# Digitalisation of traffic data and transport infrastructure

EU projects in traffic sector





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EPUBLIKA SLOVENIJA NISTRSTVO ZA INFRASTRUKTURO ACIONALNI CENTER I UPRAVLJANJE PROMETA

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- Creation and exchange of digital traffic data in road traffic sector
  - Connecting motorway operators in EU to deploy Intelligent Transport Systems (ITS)
  - EU Projects: EasyWay, CROCODILE (1, 2, 3)
- Connected mobility on motorways
  - Direct transfer of safety-related traffic information from operators to vehicles
  - EU Projects: C-Roads Slovenia, C-Roads Slovenia 2
- Multimodal data
  - Multimodal traveler information and journey planners
  - Projects: LinkingDanube, Traffic Management Integration in the National Traffic Management Centre 1 and 2
- Digitalisation of public infrastructure
  - Charging/refuelling infrastructure for alternative fuels (EU project IDACS)
- Traffic and infrastructure data access on National Access Point (NAP)
  - Projects: Traffic Management Integration in the National Traffic Management Centre 1 and NAPCORE







### Creation and exchange of digital traffic data in road traffic sector

- Project EasyWay
  - 2007-2013
  - Harmonized implementation of ITS services in Europe
  - Strong cooperation between public authorities and motorway operators
  - Mitigating the negative effects of transport in Europe
  - Positive impact on traffic flow, traffic safety and the environment
  - Beginning of the digitalisation of traffic data







### Creation and exchange of digital traffic data in road traffic sector

- Projects CROCODILE (1, 2, 3)
  - 2013-2022
  - 10 EU member states (Austria, Cyprus, Czech Republic, Germany, Greece... Slovenia)
  - Harmonised exchange of dynamic traffic data and information across borders
  - Implement an infrastructure for providing road traffic information
    - Traffic cocunters, cameras, variable message signs, traffic management centers
  - Coordination on organisational level, technical implementation of standards as well as enhancement of management strategies and end-user services
  - Set up and operate a data exchange infrastructure based on DATEX II







#### Connected mobility on motorways

• Projects



- 2017-2024
- Authorities and road operators in EU countries
- Harmonise the deployment activities of cooperative intelligent transport systems (C-ITS) across Europe
  - Communication: Infrastructure-Vehicle-Infrastructure
- The goal is to achieve the deployment of interoperable cross-border C-ITS services for road users.

