



EasyWay

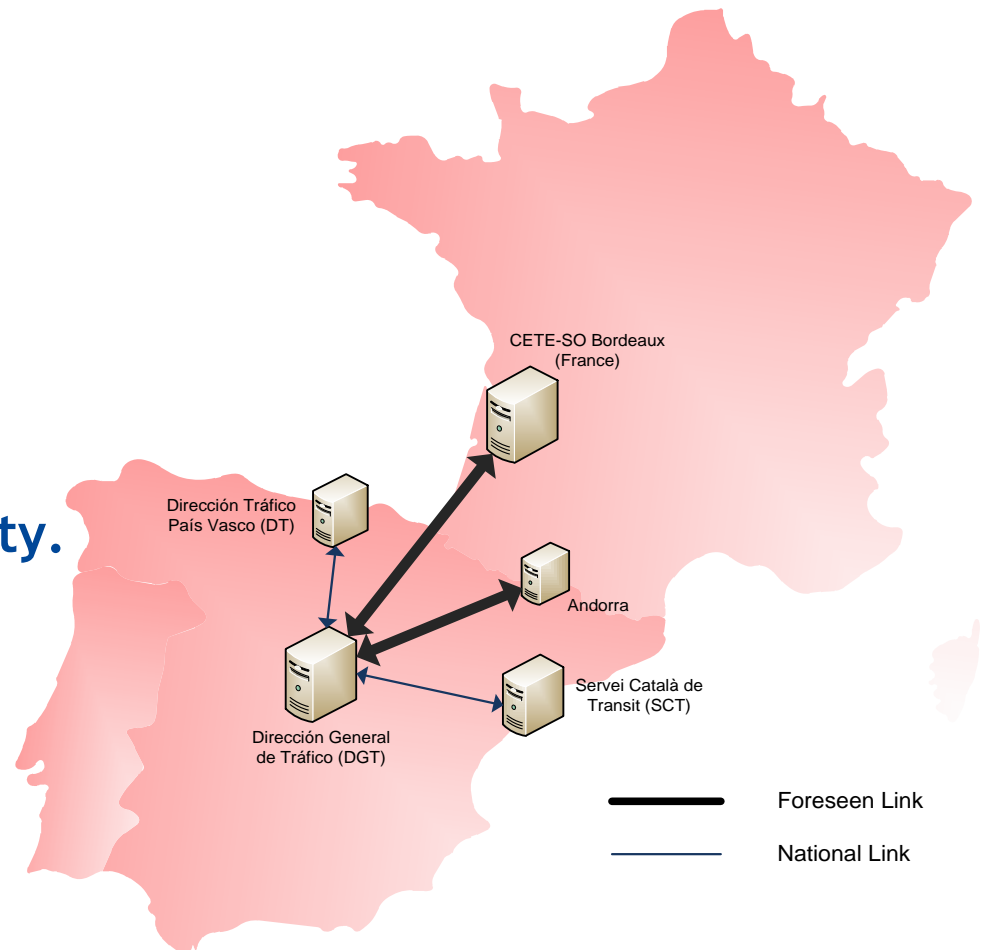
# Spanish DATEX II Deployment

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- **Past:** Spain is member of the DATEX I network since the end of nineties.
- **Present:** DATEX I to DATEX II migration has been performed.
- **Future:** Advances and benefits are expected implementing DATEX II:
  - Growth of DATEX network (external and internal links).
  - Enhanced quality of information exchanged.
  - Improved security and reliability of links.
  - Opening of new possibilities: new location systems, traffic data, customized publications (such as TMPs), etc..



