

**ASECAP DAYS**



**MILANO 2024**

**autostrade** // *per l'italia*



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# **MONITORING EVERYTHING ANYWHERE**

**A CENTRALIZED MONITORING SOLUTION FOR ROADSIDE EQUIPMENT**

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# ROAD SIDE EQUIPMENT

The importance of roadside equipment for electrical, safety and user information systems in **Autostrade per l'Italia**.

**900+**  
Equipment types

**1.000.000+**  
Equipment in field

**20.000+**  
locations

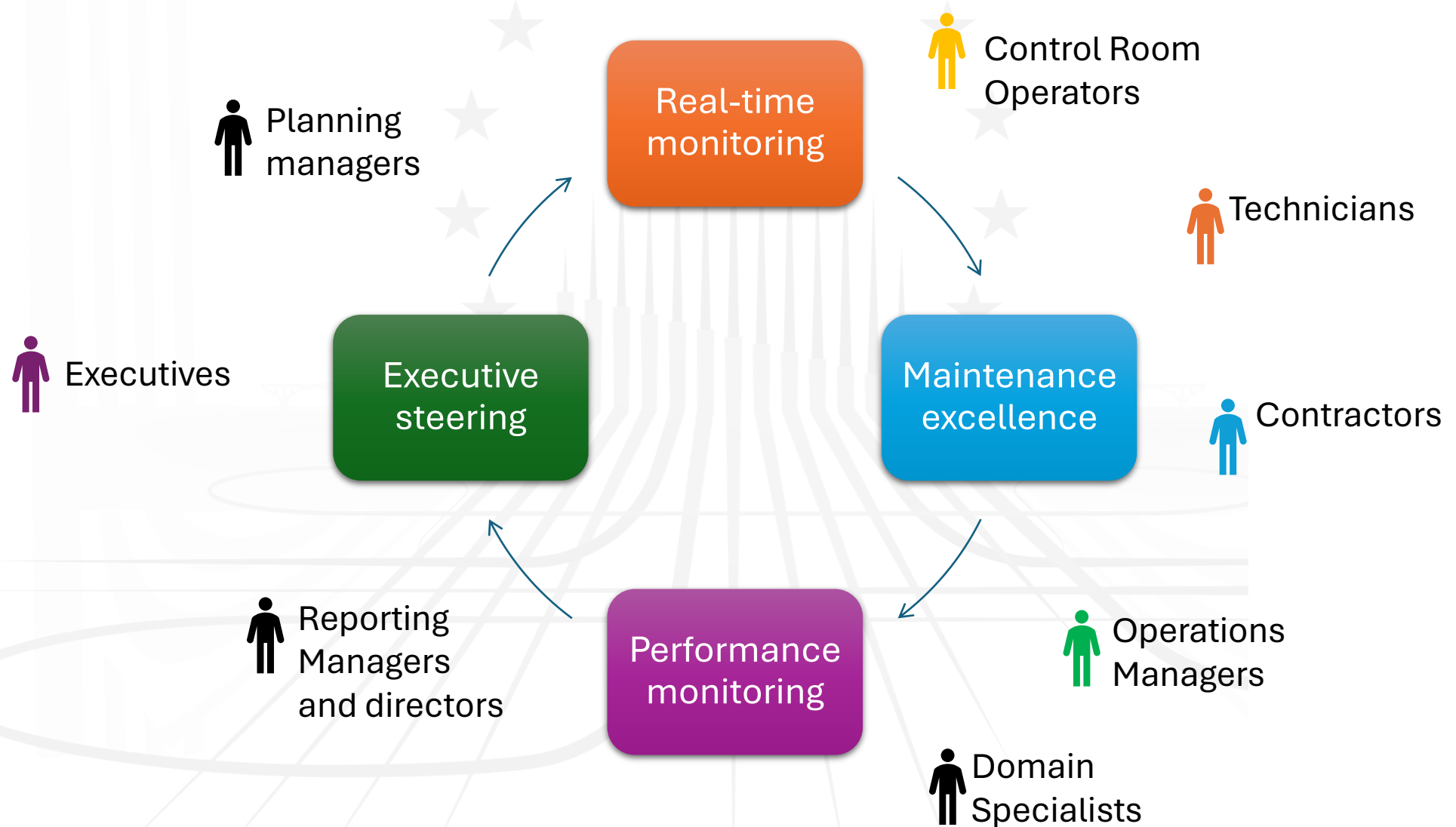
**500.000+**  
Maintenance  
activities yearly

**27**  
operations  
centers

**9**  
control rooms



# USERS AND STAKEHOLDERS





# BUSINESS NEED FOR FAST AND PRECISE DECISION MAKING

- **Failure Root Cause Analysis** based on inventory and historical data
- **Predictive maintenance:** plan maintenance activities in advance, crunching data from failures and previous activities
- **Condition Based Maintenance** support, based on performance indicators and/or «weak signal»
- **Automated response activation**, through failure code and context (e.g. traffic data, weather conditions, ...)
- **Assisted** prioritization using AI
- **Virtual Assistance, Remote** assistance technologies
- ...and more to come in the future



