Traffic Management Systems on national roads network

Main assumptions and status of implementation in Poland

Warsaw, September 2023

Generalna Dyrekcja
Dróg Krajowych i Autostrad

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
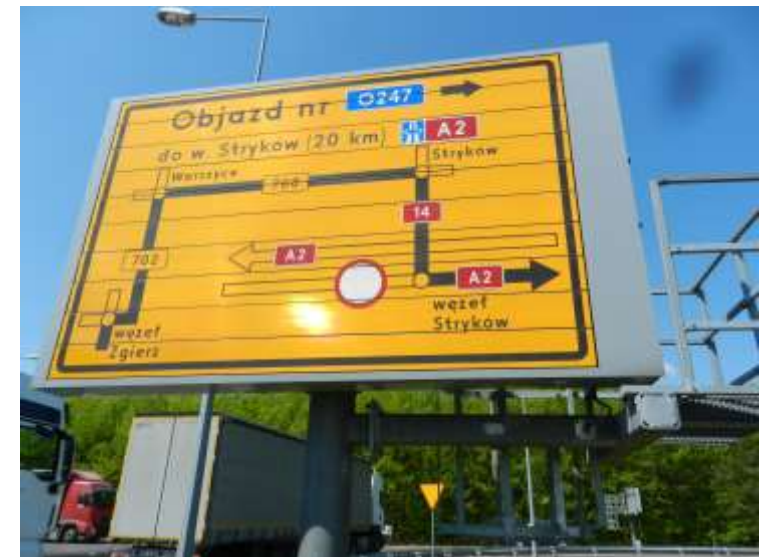
The method of implementing the NTMS Program

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 organizasions variable scenarios

Variable message signs, traffic counting stations, automatic incident detection, road video surveillance, meteo sensors

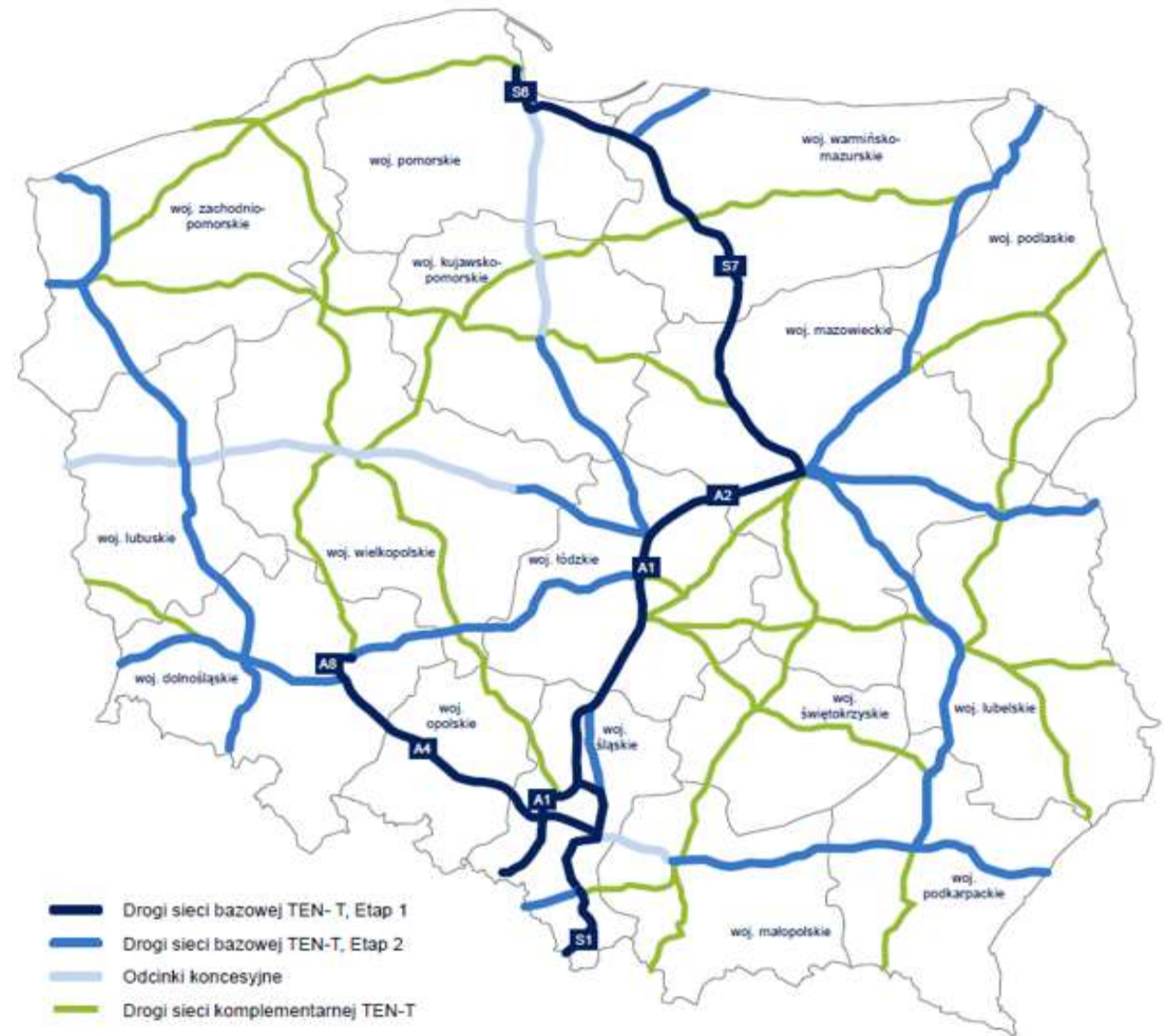**Standarized control and traffic management logic**
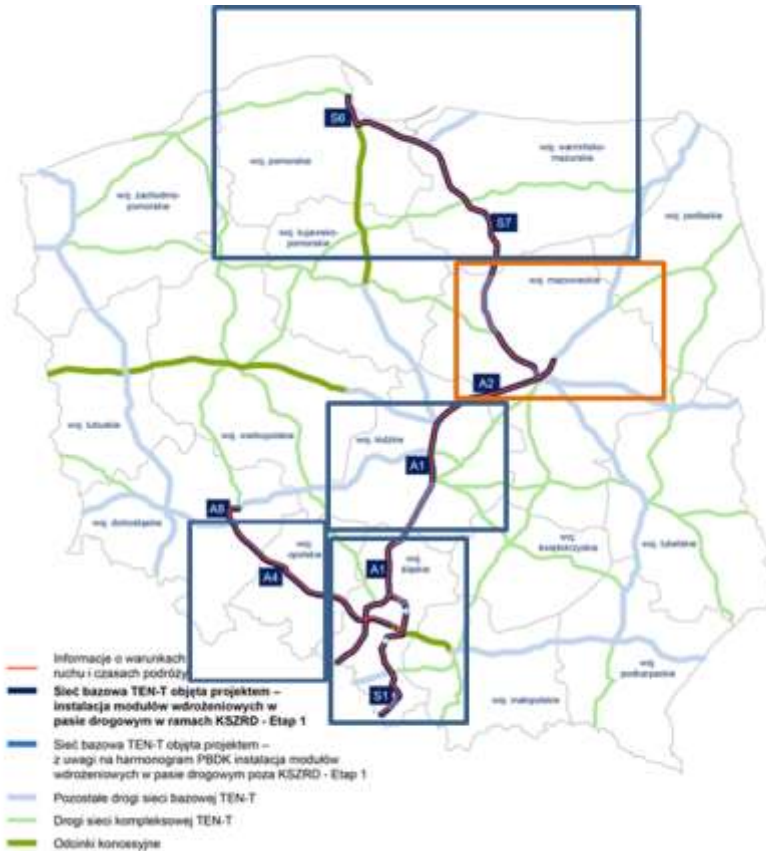
Implementation formula

