









9[™] ROAD TECHNICAL COMMITTEE

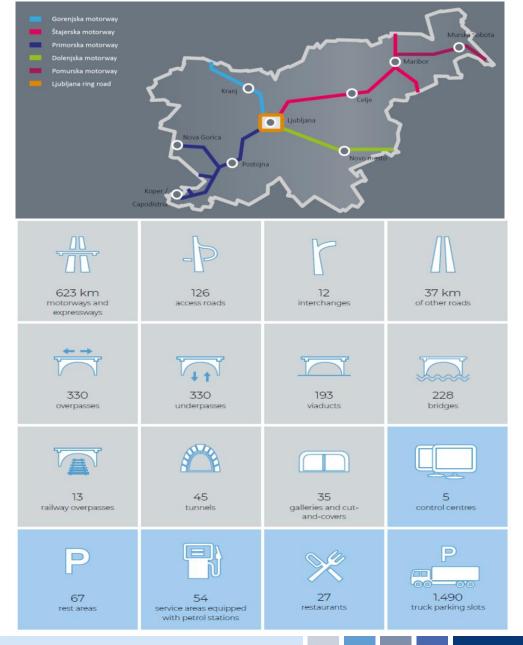
Road Asset Management System – Slovenia experience

Agenda:

- 1. Introduction of DARS d.d.
- 2. Asset management: Implementation
- 3. Asset management: Today/Future
- 4. Reconstruction Works Programme
- 5. Challenges & Conclusions

DARS d.d. Motorway Company in the Republic of Slovenia

DARS d.d. is the sole motorway Concessionaire, a joint stock company, established in 1994 by law and 100% owned by the Republic of Slovenia.



DARS d.d. Motorway Company in the Republic of Slovenia

OUR MAIN OPERATION:

- Investments and reconstruction
- Road Management
- Maintenance
- Tolling







DARS d.d. Motorway Company in the Republic of Slovenia

Number of employees:

All together: 1.236

Road Management: 110

COMPANY ORGANISATION CHART



Implementation of Asset Management Systems

> 2002

Pilot Project for PMS

Finding most suitable software

> 2004

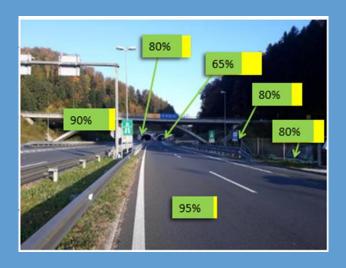
Implementation of PMS-DARS with dTIMS_CT

First results for pavements

- > 2006 2009
 - Upgrading of PMS-DARS system for pavements
- **>** 2011 2014
 - Update of PMS-DARS and introduction of a simplified road management system in PMS-DARS
- **>** 2015 2016
 - Introduction of long turn planning for Electromechanical equipment in Tunnels with dTIMS_CT
- **>** 2017 2019
 - Pilot Project for BMS
 - "Reconstruction Works Programme"
- **>** 2019 2021

Implementation of BMS-DARS with dTIMS_CT

TODAY



■ PMS-DARS: Pavement Management System (operational since 2015)

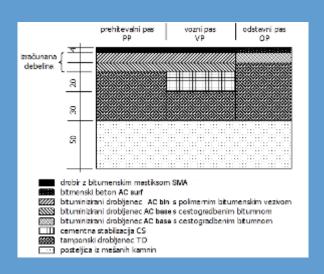
■ ESO-MS-DARS: Electro-Mechanical Equipment in Tunnels (operational since 2017)

 BMS-DARS: Bridge Management System (operational since 2020)

RESULT:

"Reconstruction Works Programme"
 (prepared each year since 2018, for the next three years)

FUTURE



 PMS-DARS: Pavement Management System (operational since 2015)

Yearly updates/upgrade?/new system?

■ ESO-MS-DARS: Electro-Mechanical Equipment in Tunnels (operational since 2017)

Yearly updates/upgrade?