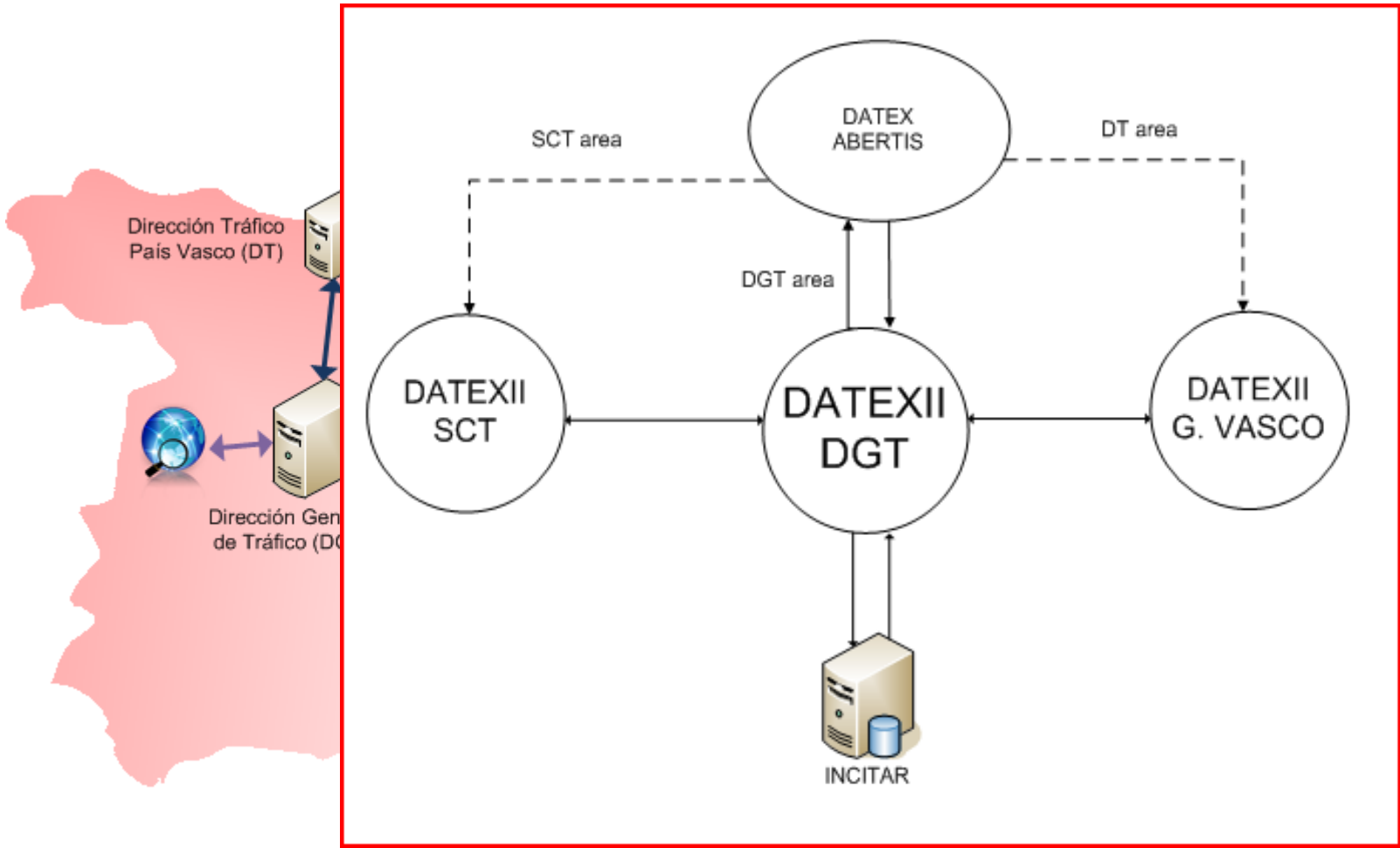
- 3 operational nodes.
- 2 international links.
  - France.
  - Andorra.
- 2 national links.
  - Nat. Authority ↔ Reg. Authority.
- Feeding services:
  - RDS-TMC.
  - Traffic web viewers.
- To be switched off in late 2012.



