

Ministry of Transport
Republic of Latvia

e-CMR

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Some of the key benefits to e-CMR include

Lower costs

Handling costs can be up to three to four times less expensive

Faster administration with reduced data entry, no paper handling, no fax/scan/letter exchanges, no paper archiving, etc.

Faster invoicing
Reduction of delivery and reception discrepancies

Greater transparency
Data accuracy
Control and monitoring of the shipment
Real-time access to the information & proof of pick up and delivery



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Latvia is one of the Baltic Sea region's DIGINNO project member

DIGINNO (*Digital Innovation Network*) project helps speed up the Baltic Sea region's transition to a single digital market by covering three common challenges:

- Uptake of information and communication technologies in the business sector
- Innovation and interoperability of public services
- Cooperation and coordination of digital policies on the macro – regional level

8 members





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DIGINNO project

DIGINNO is a project funded by INTERREG Baltic Sea Region 2014-2020, the overall aim of which is to accelerate the movement of the Baltic Sea region towards a functioning digital single market

Project implementation period:

October 1, 2017 – September 30, 2020

Project partners have chosen to focus on further development on cross-border e-CMR - Paperless consignment notes in road transport



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DIGINNO – Proto and activities timeline

DIGINNO – Proto project goal was to develop at least one working prototype of a cross – border e – service based on a showcase developed in the project

Timeline of the DIGINNO – Proto project:

Date	Activity
01.07.2019.	Project management has started
30.09.2019.	Applications are submitted for evaluation
31.10.2019.	e-CMR prototype is chosen for further development
15.01.2020.	Tender drafting with partners
10.02.2020.	International public procurement started
10.03.2020.	Public procurement ended
15.04.2020.	The contract is signed with FITEK EDI, UAB
15.09.2020.	The prototype is ready
31.12.2020.	Outcomes are introduced to partners, reporting is done, the project is ended



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Scope of the Proto development project

A common international e-CMR indexing scheme was proposed to be developed and prototyped **between partner countries: Estonia, Latvia, Lithuania and Poland.**

The prototype involved the digital availability of a CMR document (preferred machine-readable) and a mechanism of indexing the availability of such documents across the partner countries via an indexing scheme.

The system is focused on business to government (B2G) information exchange by using indexing service and the indexing number. The appointed **government institutions and controlling institutions** of the involved country **will be able to see where the e-CMR is stored and receive agreed available data.**



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Scope of the Proto development project

- The developed system will help to share and control data in a decentralized infrastructure.
- E-government compatible distributed approach with application programming interface (API) accesses was deployed, using distributed ledger technology (DLT) approach.
- Every authorized governmental institution was able to access minimum available indexing information via specialized API and get a link to request original documents relevant data directory from e-CMR service from the county of origin.
- The scope of the project was to build an expanded index and search system that would help to navigate and control data in centralized or decentralized networks at the highest security level.



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Scope of the Proto development project

- ❑ **e-CMR documents distributed index and search engine** had to be a system where there is **no central server, but at the same time allows sharing necessary data according to various roles and access rights.**
- ❑ Unlike traditional centralized search engines, work such as crawling, data mining, indexing, and query processing is distributed among several peers in a decentralized manner where there is no single point of control.
- ❑ The **solution needed to support a paperless logistics ecosystem in the best possible way.** The focus was on international road transport, but it could be expanded - sea, train, plane or multimodal transport in later phases.



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Testing in a real environment (demonstration on the working prototype)

- ✓ **Real environment testing in Latvia was carried out on the 3rd of September, 2020.**
- ✓ The truck was loaded in Riga (Latvia) and moved to Vilnius (Lithuania).
- ✓ Roadside checks did not take place in Latvia, but the e-CMR documents were checked by Latvia's controlling agencies virtually.

Testing arrangement:

- Each participating country dedicated a Country Project Manager as well as Technical Manager to support the testing.
- Each participating country arranged test rides to be uploaded and indexed for every testing participant.



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Results of testing

- All functionality and data exchange worked successfully in national and cross-border level.
- Truck companies in cooperation with EDI providers shared two formats of documents through e-CMR index registry.
- In visual control PDF files are enough, but in the near future control institutions wait for all data inside the CRM document to be machine-readable (this enables the use of modern analytical tools based on risk patterns).



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Prototype's technical details

The developed solution supports the following functionality:

- Adding or updating the e-CMR index(es)
- Making search by vehicle plate number or by e-CMR index ID
- Possibility to see who and when (date/time) added or updated the index
- Possibility to follow who has viewed e-CMR index (certificates)
- The system works with both - a single truck with loading place and a truck train
- User rights based on two groups: "government" and "business"
- The created system allows very easy to add extra groups or remove them from the registry if required
- All functionality and data exchange works at national and cross-border level



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Further steps

- The expectation from the business side is that e-CMR would be recognized legally, but would not be mandatory from the government side for business.
- Non-logistic companies have expressed interest in the digitalization of other documents connected to the logistic processes' (invoices, certificates of origin, etc.).
- Another area of expansion is countries of Benelux, in particular; Luxemburg. High interest in the DIGINNO-Proto project from their side is a good point for starting an interoperability assessment.



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Further steps

- Ensure the continuous test of the prototypes for further development (each country could keep the prototype testing teams and infrastructure for smooth transition)
- To legalize the presented prototype logic (not particularly the specific technical solution)
- Support establishing the index production infrastructure for all participating member states and countries
- Discuss and align with eFTI and other legislation (national/regional/international)

- Extend e-CMR indexing initiative and prototype testing to:
 - other Baltic Sea Region countries;
 - EU level;
 - Europe neighborhood countries

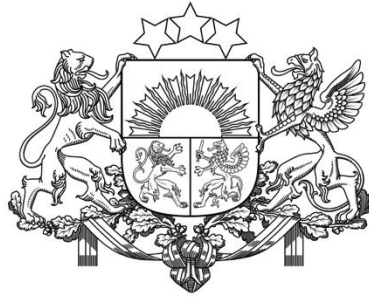
- Add to the index server other digital documents as part of document container:
Customs import and export declarations;
 - invoices
 - certificates and documents etc.



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Further steps

- Make it useful to multimodal transport modes (train, plane, ferry) by extending the prototype development by following eFTI recommendations.
- Increasing the awareness of needs and benefits of using e-CMR and other electronics documents in the transport sector. However, there is a considerable difference in the pace of development in different countries.



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Thank you!

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