



**ARMIS**

# WHY DATEX II WAS SO IMPORTANT TO US?

CARLOS COSTA  
ARMIS CEO



**ARMISIT**  
INFORMATION TECHNOLOGY

————— 2005



**ARMISITS**  
INFORMATION RESOURCES SYSTEMS

**DATEX II**



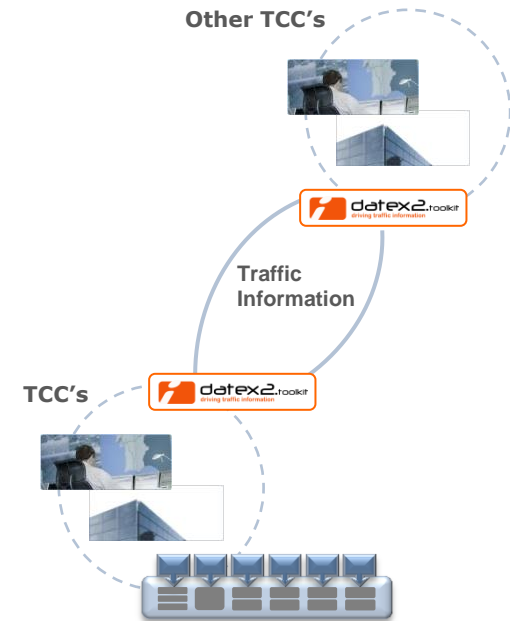
2005

2006



**DATEX2.Toolkit was one of the first worldwide implementations of the protocol (2006).**

- DATEX2Toolkit was a solution to enables traffic information exchange between entities
- Complete implementation of DATEX II specifications
- Quick & cost effective deployment.
- Simple Message Gateway!





# ARMISITS

INTELLIGENT TRANSPORT SYSTEMS

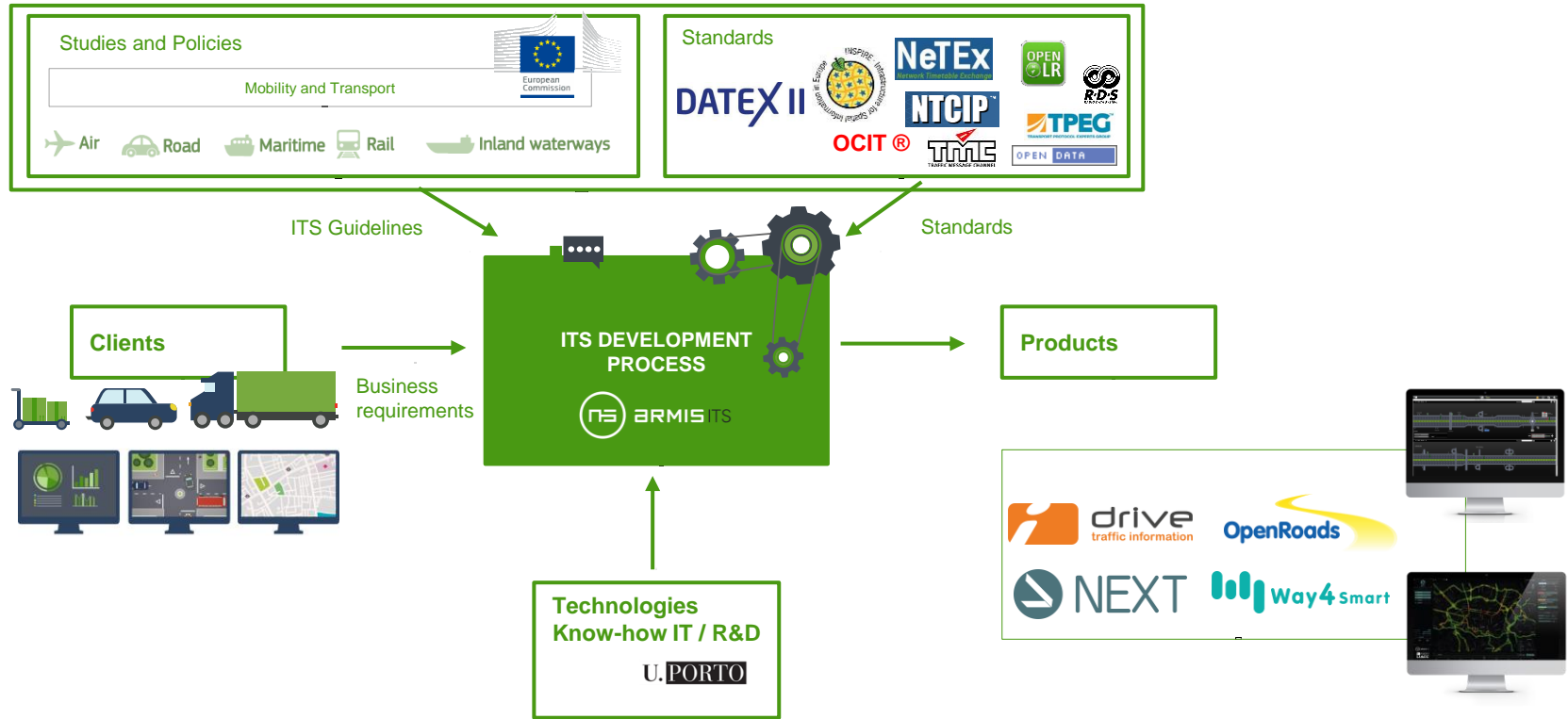
## DATEX II



2005

2006

2018



MANAGEMENT / SUPERVISION



- Smart Mobility Management as a Service



- Infrastructure Monitoring / Contract Supervision



CONTROL OPERATION CENTER



- Traffic
- Public Transport
- Parking
- Other Services



- Prediction / Simulation / Planning





## NATIONAL TRAFFIC DATA WAREHOUSE OPENROADS



**MISSION:** National Traffic Data Warehouse that evaluates road concessions compliance, the infrastructures quality and the concessions financial monitoring.