# Traffic competences in Spain



# DATEX II traffic situations – Internal architecture

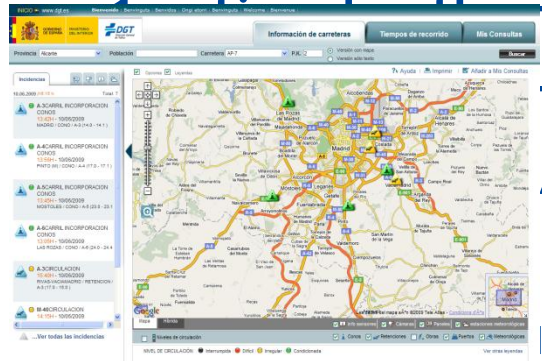


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 highways.  
 area in Spain.  
 per, RDS-TMC.  
 • DGT → traffic web viewer.

# DATEX II traffic situations – Internal architecture



- 4 operational nodes.
- Operational node in País Vasco (DT).
- Operational node in Cataluña (SCT, DT).
- Operational node in País Vasco (ABERTIS).
- Operational node in País Vasco (country).
- SCT → Catalonia.
- ABERTIS → País Vasco highways.
- DGT → País Vasco (rest of area in Spain).
- Feeding services.
  - DT → Phone number, RDS-TMC.
  - DGT → Traffic web viewer.

