Traffic Management Systems on national roads network

Main assumptions and status of implementation in Poland

Warsaw, September 2023
Program of the National Traffic Management System (NTMS)

The aim of the completion of the National Traffic Management System Program is the uniform implementation of ITS on roads managed by GDDKiA, in particular on high speed roads.
The method of implementing the NTMS Program

Technical Standardisation

Implementation formula (NRTMS*, NRCP**)

*National Road Traffic Management System

**National Road Construction Program
Technical Standardisation

- Instructions for the deployment of ITS devices
- Detailed Technical Specifications for 36 types of ITS devices
- Design standards for traffic organizations variable scenarios
  - Variable message signs, traffic counting stations, automatic incident detection, road video surveillance, meteo sensors
  - Standardized control and traffic management logic
Implementation formula

Project of the National Road Traffic Management System on the TEN-T Network (NRTMS)

- Stage 1 (under construction)
- Stage 2 (under consideration)
**Key data on NRTMS**

**Project value:**
- 880 908 767,00 PLN
- approx. 189 000 000 EUR

**Implementation areas:**
- Gdańsk/Olsztyn
- Warszawa
- Łódź
- Katowice
- Wrocław/Opole

**Range:**
- 1 100 km of high speed roads
- 3 500 pieces of ITS modules
### Aim of NRTMS

#### For NRTMS USER
- Improvement of traffic safety and travel comfort;
- Decrease of road accidents;
- Increasing the actual use of road capacity;
- Increase of the availability and quality of services on the road network;
- Expanding the scope of information for drivers;
- Making optimal decisions from the point of view of time or travel destination.

#### For NRTMS OPERATOR
- Improvement the quality of road traffic management;
- Coverage of part of the road network with a coherent traffic management system;
- Facilitation of GDDKiA tasks thanks to new IT tools;
- 24/7 monitoring of traffic conditions;
- Faster recognition of the road situation and the ability to react more effectively to road services.
National Traffic Management Centre (KCZR)

Basic tasks of KCZR:
• Managing critical incidents for road network
• Operation of National Road Hotline
• Deciding to run a Child Alert
• Formulating messages of national importance
• Emergency takeover of Regional TMC tasks
The elements of KSZRD in the field

- Information on road impediments
- Lane Control System
- High accuracy travel time measurement
- Acquisition and transfer of information using I2V/V2I
- Image acquisition at junctions and other road locations by CCTV
Implementation formula

National Road Construction Program (NRCP)
National Road Construction Program (NRCP)

NRCP WITH ITS NUMBERS

- Existing: 906
- Under construction: 604
- Planned to 2035: 2845

KILOMETERS OF ROADS
Summary

NTMS Program - uniform and coherent ITS solution for Polish national roads network
Thank You For Your Attention