### PROJECT IMPLEMENTATION:

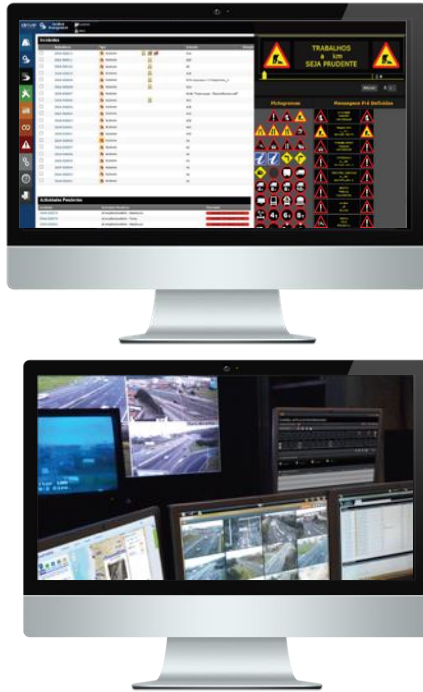
Provide:

- ✓ Improving Business Intelligence and analysis skills;
- ✓ Datex II Profiles – Situations and Measures
- ✓ Datex II Extensions - Infrastructure quality assessment

Allow to know:

- ✓ What is happening on the road network;
- ✓ With a granularity of 100 mts, on each motorway, each lane, each day, every hour;
- ✓ Openroads is a powerfull tool for assessing Concessions performance
- ✓ Supervise and Controls more than 15 concessions, with different rules and financial contracts





# PORTUGUESE NATIONAL TRAFFIC CONTROL CENTER (IP) TRAFFIC MANAGEMENT



**MISSION:** Supervise and manage the Portuguese Road Network according to the model of road concessions in Portugal, IP (Infrastructure of Portugal) has as part of its the responsibility.

**PROJECT IMPLEMENTATION:**

- Implementation of DRIVE platform on the Traffic Control Center for traffic management
- Implementation of an ITS solution that follows the most recent EU recommendations and the most innovative ITS services.

- |  |  |
|--|--|
| ✓ Monitoring and network supervision               | ✓ Traffic Surveillance, operating and control of all types of equipment's on the roads |
| ✓ Incident Management and traffic management plans | ✓ Data Analysis and traffic performance indicators                                     |
| ✓ Infrastructure and roads work management         | ✓ Data Exchange / sharing data with other entities                                     |





## Oporto City (Urban Control Center) FORECAST, SIMULATION AND TRAFFIC PLANNING

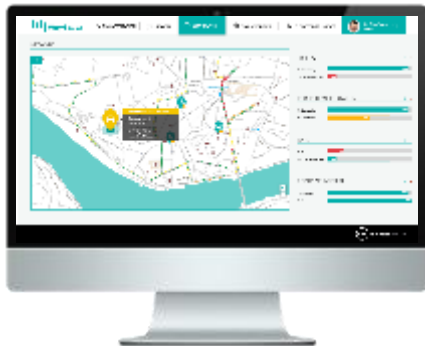
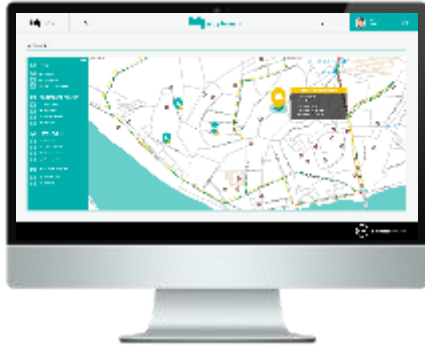


**MISSION:** Control and real-time traffic management.

### PROJECT IMPLEMENTATION:

- Install a solution for traffic forecast system at Traffic Control Centre (TCC) of Oporto
- Gather real-time traffic information for traffic data forecast and decision support algorithms (advices, warnings, ...).
- Allows to perform simulations and network planning operations, with existent data:
  - ✓ Urban Data (traffic data signals, Incidents)
  - ✓ Interurban Data (traffic data, Incidents), exchange data with IP (National Control Center) using DATEX II protocol
  - ✓ Public Transport Data (static and Dynamic) exchange data with IP (Public Transport Control Center) using NeTex protocol





# AMP (OPORTO MOBILITY AND TRANSPORT AUTHORITY) SMART CONCEPT



**MISSION:** Collect information from Operators of Mobility (Traffic, Public Transports and others), manage and coordinate his network and exchange the information with other entities.

**PROJECT IMPLEMENTATION:**

Manage its Mobility Network and Plans by collecting information from:

- Public transport operators using NeTEx protocol;
- Traffic Operators using DATEXII protocol;

This project will also be able to integrate this information with the National Access Point, integrating this information with information from other networks and publishing to the end user.





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