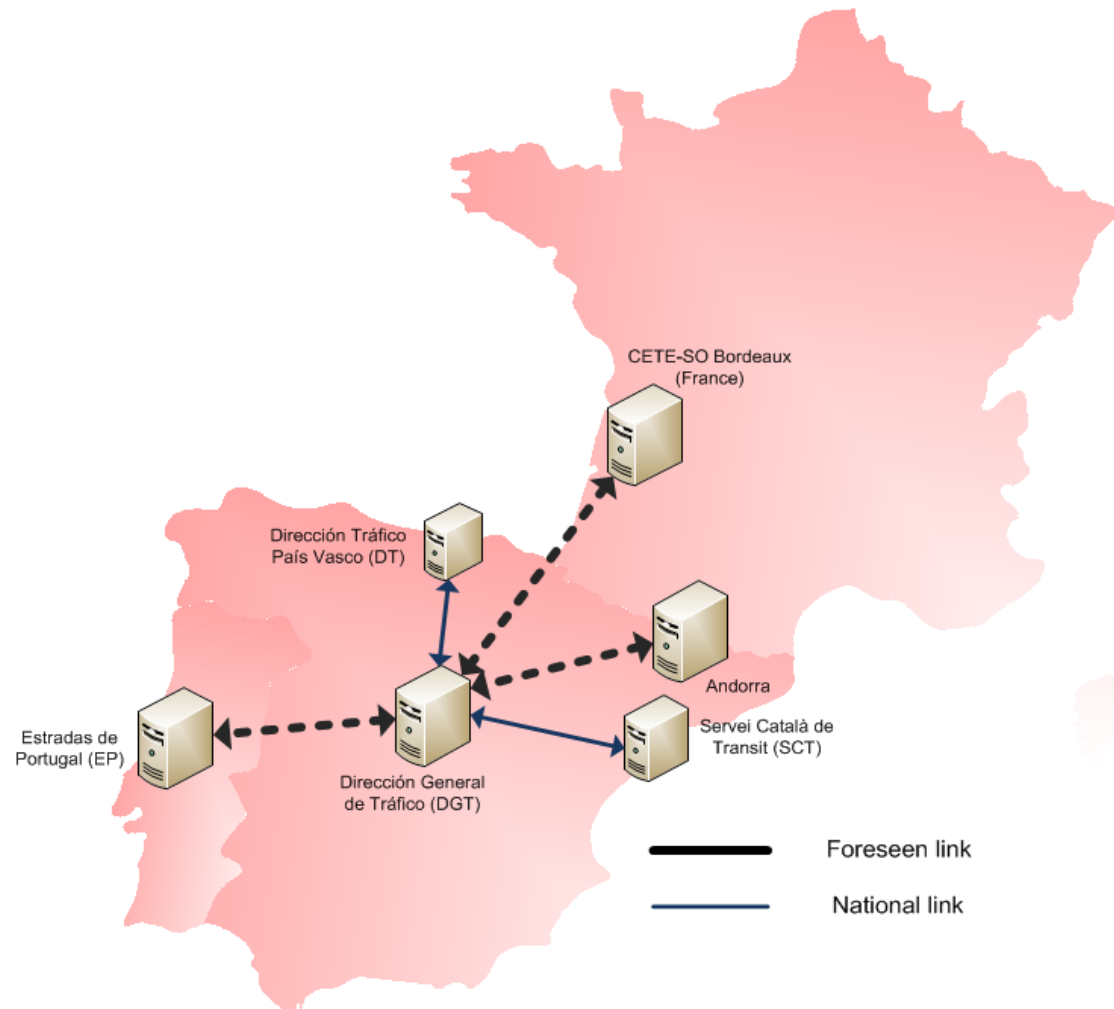




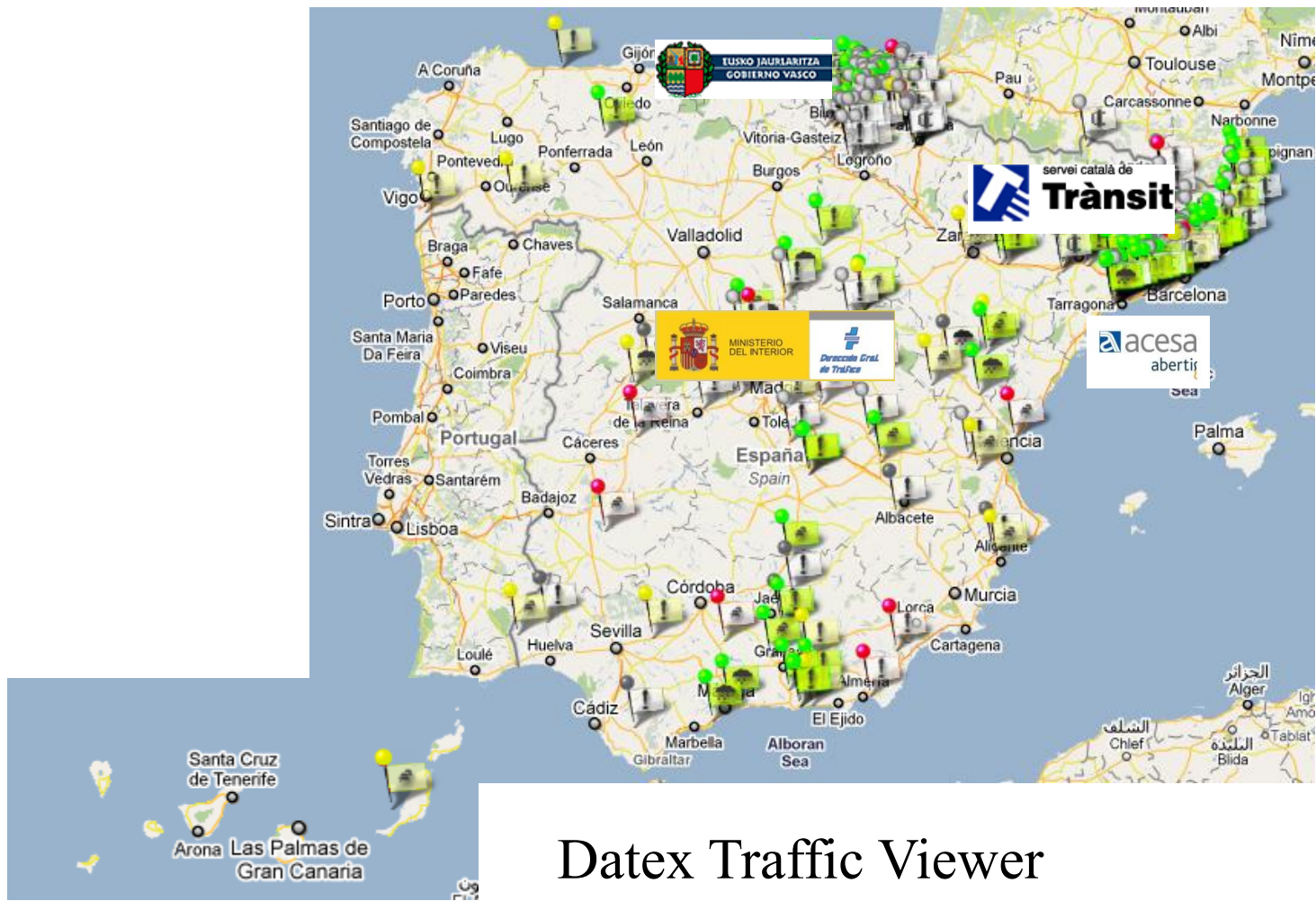
- Testing phase is finished.
- In operation:
  - All three nodes are exchanging information.
  - Nat./Reg. Authorities **MUST** validate the information received from the Motorway Concessionaries.
  - Gathering information to a first evaluation.
- Profiles implemented:
  - Reg. / Nat. Nodes: Full profile.
  - Motorway concessionaries: LCP.
  - Feeding services: Client LCP.
- Exchange characteristics:
  - Locations: Alert-C, LinearElements, TPEG.
  - Filtering: type, road, impact.