# A CENTRALIZED APPROACH

- Merged information and signals among vertical domains (tunnels, tolling, info-traffic)
- Data-fusion and standardization among legacy and latest installations
- Centralized event management, problem determination and operations

**GOAL: Provide decision-makers with diagnostics and business indicators to maximize safety and service levels**

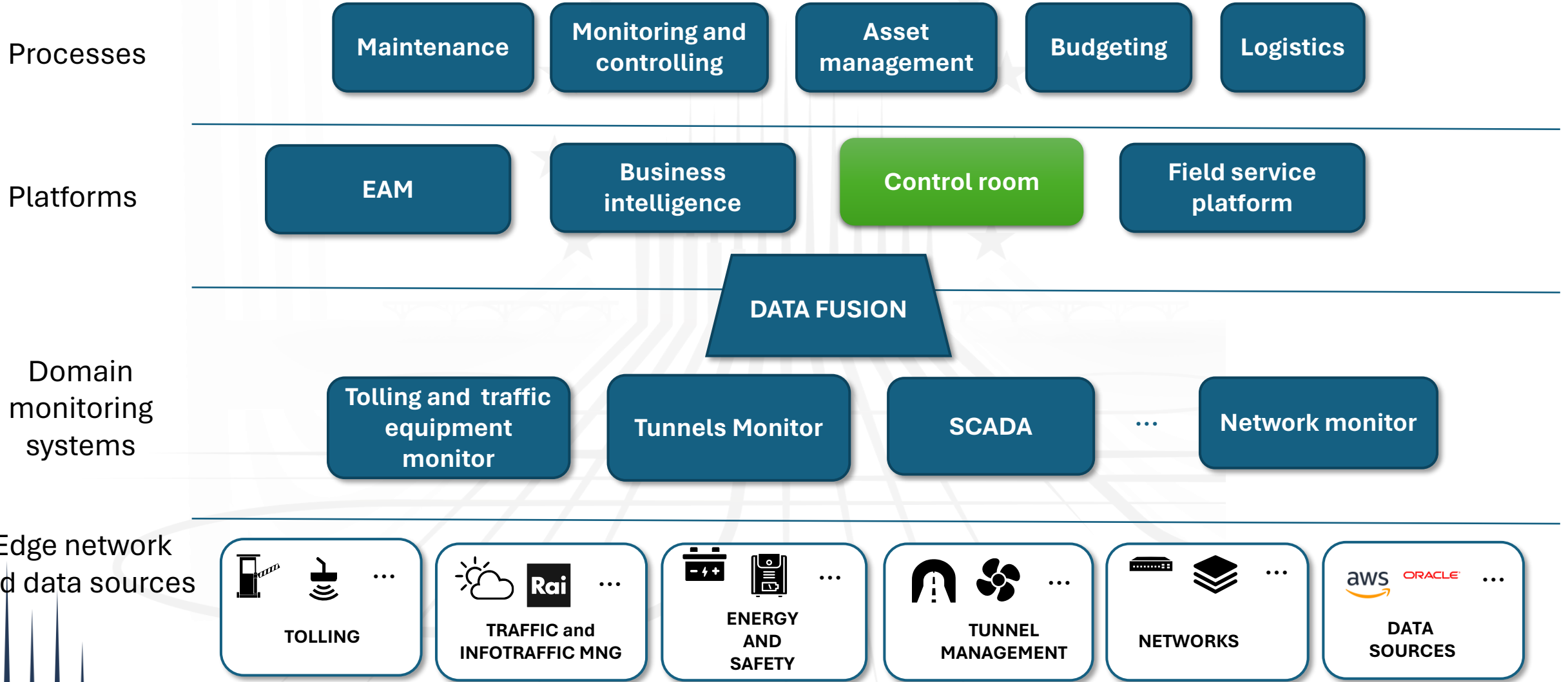


# KEY FEATURES

- **Unified** and standardized road-side equipment **inventory**
- Highest level of configuration and **flexibility** via a «widgeted» approach
- **Big picture and drill downs**
  - Map view
  - Highway section
  - Individual site view in schematics (and 3D!)
- Combined diagnostics and performance indicators



# LAYERED ARCHITECTURE





# WRAP UP... FUTURE PROOFING

## Holistic approach: seeing the big picture

Decision-makers need to gain a holistic view on the status of the road infrastructure in terms of road-side equipment, Operational Technologies (OT), Traffic Management

## Operations intelligence to a higher degree

Event correlation, false positive avoidance, and enable future innovations and applications in AI, predictive maintenance, failure detection

Lawful compliance and highest service levels of roadside equipment as the final goal

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**THANK  
YOU**

**GRAZIE**

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