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Intelligent Transport Systems IN LATVIA

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Intelligent Transport Systems

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ITS are systems in which information and communication technologies are applied in the field of road transport, including infrastructure, vehicles and users, and in traffic management and mobility management, as well as for interfaces with other modes of transport.

Cooperative-ITS use technologies that allow road vehicles to communicate with other vehicles (V2V), with traffic signals and roadside infrastructure & with other road users (V2X).
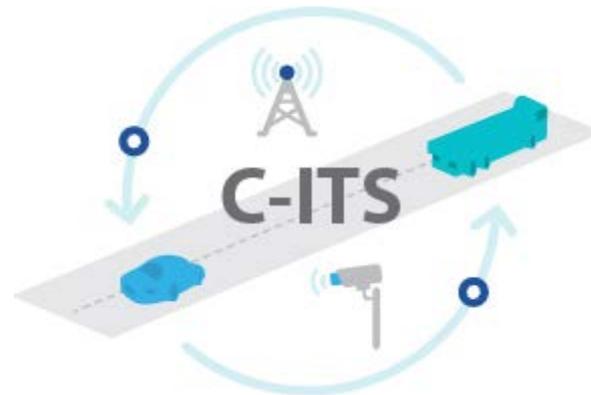
Main objectives of ITS

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Increase safety
Increase efficiency
Increase sustainability

ITS is based on the availability of
transport related data for exchange and reuse
by applying various information and communication technologies to all
modes of passenger and freight transport.

ITS mission - extensive use of transport data for mobility needs

Regulation of ITS

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Directive 2010/40/EU on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport.

Priority areas:
   I.   Optimal use of road, traffic and travel data,
   II. Continuity of traffic and freight management ITS services,
   III. ITS road safety and security applications,
   IV. Linking the vehicle with the transport infrastructure.

Priority actions:
   a) EU-wide multimodal travel information services;
   b) EU-wide real-time traffic information services;
   c) road safety related minimum universal traffic information;
   d) interoperable EU-wide eCall;
   e) information services for safe and secure parking places for trucks and commercial vehicles;
   f) reservation services for safe and secure parking places for trucks and commercial vehicles.

The relation of ITS domains
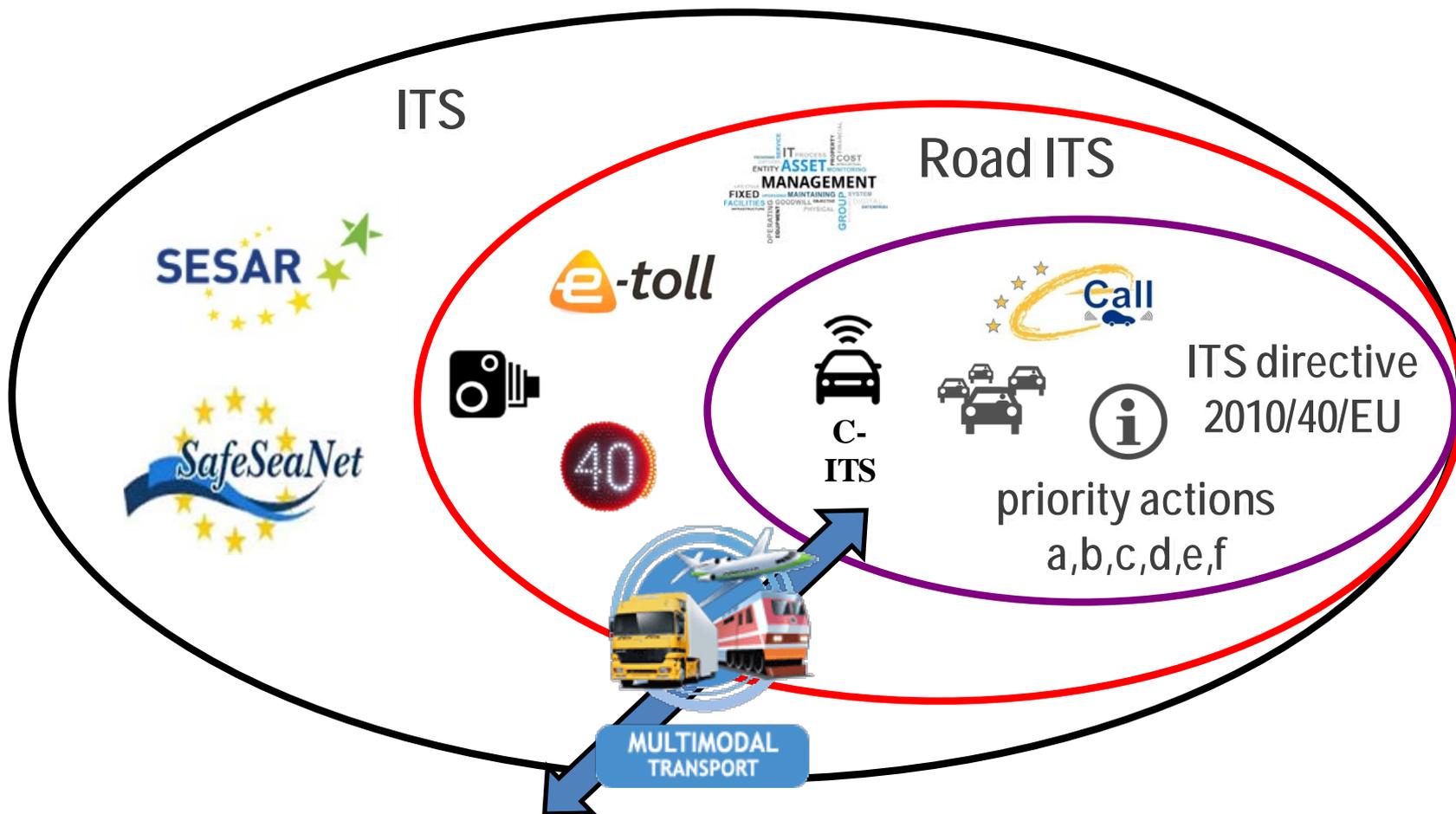
Steps taken in Latvia so far