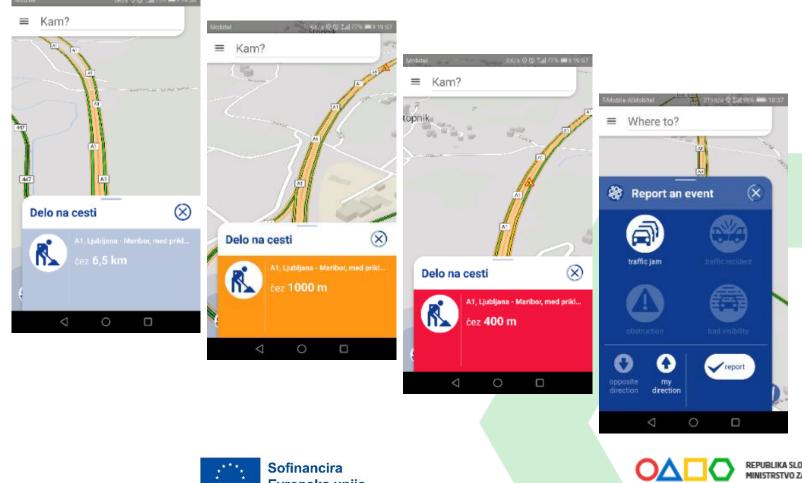






#### Connected mobility on motorways





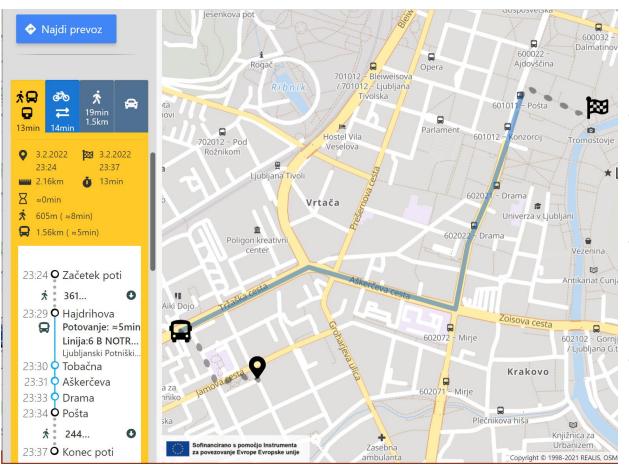




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#### Multimodal data / MaaS



- Projects: LinkingDanube, Traffic Management
  Integration in the National Traffic
  Management Centre 1 and 2...
- Creating and collecting public passenger data
  - Integrated Public Passenger Transport Service (bus and train transport)
  - Various data formats available: GTFS, NeTEx, SIRI
- Creating and collecting multimodal infrastructure data
  - Bike-sharing, bycicle routes (categorisation and digitalisation in progress)
- Cross-border exchange via OpenAPI (projects LinkingAlps and OJP4Danube)

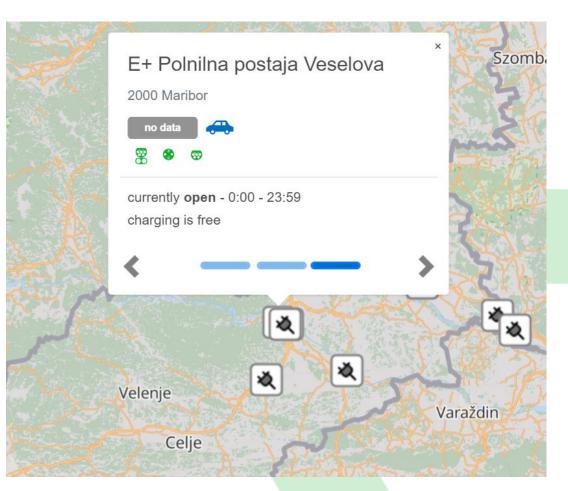






## Charging/refuelling infrastructure for alternative fuels

- Project: IDACS (ID and Data Collection for Sustainable Fuels in Europe)
  - 15 EU Member States
  - Comprehensive and reliable data accessible on a nondiscriminatory basis on the charging/refuelling infrastructure for alternative fuels





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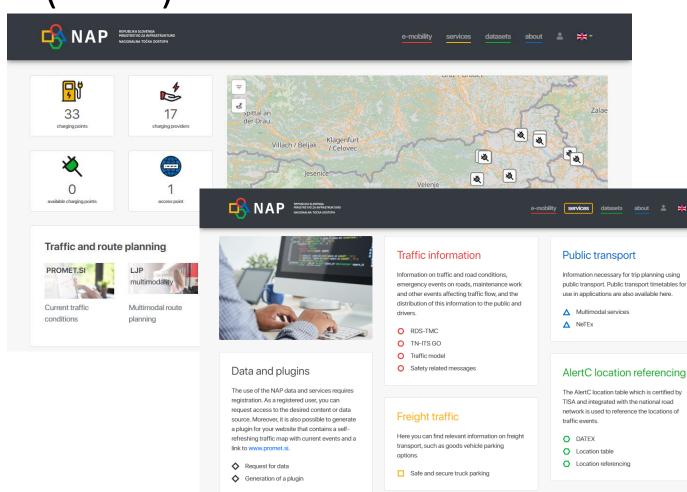


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# Traffic and infrastructure data access on National Access Point (NAP)

- Projects: Traffic Management Integration in the National Traffic Management Centre 1, NAPCORE...
- Integrating all relevant traffic and infrastructure data
- Interactive map with real time data
- Meta data services
- G2B/B2B REST API data access
- Services
  - DATEXII, TPEG XML
  - TN-ITS GO
  - Multimodal services
    - OpenAPI, NeTEx, SIRI, GTFS
  - E-mobility (charging stations)
  - Location referencing (AlertC, OpenLR, linear referencing)
  - Safety related messages
  - TMC location table
  - RDS TMC





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