# DATEX II traffic situations – International scenario

- International links:
  - Portugal (testing).
  - France (testing).
  - Andorra (future).
- Centralized architecture:
  - Only DGT delivers information.
  - 1 service, 3 publications.
  - Traffic information from concessionaries is integrated into other publications.

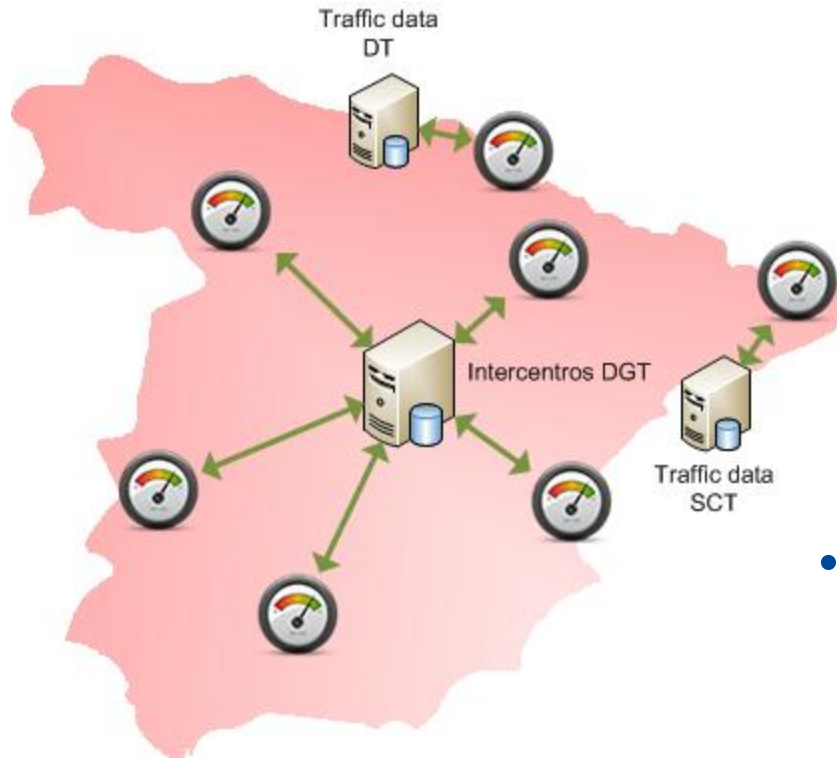






# Datex Traffic Viewer

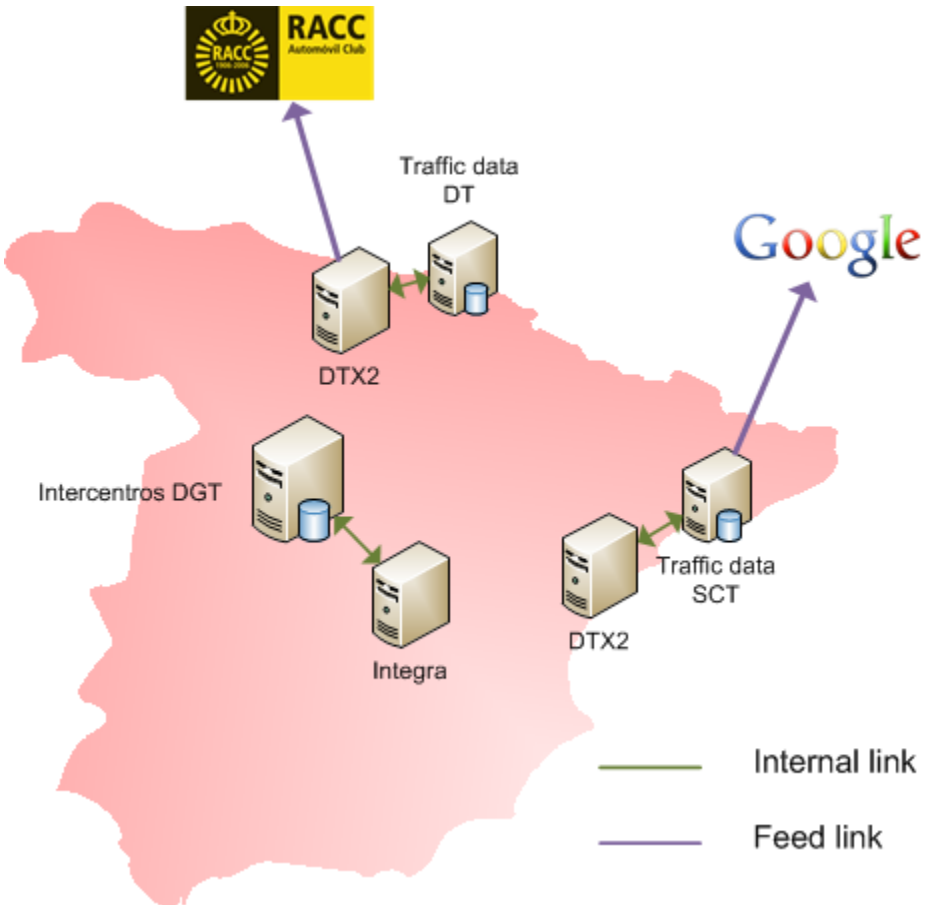
# DATEX II traffic data – Internal architecture



- **Organization:**
  - Proprietary systems and protocols.
  - 1 national authority (DGT).
    - Global system: Intercentros.
    - Gets information from regional centers.
  - 2 regional authority (SCT, DT).
  - Councils and other (maybe).
- **Data:**
  - Inventories of equipment.
  - Traffic data: speeds, occupation, etc.
- DATEX II migration started in 2011.

# DATEX II Traffic data – National architecture

- Available information:
  - Elaborated / measured data.  
Measurement site table.
- Static locations are separated (Predefined Locations Publication).
- Profiles implemented:
  - Nat. Reg. authorities: Pull, LCP.
  - Feeding services: Client LCP.
- First tests: large amount of data.
- No links yet (internal / external).
- Feeding services:
  - Traffic speeds: RACC (Basque Country), Google (Catalonia).



- **Traffic situations:**
  - DATEX I - DATEX II migration in final phase.
  - DATEX II network is fully deployed in Spain.
  - International links to test in 2012 (Portugal, France).
  - Feeds enabled: RDS-TMC, traffic web viewers, traffic phone number.
- **Traffic data:**
  - DATEX II migration has just begun.
  - To do list: enable links, test and evaluate the systems, fix some issues (large amount of data).
  - Feeds enabled: RACC, Google (level of service integration).



**EasyWay**

**Thank you for your attention**