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Extensive research in ITS and relations to other modes of transport has been conducted.

Within the framework of the research:

- proposals for the Latvian ITS strategy were developed;
- objectives and priority services of the Latvian ITS Strategy have been defined;
- proposals for the Latvian ITS Strategy Implementation Plan, defining legal, organisational and technological ITS deployment activities over a 5-year perspective have been developed.

The main conclusion of the research:

the cornerstone of ITS is a **national access point (NAP)**

National Access Point

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NAP can take on various forms, such as a database, data warehouse, data marketplace, repository, and register, web portal or similar depending on the type of data concerned and provide discovery services, making it easier to fuse, crunch or analyse data sets.

Data provider → **NAP** → **Service provider**
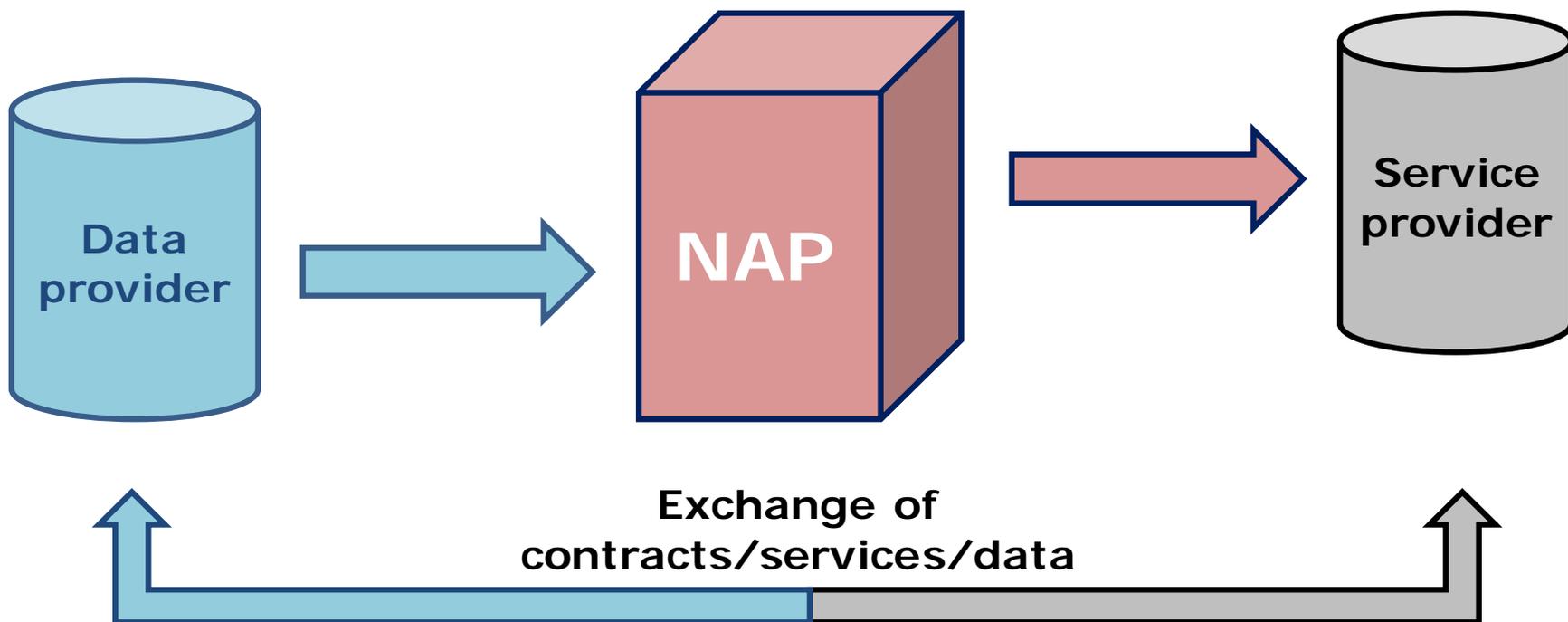
Exchange of contracts/services/data

