traffic was **suspended** for more than a week. The consequent diversion increased travel time by 25%
- Toll suspensions applied at affected areas

Flooding incidents: Phase B



Phase B – Gradual rise of the waters (3 consequent days)

- A couple of days after the heavy rainfalls, Aegean Motorway dealt with huge quantities of storm water, moving in Thessaly Plain from W → E
- An area over 5 km long was severely affected
- All traffic was **suspended** for more than a week. The consequent diversion increased travel time by 25%
- Toll suspensions applied at affected areas

New standard for infrastructure monitoring



The 5km section of the motorway was fully reopened to traffic after a month.

Traffic was reinstated in three phases, with the implementation of specialized methodology in order to verify the operational status of the motorway. This methodology among others included:

- Visual inspections of assets
- Slip testing (with British Pendulum and Micro Griptester devices)
- Smoothness checks (with a special vehicle carrying special electronic equipment)
- Pavement bearing capacity tests (with the Benkelman beam test)
- Geotechnical tests carried out by boreholes

Ensuring maximum safety for drivers

**Blueprint for checking operational status of the motorway
before and after extreme weather phenomena**

Thank you for your attention

Dimitrios Mandalozis

Chief Operations Officer

dmandalozis@aegeanmotorway.gr

Aegean Motorway SA