 BMS-DARS: Bridge Management System (operational since 2020)

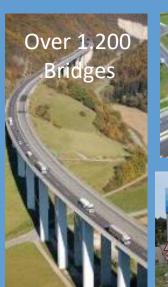
Yearly updates

RESULT:

"Reconstruction Works Programme"
 (prepared each year since 2018, for the next three years)

Incorporation of new assets into the sliding plan

Reconstruction Works Programme













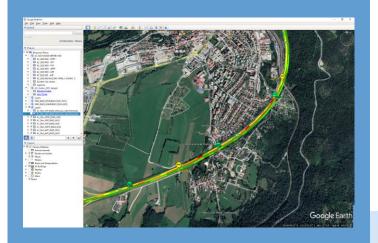


- Pavements
- Bridges
- Tunnels & Geotechnical objects
- Noise protection, controlled drainage retainers and other equipment
- Electro-Mechanical Equipment in Tunnels
- Traffic control and management system
- Traffic equipment
- Rest areas





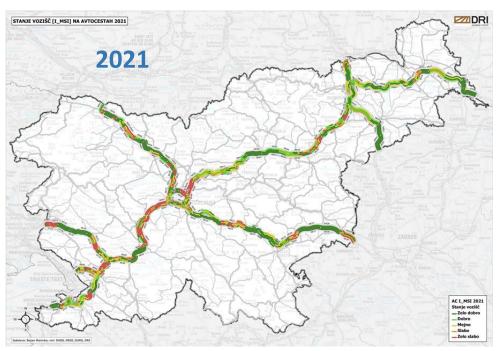
Reconstruction Works Programme

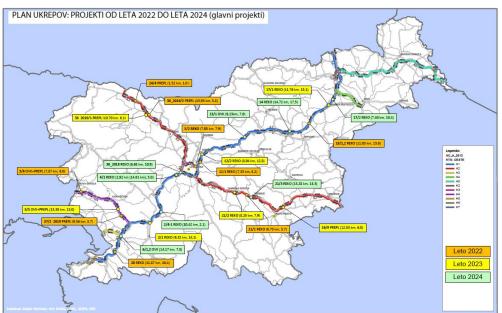


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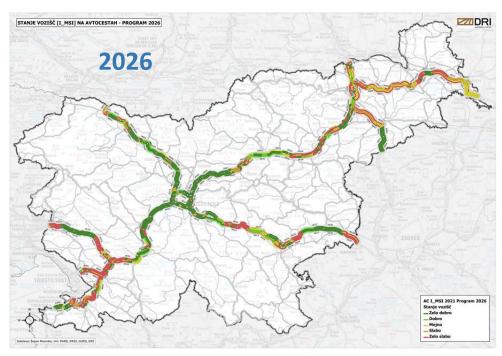


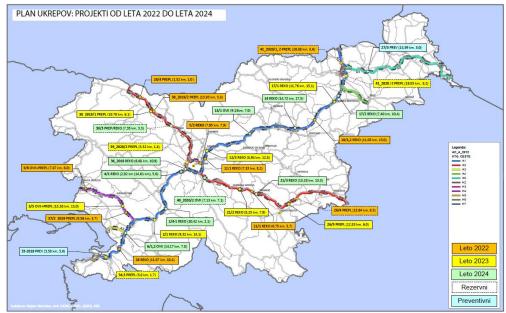
Reconstruction Works Programme



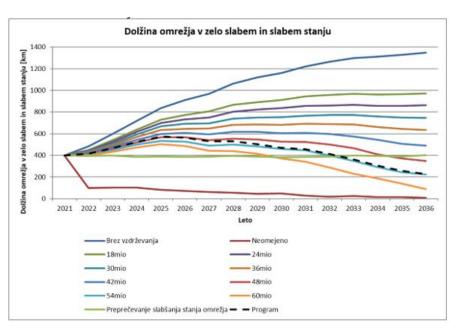


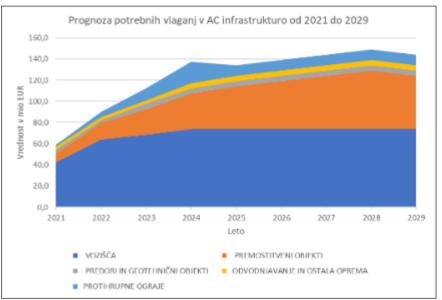
Reconstruction Works Programme





PMS results





CHALLENGES & CONCLUSIONS

- To make sure that the majority of treatments in the Reconstruction Works programme are carried out within the time and cost limits
- To keep the network condition at least in the current condition
- To increase the accuracy of the PMS System (many under-designed pavements, low build quality on some sections)
 - Incorporation of deflection data into PMS
 - Simplification of the current PMS System: upgrade/new system?
- Cross Asset analysis of all different Assets
- Implementation of GIS System for Works programme (ArcGIS)



Thank you for your attention. Andrej Zajec, DARS d.d.