ITS solutions in Latvia

Road user charge enforcement

ITS solutions in Latvia
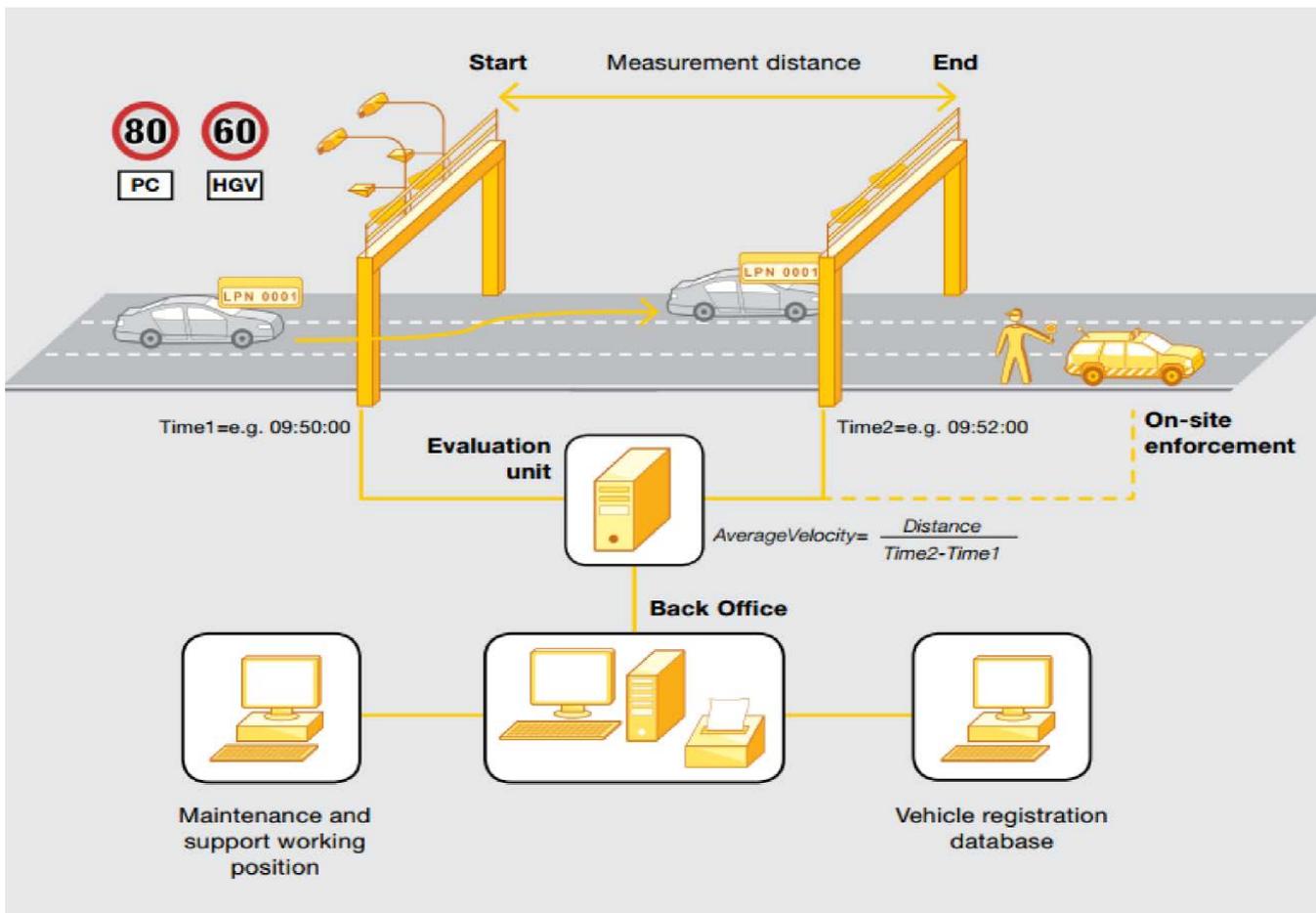
Avarage speed enforcement pilot

