9th ROAD TECHNICAL COMMITTEE

Road Asset Management System – Slovenia experience

Belgrade, 5 - 7 October 2022
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
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 Electro-mechanical equipment in Tunnels with dTIMS_CT
- **2017 - 2019**
  - Pilot Project for BMS
  - „Reconstruction Works Programme“
- **2019 – 2021**
  - Implementation of BMS-DARS with dTIMS_CT
Asset management
DARS d.d.

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)
Assets management
DARS d.d.

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
Asset management
DARS d.d.

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

Over 1,200 Bridges
1,243 lane km
12 junctions
163 km
198 km
23 tunnels
44 km
Asset management
DARS d.d.

Reconstruction Works Programme
Assets management
DARS d.d.
Reconstruction Works Programme
Assets management
DARS d.d.

Reconstruction Works Programme
Assets management
DARS d.d.

PMS results
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.