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

- **Stage 1** (under construction)

  - Stage 2 (under consideration)

Drogi sieci bazowej TEN-T, Etap 1
Drogi sieci bazowej TEN-T, Etap 2
Odcinki koncesyjne
Drogi sieci komplementarnej TEN-T

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

Co-funded by
the European Union

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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

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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

Operational room of KCZR

Room of National Road Hotline

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The elements of KSZRD in the field

Information on road impediments

Lane Control System

High accuracy travel time measurement

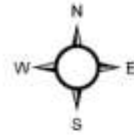Acquisition and transfer of information using I2V/V2I

Image acquisition at junctions and other road locations by CCTV

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Implementation formula

National Road Construction Program (NRCP)

Systemy Zarządzania Ruchem na drogach GDDKiA - stan realizacji

Legenda

- KSZRD Etap 1 - 1100 km
- SZR_istniejące - 906 km
- SZR_w realizacji - 604 km
- SZR _ planowane do 2035 - 2845 km
- Krajowe Centrum Zarządzania Ruchem
- Regionalne Centrum Zarządzania Ruchem

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Implementation formula

National Road Construction Program (NRCP)

Systemy Zarządzania Ruchem na drogach GDDKiA - stan realizacji

NRCP WITH ITS NUMBERS

	KILOMETERS OF ROADS
Existing	906
Under construction	604
Planned to 2035	2845

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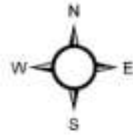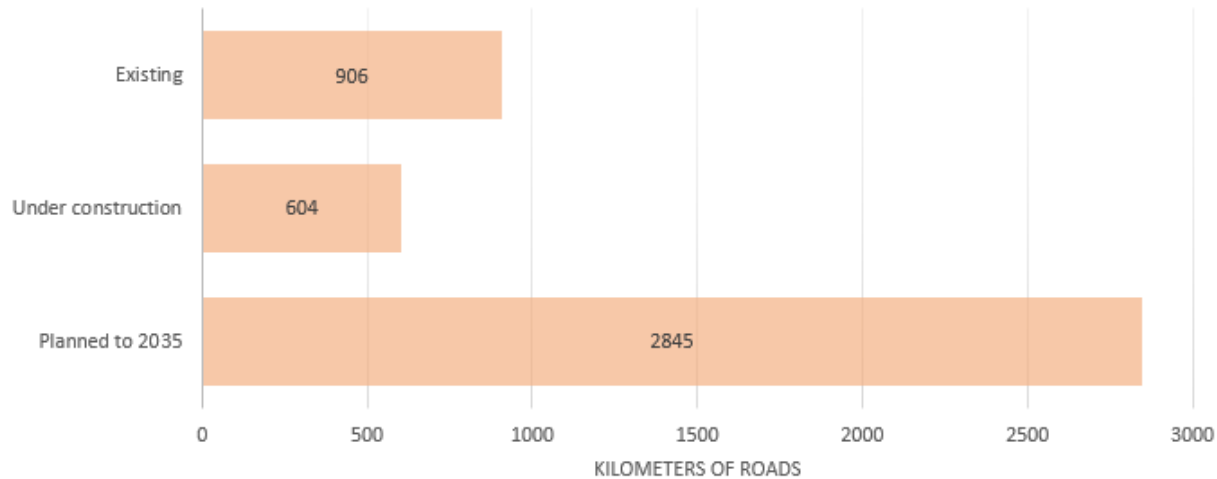
Summary

NTMS Program - uniform and coherent ITS solution for Polish national roads network

Thank You For Your Attention

Generalna Dyrekcja
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