ITS solutions in Latvia

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**Variable message signs
on the
Via Baltica
corridor**

ITS solutions in Latvia

**Road delineators
with wildlife crossing
guardment**

Connected Automated Driving & 5G

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On September 28th 2018 the three Baltic states signed a memorandum of understanding and intentions in the field of Connected Automated Driving (CAD) development in Via Baltica corridor.

The objective of this memorandum is to promote connected automated driving and with aim to support sustainable mobility, improve traffic safety and foster innovations.

The three Baltic states will seek for gradual deployment of the 5G network along the Via Baltica corridor in order to improve interoperable driving for autonomous vehicles, and to cooperate to ensure connections of CAD cross border sections.
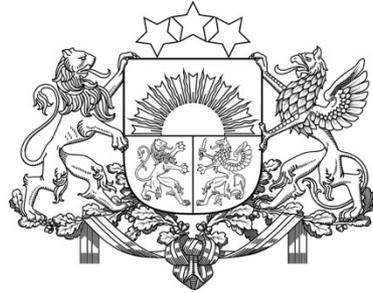
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Digitalisation
in Other Transport Sectors

International freight logistics and port information system (SKLOIS)

SKLOIS goals:

Establishment of electronic document and electronic information interchange between organisations involved in cargo transportation process in ports;

Reduce the use of paper documents;

Use of one single window principles for administrative procedures for ships and cargo operations in ports.

The system is in operation since the end of 2015. It is constantly improved and functionality extended with more and more new processes and services.

It is very well connected with Customs authorities, Border Guards, Veterinary and Fito-sanitary Control services, Coast Guards, Port Authorities, Maritime Administration and many users from industry.

Rail Baltica project

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Rail Baltica will be equipped with ERTMS (European Railway Traffic Management System) thus **providing** an **interoperable European railway network** and **allowing** to shape an efficiently **automated and optimized scheduling process** as well as to **improve line capacity and efficiency**.

EU Commisions document «Communication - Connectivity for a Competitive Digital Single Market - Towards a European Gigabit Society (2016)» **underlines the impor**tance **of very high capacity 5G coverage** in all cities and along all major terrestrial transport paths by 2025.

Therefore, work is ongoing to assess the technical, operational, legal, governance and business perspectives of the synergies between Rail Baltica infrastructure and 5G technologies.

SJSC «Latvian Railway»

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One of the solutions to facilitate development of a modern railway system is participation in **"Shift2Rail" platform** that is a large-scale private and public partnership initiated by the European Commission.

The goal of this platform is to **support better railway services in Europe**, **developing strategic technologies and solutions** that will help to **strengthen competitiveness** of European companies and **maintain Europe's leafing position in the global railway market**.

Cooperation with Russia, Belarus, Lithuania to develop **electronic waybills** in freight transport. Electronic waybills were introduced for empty wagons at the first stage. Since 2019 the use of electronic waybills for transportation of full cargo wagons between Latvia, Russia and Lithuania. Plans for use of electronic waybills for transit route Russia, Latvia, Lithuania, Kaliningrad with perspective direction to Poland.
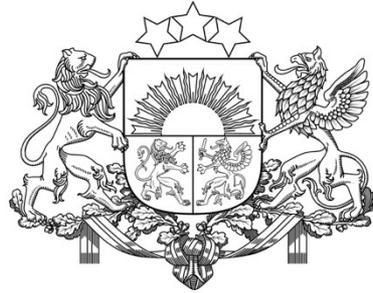
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Thank You!